

IS THERE EVIDENCE OF IMPLICIT RATIONING IN THE SWISS HEALTH CARE SYSTEM ?

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II: B. Santos-Eggimann, S. Cornaz, N. Chavaz Cirilli. Recours aux services de santé selon les données de la Statistique des hôpitaux et de l'Enquête suisse sur la santé.

III: B. Santos-Eggimann, L. Seematter-Bagnoud, I. Peytremann Bridevaux, J. Junod. Enquête auprès des médecins de première ligne et des hôpitaux publics.

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Le rationnement implicite en Suisse: Proposition pour une exploration des domaines et des populations à risque.

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1 INTRODUCTION

The Swiss health care system is the most expensive of all systems in which universal coverage is financed collectively. Its cost has grown from 7.1% of GDP in 1980 to 10.9% of GDP in 2002¹. Several factors contribute to this situation. Compared with other countries, the range of health care services covered by the national health insurance scheme is quite broad,² and very few medical services are explicitly excluded. The country has 3.9 hospital acute care beds and 3.6 practicing physicians per 1'000 inhabitants. Technical equipment is widely available (18.0 scanners and 14.1 MRI installations per 1,000,000 inhabitants), and although Switzerland is home to a number of major pharmaceutical companies, drug prices are high. From a demographic point of view, Switzerland also has a large proportion of residents aged 65 or over (15.7% in 2003³), and the population enjoys a particularly long life expectancy (77.8 years in men and 83.0 years in women in 2002). As in any industrialized country, old age is the phase of life characterized by multiple chronic diseases and high utilization of health care services.

More than two thirds of the rising cost of health care is paid by households through health insurances premiums, co-payments, deductibles and out-of-pocket payments⁴. Although the cost of health insurance premiums is now prohibitive for many households, the promotion of alternative models of health insurance schemes (managed care, health care networks) involving lower health insurance premiums has not been successful: HMOs, which were introduced in the early 1990s, currently cover only 110,000 individuals nationwide⁵.

For the Swiss cantons, which are facing huge public deficits but are still responsible for at least half of the hospital bill, cost containment through infrastructure reduction has been unavoidable. They have eliminated or reallocated many hospital beds in the last 20 years. The federal government followed the same path. It placed the blame on the high density of medical services and prohibited the opening of new private medical practices. In the context of heightened concern relating to medical progress and population aging, reduced health care

¹ OECD Health data 2004

² A notable exception is the almost complete exclusion of dental care.

³ OFS 2005

⁴ Gilliland P, 2005

⁵ Baumberger J. , 2005

resources provoke debates on access to care and hidden rationing. Some people feel that the Swiss health care system is still bloated and offers many possibilities for waste reduction (rationalization). Others claim that there are unmet needs due to health care rationing and call for explicit priority setting. Both opinions may be valid.

One of the most serious arguments advanced by advocates of explicit priority setting is that given the lack of public recognition of inadequate access to care, implicit rationing takes place to the detriment of certain disadvantaged population subgroups. This argument was the basis of a research grant awarded by the former Federal Social Insurance Office (now the Swiss Federal Office of Public Health) to the Health Services Research Unit of the Lausanne University Institute of Social and Preventive Medicine. As a preliminary step, a literature review was performed in 2001. Its aim was to formulate a proposal for the study of areas and populations at risk for implicit rationing. The questions raised were: How should we define implicit rationing? Having defined it, can we find examples of objective documentation or measurement in other countries? How and where should we look for direct or indirect signs of implicit rationing? In the present study, we first summarize the main results of this review, which was presented in the report entitled "Le rationnement implicite en Suisse: proposition pour une exploration des domaines et des populations à risque"⁶ (see Chapter 2).

Given the limited evidence available in the published literature and the methodological problems associated with the objective measurement of implicit rationing, this preliminary report concluded with a research proposal for investigating the areas and populations at risk for implicit rationing in Switzerland. The results of three different approaches are detailed in Chapters 3 to 6.

Finally, Chapter 7 discusses the results of the three phases of this research project.

⁶ Santos-Eggimann B, 2001

2 IMPLICIT RATIONING IN THE PUBLISHED LITERATURE

2.1 WHAT IS IMPLICIT RATIONING ?

In periods of cost containment, an initial distinction must be made between rationalization and rationing. The principle of rationalization does not trigger ethical debates. It refers to the search for the most efficient use of resources in order to provide optimal care for all individuals who need it, and therefore it does not compromise the health of any single person.

Rationing, in contrast, has a negative connotation. It denotes restrictions on the supply of essential goods in crisis or war situations⁷ and often generates fears of discrimination against the most vulnerable individuals⁸. Rationing necessarily implies insufficient, if not scarce, resources; it refers to the process of resource allocation in the event that all needs cannot be met⁹. In the extreme, rationing occurs as soon as it becomes impossible, due to limited resources, to deliver potentially beneficial health care to all people¹⁰. Limited resources do not involve only financial resources; the supply of trained health care professionals or the necessary infrastructures may also be limited. Rationing also applies to the field of transplants, when the need for organs exceeds the supply, and it is even practised in more ordinary circumstances. Hall¹¹ describes the phenomenon as follows:

Physicians also regularly engage in a mild form of rationing at a more mundane level of everyday primary medicine. They allocate their time and attention according to a rough sense of triage among daily demands.

Principles behind rationing vary according to the type of health care system. For Fuchs¹²,

the basic method of rationing goods and services in this country [USA] is through the market. The willingness and ability of consumers to pay for goods and services, and of producers to supply them, determine how they are apportioned or distributed

But Coast et al. see a different picture¹³:

for the UK, rationing by need provides the main basis for the current implicit rationing.

Rationing decisions are made at different levels. Macro-rationing refers to budget allocation decisions, usually at a national or regional government level, when investments in

⁷ Maynard A, 1999

⁸ Ash DA and Ubel PA, 1997

⁹ Limiting care for reasons other than scarcity of resources is not rationing. Physicians can refuse to administer an antibiotic treatment in the case of otitis in order to prevent the development of microbial resistance.

¹⁰ Coast J and Donovan J, 1996

¹¹ Hall MA, 1997

¹² Fuchs VR, 1984

¹³ Coast J, Bevan G, Frankel S, 1996

the healthcare sector compete with investments in other economic sectors. Meso-rationing refers to health resource allocation by politicians among different areas of the healthcare system (e.g. preventive vs curative care, hospital vs out-patient care, acute vs long-term care) or by administrators among different care activities of an institution (e.g. paediatrics vs geriatrics, surgery vs medical services). Both macro- and meso-rationing affect groups of patients characterised by a common need, not individuals identified by decision-makers. Micro-rationing, or "bed-side rationing" refers to allocation of resources by health care providers within the framework of the caring relationship. It is constrained by macro- and meso-level rationing decisions and it affects identifiable individuals. Ubel and Goold¹⁴ have identified three necessary conditions for a medical allocation decision to qualify as bedside rationing:

The physician must 1) withhold, withdraw, or fail to recommend a service that, in the physician's best judgment, is in the patient's best interests; 2) act primarily to promote the financial interests of someone other than the patient (including an organization, society at large, and physician himself or herself); and 3) have control over the use of the beneficial service.

Because of the negative perception of rationing, few people in the field are willing to endorse the need for rationing, and many refer to it by using other terms such as resource allocation or priority setting. This is particularly the case with macro- and meso-rationing, where decisions are made at a political level¹⁵.

The easiest solution may be for politicians and third-party payers to avoid explicit acknowledgement of the need to ration, while creating policies that implicitly require physicians to ration at the bedside.

Rationing can be overt or covert. **Implicit rationing** is the unrecognized limitation of access to care within a context of insufficient resources that may have a negative, even if minimal, effect on the health of affected individuals who have not been fully informed concerning the decision to forego the needed care, its basis and the decisional process. This can be observed at all levels of decision-making, as underscored by Coast and Donovan¹⁶:

There is considerable evidence that rationing in the UK is at present implicit; for example, the fact that the elderly have been much less likely to receive renal dialysis in the UK than in the USA has not occurred as a result of an official policy of denying care, but as a result of a limited number of machines and staff to run them, and referral practices which acknowledge this fact.

¹⁴ Ubel PA and Goold S, 1997

¹⁵ Ubel PA and Arnold RM, 1995

¹⁶ Coast J and Donovan J, 1996

This is confirmed by Baker¹⁷:

The British public ... was never informed that when they passed age fifty their entitlement to acute and tertiary care would be diminished; nor have they ever formally accepted the principle of rationing access according to chronological age.

Positive reasons for implicitness are to protect decision-makers and to provide reassurance. Implicitness perpetuates the ideal of a health care system that offers maximum care, in all circumstances, to all individuals. And as stated by Mechanic¹⁸:

Implicit rationing works because patients trust that doctors are their agents and have their interests at heart.

The problem is that implicit rationing is the result of a non-democratic process and leads to discrimination against selected individuals or population subgroups.

In our work, we defined implicit rationing as the process of allocating insufficient resources to cover all needs at the macro-, meso- or micro-level of decision-making, resulting in a higher risk of poor health for individuals or for population subgroups when any of the following elements are lacking:

- specified criteria for the allocation of resources to individuals according to specified health or social objectives;
- specified responsibility for decision-making;
- clear and detailed information concerning the rationale and mechanisms of the allocation process made available to the public in connection with decisions made at the macro- or meso-levels and to the affected individuals in the case of decisions taken at a micro-level.

2.2 IS IMPLICIT RATIONING AMENABLE TO OBSERVATION ?

While theoretical opinions and examples relating to implicit rationing are plentiful, the extent of the phenomenon has not been systematically documented in the scientific literature. As Clarkeburne¹⁹ notes, implicit rationing is also "invisible" rationing, sometimes even for the physicians who take the final allocation decision²⁰:

By various means, physicians and other health care providers try to make the denial of care seem routine or optimal... the physician, in order to live with himself and to sleep well at night, has to look at the arguments for not treating a patient. And there are always some – social, medical, whatever.

¹⁷ Baker R, 1992

¹⁸ Mechanic D, 1995

¹⁹ Clarkeburne H, 1998

²⁰ Aaron HJ and Schwartz WB, 1984

Since it is an invisible phenomenon, implicit rationing can be suspected, but it cannot be observed with certitude or quantified.

For many authors, rationing is present everywhere because, as stated by Fuchs²¹:

No nation is wealthy enough to supply all the care that is technically feasible and desirable; no nation can provide "presidential medicine" for all its citizens.

It also follows that implicit rationing exists wherever there is no explicit rationing.

If so, there is not much interest in proving it, and we should abandon the idea of measuring it objectively. Instead, we might approach it using indirect and imperfect methods. One method is to compare the level of health service utilization in different countries for specific population subgroups. However, caution is required when interpreting data since a variety of causes other than implicit rationing may explain international variations. The same applies to comparisons of healthcare utilization between different population subgroups. Another approach is to document policy decisions and mechanisms that implicitly reduce the access to medical services. King and Maynard indicate that the creation of waiting lists may indicate implicit rationing at a systemic level²²:

Rationing by waiting in the NHS became evident very rapidly after 1948. ... In fact, demand exceeded supply from the Service's inception and the consequent "crises" led to the establishment of a Royal Commission, whose report demonstrated clearly that resource allocation decisions were always likely to mean that some patients who could benefit from care, would be deprived of it due to funding limitations.

At an individual level, Klein has identified a series of mechanisms in clinical settings²³:

The receptionist takes a decision, when I ask for an appointment, about how urgent is my case: Roy Parker called [this], in a seminal article published 25 years ago, rationing by deterrence or delay... my doctor ... will decide whether to give me five minutes or ten. Next will come a decision about whether or not to refer me to hospital... While I am there, doctors will take decisions about just what resources to throw at me – rationing by dilution, in Parker's terminology... Finally, there will be decisions about how long to keep me in the hospital: rationing by termination of treatment.

Other mechanisms have been identified in connection with mediation by third-party payers, as detailed by Grumet²⁴ or evoked by Baker²⁵:

²¹ Fuchs VR, 1984

²² King D and Maynard A, 1999

²³ Klein R, 1993

²⁴ Grumet GW, 1989

²⁵ Baker R, 1992

Britain places the power of disentanglement in the hands of gate-keeping physicians. In the United States, ... disentanglements are achieved through bureaucracies of reimbursement.

Such mechanisms can hardly be documented systematically, but subjective information can be collected systematically in surveys of individuals most involved in the healthcare system - providers, primary users (patients) or intermediate users (e.g. physicians referring patients to other care providers). They can be asked about their experience regarding access to care and their knowledge about the existence of explicit rules for allocating resources in the event of scarcity. This was the option we chose for our research, our aim being to identify areas and populations at risk of exposure to implicit rationing.

2.3 WHERE IS IMPLICIT RATIONING MOST LIKELY ?

The published literature, finally, made it possible to identify the circumstances that promote implicit rationing as well as the types of care most susceptible to it and the persons likely to experience it in other countries. This helped to define the content of our surveys.

In the field of hospital care, preset budgetary envelopes and limitations involving manpower, beds or equipment are frequently cited as elements that promote the development of implicit rationing in cases where these resources are made available at levels inferior to demand and explicit criteria for access have not been defined. Policies that encourage the development of an "internal market" within the hospital or that favour services that generate profits also reduce resources for less lucrative but necessary activities²⁶. Many of these elements are currently present in the Swiss health care system, but the extent to which resources are inferior to demand not to mention need is unknown. However, most of the examples of rationing cited in Switzerland relate to the hospital (waiting lists for surgery²⁷, excessive waiting time in the emergency room²⁸, insufficient time for contact with hospitalized patients²⁹, and limited access to intensive care units³⁰, to other intra-hospital resources^{31 32} and to in-patient rehabilitation care³³).

In out-patient care, the main factors mentioned are global budgets that lack clear rules regarding priorities, selection of the cheapest health care professionals for contracting with third-payers, and managed care (HMOs, gate-keeping), in which cases physicians are financially encouraged to limit the care provided to their patients. In Switzerland, these elements are part of the political debate but they are not generally in effect. Accordingly,

²⁶ Rissanen P and Häkkinen U, 1999

²⁷ Mancelle A, 2001

²⁸ Lundqvist JP, 1999

²⁹ Gobet P and Roux P, 1995

³⁰ Oelz O, 2000

³¹ Strebel U, 1999

³² Niquille M et al, 1991

³³ Oelz O, 2000

examples that suggest implicit rationing are less numerous in our out-patient care sector³⁴. Recently, however, the press reported a shortage of psychiatrists that might lead to the rationing of care for mental health diseases.

Rationing is often illustrated by extreme examples. Limited access to intensive care units or to organ transplants are widely publicized. However, this type of care is not the most likely to be rationed implicitly, as explained by Hall³⁵:

It would be to corrosive of the treatment relationship for physicians to make high-stakes, high-drama rationing decisions without consulting their patients or relying on explicit regulatory or contractual authority. I see physicians declining to order a confirming diagnostic test, an extra day in the hospital, a more expensive drug, or a referral to a specialist when the stakes are low or their confidence in diagnosis or prognosis is fairly high already.

And, according to Klein and Williams³⁶:

Concentrating on expensive interventions oversimplifies the real policy issue in setting health care priorities. Many of these have nothing to do with high-tech drama and everything to do with providing support and relief for long-standing chronic conditions.

Some characteristics, listed by Aaron and Schwartz³⁷, increase the probability of rationing. Care for widespread but low-visibility diseases that affect relatively passive population subgroups (e.g. mental health or geriatric diseases) is more likely to be rationed. Interventions for critical diseases (such as cancer) are less likely to be rationed than interventions for run-of-the-mill diseases (such as rheumatism), particularly if their aggregated cost is potentially high. Services (such as dialysis) that require considerable capital investment in order to produce a specific benefit and services that do not produce a major improvement in quality of life are also more exposed to implicit rationing.

The individuals who are particularly affected by implicit rationing decisions are those who are most vulnerable. The elderly are often cited. As noted by Grimley Evans³⁸:

An important element in the difficulties of rationing is the temptation to treat individuals merely as members of arbitrarily defined groups... and treat them as though they were homogeneous... Age is a useful probe for identifying the kinds of illogicality and injustice that can arise from categorization.

Women, disadvantaged socio-economic population subgroups, individuals without health insurance (or without supplementary private insurance), persons who have difficulty

³⁴ Muntwyler J et al, 2000

³⁵ Hall MA, 1997

³⁶ Klein R and William A, 2000

³⁷ Aaron HJ and Schwartz WB, 1984

³⁸ Grimley Evans J, 1993

communicating, captive populations (e.g. in long-term care facilities), neonates with malformations or cerebral damage, individuals with limited functional autonomy or with diminished quality of life, and persons with health-damaging behaviours seem to be at risk.

2.4 IMPLICATIONS FOR RESEARCH

Since implicit rationing is not likely to be identified by direct and objective observation, an alternative strategy is to adopt imperfect but complementary methods for documenting its probability.

For example, the main effect of rationing is to reduce access to care for vulnerable populations. Do we observe population subgroups who experience lower rates of medical care? Variations in health service utilization must be considered with caution as potential indicators of implicit rationing since a lower utilization rate may result from factors other than implicit rationing in the health care system. However, the existence of variations in use can be investigated through secondary analysis of databases currently available in Switzerland. We therefore explored this potential, using data collected and centralized by the Swiss Federal Statistical Office (Chapter 3)³⁹. This analysis was subject to considerable limitations relating to the content and quality of the data sources.

Our second approach was to collect ad hoc data from a variety of participants in the health care system. Surveys of the opinions of patients (Chapter 4)⁴⁰, general practitioners (Chapter 5) and hospital medical and administrative directors (Chapter 6)⁴¹ offer a more convincing basis for reflection concerning areas and populations exposed to implicit rationing in Switzerland. Our basic assumption was that implicit rationing is highly probable when access to care is insufficient and no rule has been explicitly defined for allocating limited resources. We tried to identify specific types of care deemed insufficiently available, asked for the existence of explicit allocation rules when decisions must be taken in daily practice, and finally gathered opinions concerning population subgroups that might experience more limited access when needs exceed resources. Our emphasis was on the types of care most frequently quoted in the literature as being subject to implicit rationing. While such surveys produce subjective data, there is great interest in the analysis of convergent points of view concerning the difficulties faced by some patients in getting all the care they need.

³⁹ For detailed results, see: Santos-Eggimann B, Cornaz S, Chavaz Cirilli N. Rationnement implicite en Suisse: Exploration des domaines et des populations à risque. II: Recours aux services de santé selon les données de la statistique des hôpitaux et de l'Enquête suisse sur la santé. Lausanne: Institut Universitaire de Médecine Sociale et Préventive, Février 2005.

⁴⁰ For detailed results see: Paroz S, Santos-Eggimann B. Rationnement implicite en Suisse: Exploration des domaines et des populations à risque. I: Enquête qualitative auprès des usagers. Lausanne: Institut Universitaire de Médecine Sociale et Préventive, Février 2005.

⁴¹ For detailed results see: Santos-Eggimann B, Seematter-Bagnoud L, Peytremann Bridevaux I, Junod J. Rationnement implicite en Suisse: Exploration des domaines et des populations à risque. III: Enquête auprès des médecins de première ligne et des hôpitaux publics. Lausanne: Institut Universitaire de Médecine Sociale et Préventive, Février 2005.

3 WHAT CAN WE LEARN FROM SECONDARY ANALYSES OF SWISS DATA ?

Analyzing data sources collected on the national level by the Swiss Federal Statistical Office for variations in health care utilization according to individual non-medical characteristics is a logical although limited way to study access to care. Equal levels of health services utilization in a variety of population subgroups, including the socially disadvantaged, would be an argument against widespread implicit rationing. Uniformity of health services utilization in all segments of the Swiss resident population was the central hypothesis of our secondary analysis of official statistics.

Data from the Swiss Health Surveys and from the Medical Hospital Statistics are collected by the Swiss Federal Statistical Office for general information purposes. As such, they provide unbiased data for testing our hypothesis. However, secondary analyses of pre-collected data are constrained by the qualitative and quantitative limitations of surveys that have not been designed to investigate either access to care or rationing. For this reason, they only provide clues that should not be over-interpreted. Although uniform rates of health services utilization would indicate that discrimination against certain population subgroups is unlikely, differences in use may have more than one cause. Consequently, such differences should not be considered as proof of rationing.

3.1 SWISS HEALTH SURVEYS 1997 AND 2002

3.1.1 Methods

The 1997 and 2002 cross-sectional Swiss Health Surveys were conducted on large, representative, independent samples of the resident, community-dwelling population aged 15 years and over. Information was collected regarding a variety of areas (demographic, social, economic, health and health services utilization), and several questions were included in both survey years. All data were collected directly from respondents or from proxies, in phone interviews (or face-to-face interviews for those aged 75 and older) and by way of a written questionnaire filled out and returned by respondents to the Swiss Federal Statistical Office.

Analyses concentrated on the relationship between the respondents' socio-economic, demographic, behavioural and residential characteristics and their reported use of health care. The analyses first looked at the effect of each characteristic when age and gender are taken into account, since these two factors are related to the need for care. The analyses were then repeated to include the additional factor of respondents' self-rated health.

Due to the large number of statistical tests, a conservative level of significance of $p < .01$ was adopted. Relationships significant at a $.01 < p < .05$ level should be interpreted only if they are observed both in 1997 and in 2002.

3.1.2 Results

Tables 1 to 4 display the main results of these analyses. For many health services, the frequency of use reported in both surveys was not related to the level of income or educational attainment, as shown in Table 1. Surgery, medication (prescription or non-prescription) for pain, blood pressure (BP) measurement in high-risk individuals, medication for hypertension, flu vaccination, optician consultations in cases of impaired vision and use of a hearing aid in cases of hearing impairment are reported by an equal proportion of individuals from different socio-economic groups.

Table 1: Relationship between socio-economic factors and the use of selected health services in the Swiss resident population aged 15+ years (Swiss Health Survey 2002)

| | Adjusted for age and gender | | Adjusted for age, gender, and subjective health | |
|--|-----------------------------|------|---|------|
| | 1997 | 2002 | 1997 | 2002 |
| Income (ref. percentile<25) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | | | | |
| Knee surgery at age 60+ | | | | |
| Prescribed pain drugs past 7d. if pain++ | | - | | |
| Pain drugs past 7d. if pain++ | | | | |
| BP measurement past 12m. | | | (+) | (+) |
| BP measurem. if known high BP or cholesterol | | (-) | | |
| Anti-hypertensive treatment if known high BP | | | | |
| Flu vaccination past 12m. if age 60+ | | | | |
| 1+ gynaecological visit past 12m. | + | + | + | + |
| Mammogram past 12m. | | | | (+) |
| HIV test past 12 m. if age -50 | (+) | + | (+) | + |
| Any HIV test if age -50 | + | + | + | + |
| Any physioth./chiropractic past 12m. | | | | + |
| Foot care if known diabetes | | | | (+) |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |
| Education (ref. limited to primary) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | | | | |
| Knee surgery at age 60+ | | | | (+) |
| Prescribed pain drugs past 7d. if pain++ | | | (+) | |
| Pain drugs past 7d. if pain++ | | (-) | | |
| BP measurement past 12m. | | (-) | + | |
| BP measurem. if known high BP or cholesterol | | | | |
| Anti-hypertensive treatment if known high BP | | | | |
| Flu vaccination past 12m. if age 60+ | | | (+) | |
| 1+ gynaecological visit past 12m. | + | + | + | + |
| Mammogram past 12m. | | + | | + |
| HIV test past 12 m. if age -50 | | | | (+) |
| Any HIV test if age -50 | + | + | + | + |
| Any physioth./chiropractic past 12m. | | | | + |
| Foot care if known diabetes | | + | | + |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |

+ positive relationship $p < .01$
 - inverse relationship $p < .01$

(+) positive relationship $.01 < p < .05$
 (-) inverse relationship $.01 < p < .05$

Discrimination based on lifestyle characteristics such as smoking or nutritional problems was generally not supported by data from the last two Swiss Health Surveys (Table 3). Smokers reported more pain medication and HIV testing, and being overweight was, as expected, associated with a higher use of several health services. However, there were some exceptions. High risk smokers seemed to have less frequent BP measurements in 2002, which is particularly inappropriate since smoking multiplies the risk of cardiovascular events, and overweight respondents reported fewer annual gynaecological checkups, mammograms and HIV tests.

Table 3: Relationship between smoking, overweight and the use of selected health services in the Swiss resident population aged 15+ years (Swiss Health Survey 2002)

| | Adjusted for age and gender | | Adjusted for age, gender and subjective health | |
|--|-----------------------------|------|--|------|
| | 1997 | 2002 | 1997 | 2002 |
| Smoking (ref. no or ex-smoking) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | | | | |
| Knee surgery at age 60+ | | (-) | | (-) |
| Prescribed pain drugs past 7d. if pain++ | | + | | + |
| Pain drugs past 7d. if pain++ | | + | | (+) |
| BP measurement past 12m. | | | | |
| BP measurem. if known high BP or cholesterol | | - | | - |
| Anti-hypertensive treatment if known high BP | | | | |
| Flu vaccination past 12m. if age 60+ | | | | |
| 1+ gynaecological visit past 12m. | | | | |
| Mammogram past 12m. | | | | |
| HIV test past 12 m. if age -50 | + | | (+) | |
| Any HIV test if age -50 | (+) | + | + | + |
| Any physioth./chiropractic past 12m. | | | | |
| Foot care if known diabetes | | | | |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |
| Overweight (ref. BMI<25) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | | | | |
| Knee surgery at age 60+ | (+) | + | (+) | + |
| Prescribed pain drugs past 7d. if pain++ | + | + | + | (+) |
| Pain drugs past 7d. if pain++ | + | (+) | + | |
| BP measurement past 12m. | + | + | + | + |
| BP measurem. if known high BP or cholesterol | | | | |
| Anti-hypertensive treatment if known high BP | + | + | + | + |
| Flu vaccination past 12m. if age 60+ | | + | | + |
| 1+ gynaecological visit past 12m. | - | | - | (+) |
| Mammogram past 12m. | (-) | | (-) | |
| HIV test past 12 m. if age -50 | | (-) | | (-) |
| Any HIV test if age -50 | - | - | - | - |
| Any physioth./chiropractic past 12m. | | | | |
| Foot care if known diabetes | | + | | |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |

+ positive relationship p<.01

- inverse relationship p<.01

(+) positive relationship .01<p<.05

(-) inverse relationship .01<p<.05

Residents of rural regions experienced hip surgery more frequently. They reported fewer BP measurements but high risk individuals do not seem to differ in their medical treatment. Rural residency was also associated with fewer gynaecological visits, mammograms, HIV tests and physiotherapy/chiropractic treatments. These types of care were all reported more frequently by residents of cantons in which there was a college of medicine (Table 4).

Table 4: Relationship between place of residency and the use of selected health services in the Swiss resident population aged 15+ years (Swiss Health Survey 2002)

| | Age and gender adjusted | | Age, gender, and subject. health adjusted | |
|---|-------------------------|------|---|------|
| | 1997 | 2002 | 1997 | 2002 |
| Rural residency (ref. urban) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | + | | (+) | |
| Knee surgery at age 60+ | | | | |
| Prescribed pain drugs past 7d. if pain++ | | | | |
| Pain drugs past 7d. if pain++ | | (-) | | |
| BP measurement past 12m. | | - | | - |
| BP measurem. if known high BP or cholesterol | | | | |
| Anti-hypertensive treatment if known high BP | | | | |
| Flu vaccination past 12m. if age 60+ | | | | |
| 1+ gynaecological visit past 12m. | - | - | - | - |
| Mammogram past 12m. | - | | - | |
| HIV test past 12 m. if age -50 | - | - | - | - |
| Any HIV test if age -50 | - | - | - | - |
| Any physioth./chiropractic past 12m. | - | - | - | - |
| Foot care if known diabetes | | | | |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |
| University (ref. no college of medicine) | | | | |
| Cataract surgery at age 60+ | | | | |
| Hip surgery at age 60+ | | | | |
| Knee surgery at age 60+ | | | | |
| Prescribed pain drugs past 7d. if pain++ | | | | |
| Pain drugs past 7d. if pain++ | | | | |
| BP measurement past 12m. | | | | |
| BP measurem. if known high BP or cholesterol | | | | |
| Anti-hypertensive treatment if known high BP | | | | |
| Flu vaccination past 12m. if age 60+ | + | | + | |
| 1+ gynaecological visit past 12m. | + | + | + | + |
| Mammogram past 12m. | + | (+) | + | + |
| HIV test past 12 m. if age -50 | + | (+) | + | (+) |
| Any HIV test if age -50 | + | + | + | + |
| Any physioth./chiropractic past 12m. | | + | | + |
| Foot care if known diabetes | | | | |
| Optician visit if impaired vision w/glasses | | | | |
| Use of hearing device if impaired hearing | | | | |

+ positive relationship $p < .01$
 - inverse relationship $p < .01$

(+) positive relationship $.01 < p < .05$
 (-) inverse relationship $.01 < p < .05$

3.1.3 Interpretation

Due to the limited sample size and to a non-negligible level of missing information about variables such as income in the Swiss Health Surveys, our multivariate analysis could not integrate factors other than one dimension of interest plus age and gender, and it was not possible to study the relative contributions of individuals' socio-economic, lifestyle and residential characteristics in spite of likely correlations. Second, important areas of care such as mental care, long term care or rehabilitation care could not be studied appropriately using this data source. The fact that the health services listed in Tables 1 to 4 relate essentially to out-patient medical and paramedical care for somatic conditions or for prevention is another restriction on our secondary data analysis. With these limitations in mind, we can say that, overall, the results do not point to discrimination against population subgroups in the areas of essential out-patient somatic care, but they do indicate lower rates of use in several areas of preventive care associated with unfavourable socio-economic characteristics, with being overweight and with rural residency. Unfortunately, the data source did not allow for a search for indications of a common cause (possibly education) that could explain a lower actual access to preventive care.

3.2 MEDICAL DISCHARGE STATISTICS OF SWISS HOSPITALS 2000 TO 2002

3.2.1 Methods

The Medical Hospital Statistics of the Swiss Federal Statistical Office theoretically include all hospital discharges from public and private Swiss hospitals since 1998. Thus, it appears to be a suitable database for investigating the level of hospital use in population subgroups defined by characteristics such as age, gender, nationality or canton of residence.

In practice, coverage of all hospitals and all stays by the Medical Hospital Statistics increased over time, but the most recent year available for analysis (2002) was still incomplete. In order to study population-based rates of hospital use for the largest possible number of Swiss cantons, we explored data from the years 2000 to 2002. We retained, for each year, only the cantons characterized both by a high coverage of stays recorded in public and private hospitals (using figures from the Administrative Hospital Statistics as a standard) and by a low proportion, in their resident population, of hospitalizations exported to other cantons whose hospitals participated only partially in the Medical Hospital Statistics. A total of 21 cantons contributed for one to three years to our analysis (36 canton-years of observation overall). Five cantons did not fulfil our requirements in the three-year period 2000-2002 and were excluded (Glaris, Appenzell I, Neuchâtel, Geneva and Jura) .

As a next step, data from several small neighbouring cantons were grouped in order to facilitate analysis: a Central region was defined as including the cantons of Uri, Schwytz, Unterwald and Zug, an Eastern region included St. Gallen and Appenzell-R, and a Northern region included Schaffhausen and Thurgau. This resulted in 15 cantonal or regional units for analysis purposes.

Variables with a low proportion of missing information were selected: data such as age, gender, nationality, canton of residence, diagnoses and interventions were available on most records. Finally, analyses were performed to estimate the rate of hospitalizations for selected surgical procedures: coronary by-pass, coronary angioplasty, primary total knee and hip replacement, vein stripping and hernia repair.

For analyses of hospital use, surgical interventions were preferred to medical diagnoses based on methodological considerations. Compared with medical diagnoses, surgeries are less likely to be underreported and are less subject to interpretation in the coding and registration process (in the case of multiple morbidities, the hierarchy of diagnoses may be difficult to establish and some diagnoses may not be recorded). Moreover, repeat admissions during a year are not rare for medical conditions (e.g. heart failure may motivate more than one hospital stay during a given year), while hospitalizations for surgery are usually unique events.

Nevertheless, focusing on surgeries rather than on diagnoses does not solve all problems. The Medical Hospital Statistics are generated by hospitals based on local rules regarding definitions such as day or out-patient surgery cases. As a result, surgeries that can be performed on a day or out-patient basis may be underreported in some cantons. This is the case with coronary angioplasty, vein stripping and hernia repair. For this reason, we only include results for primary total knee and hip replacements, which are necessarily performed as in-patient procedures.

We looked first at variations in cantonal rates of interventions, then at differences in utilization between Swiss and foreign residents, and finally compared Swiss rates to those of several other countries, including places where explicit rationing policies limit access to surgery. This is the case in New Zealand, in particular, where access to prosthetic surgery is conditional on a range of needs⁴² ⁴³. Sweden has established clinical criteria for priority setting⁴⁴. Finland has also defined clinical criteria for priority setting; waiting lists in this country vary between one and eighteen months for a total hip replacement. In the United States, a sizable proportion of the population, namely the uninsured, has limited access to elective surgeries.

3.2.2 Results

Primary total knee replacement

Total knee replacement (KR) is intended to restore the joint's function in cases of arthritic disorders or after an injury. While the prevalence of rheumatic disorders is higher in women, injuries that may result in joint imbalance and erosion are more frequent in men. These two

⁴²Observatoire des systèmes de santé: www.who.int

⁴³ Hadorn DC, Holmes AC, 1997

⁴⁴ Calltrop, 1999

phenomena result in a higher prevalence of knee arthritis in women, and thus higher rates of joint replacement are expected in the female population.

Actual rates observed in 21 Swiss cantons are indeed almost double for women (31.0 surgeries per 10,000 inhabitants, 95%CI [30.3-31.8]) than for men (17.2, 95%CI [16.6-17.8]). For both genders, the rate of KR increases with age up to 70-79 years. The estimated rate in the 80+ years category decreases to a greater extent in women (-89%) than in men (-51%).

As shown in Figures 1 and 2, there is substantial variation among cantonal rates of KR in both men and in women. Solothurn and Basel present higher rates than Graubunden or Ticino across age and gender categories, an observation that is not always supported by the density of hospital beds. For example, although Basel-Stadt is characterized by a high density of bed days (4.8 per inhabitant)⁴⁵, which may explain its high rates, Solothurn has a markedly lower bed day density (1.5) than Graubunden (2.8) or Ticino (2.6), even though its rate of KR is higher.

Nationality seems to play a role in the level of surgery use. Swiss nationals exhibit markedly higher rates of KR than foreign nationals. Figure 3 shows that this is the case in all age categories and for both genders: KR rates for foreign residents are half the rates of Swiss residents. This observation is not explained by the quality of data. Even if all cases involving missing information about nationality are assigned to the foreign national subgroup (see last column of each block in Figure 3), based on the most extreme hypothesis regarding data quality that might have resulted in an underestimate of surgical rates in the foreign population, foreign resident rates are still far below the rates estimated for Swiss national residents.

When KR rates in the 21 Swiss cantons (Figures 1) are compared with rates reported in selected other countries (Figure 4), the rates for men are very close to those observed in New Zealand in all age categories. They are also similar to Swedish and Finnish rates up to the age of 70, and are only slightly higher at the age of 70. In contrast, they are lower than USA rates at any age.

Rates for women are similar in Switzerland, Finland and the USA, except below the age of 70. In younger women, USA rates are higher. From the age of 60 years, the rates observed in New Zealand and in Sweden are systematically lower.

When the lowest cantonal or regional KR rates in Switzerland (Figure 2) are compared with the rates in countries that have explicit rationing policies such as New Zealand, Sweden or Finland (Figure 4), it appears that they are lower or, considering the uncertainty of estimates, at most similar. This is particularly the case for men. Rates for foreign nationals living in Switzerland are lower than in the general population of New Zealand, Sweden and Finland.

⁴⁵ Number of bed days = total cumulative number of days during which hospital beds are in use (beds for day cases excluded). Sources: Actualités OFS, Tableaux de la statistique de la santé, Statistique médicale, résultats 2002 (tableaux standard, E1). Neuchâtel: Office Fédéral de la Statistique, janvier 2004 and resident population from Office Fédéral de la Statistique. Annuaire statistique de la Suisse 2004, Zürich: Neue Zürcher Verlag, 2004, p.74.

Figure 1: Annual rate of total knee replacement in men by age category and residency over the 2000-2002 period

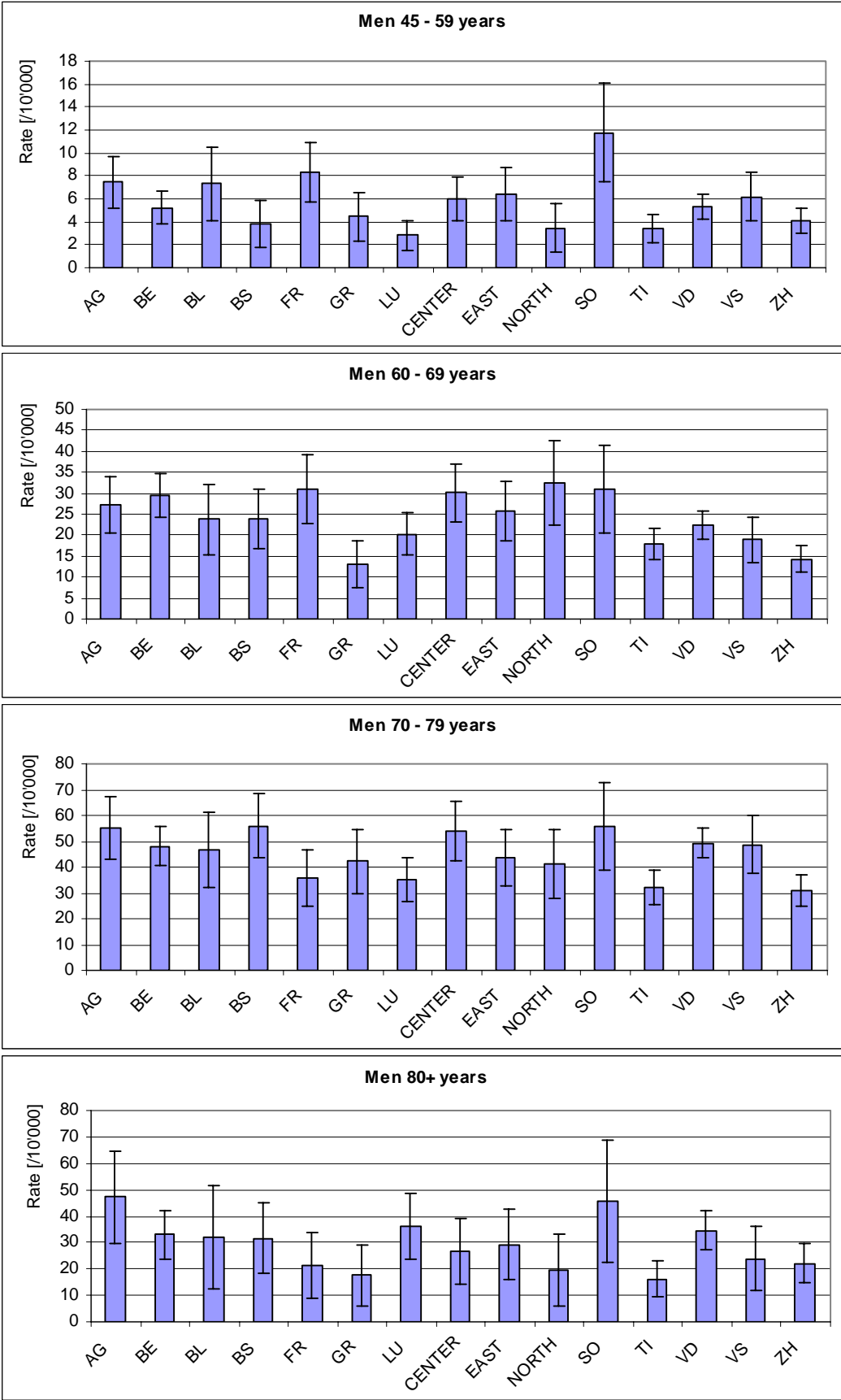


Figure 2: Annual rate of total knee replacement in women by age category and residency over the 2000-2002 period

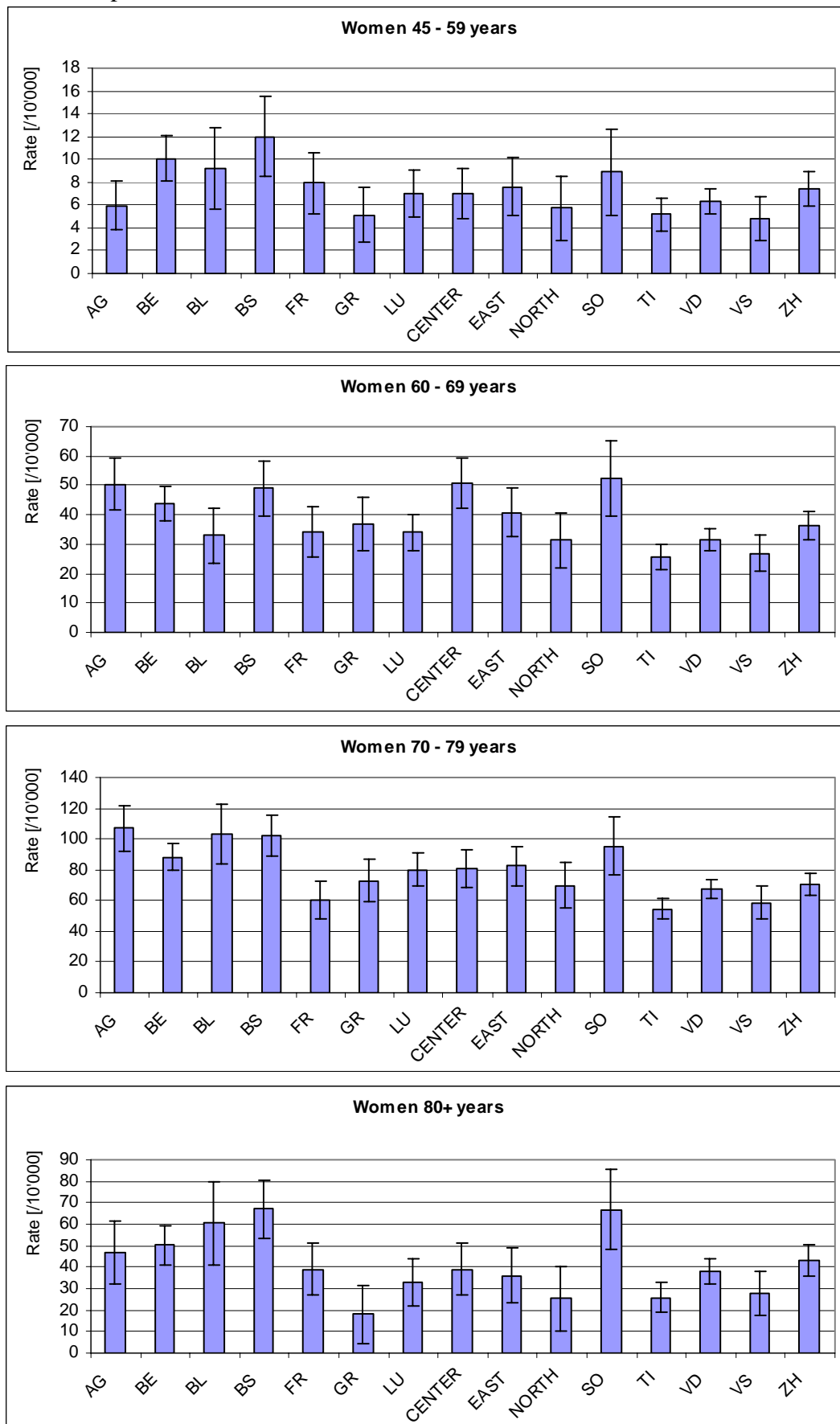


Figure 3: Annual rate of total knee replacement by gender, age category and nationality over the 2000-2002 period

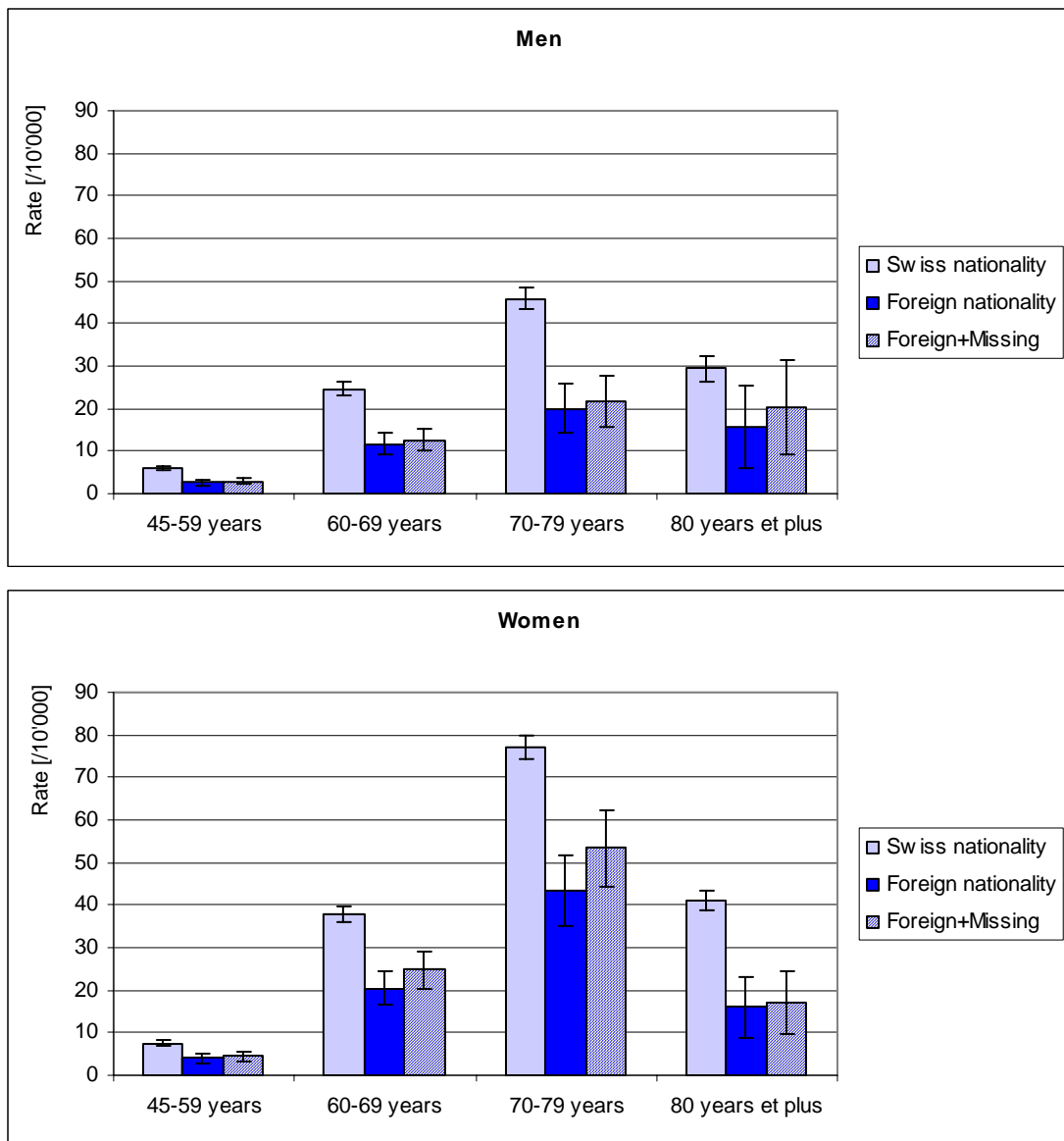
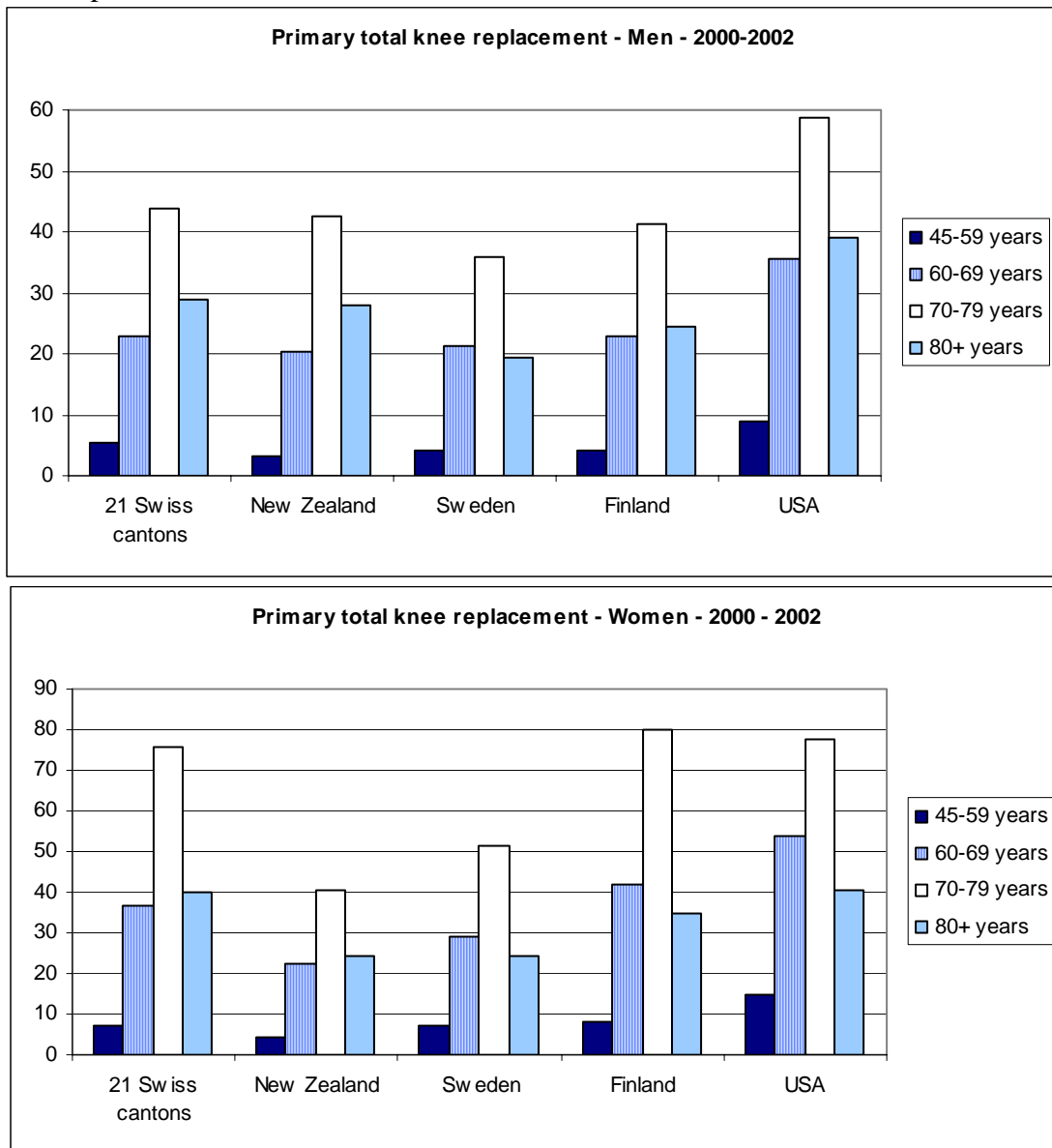


Figure 4: Annual rate of total knee replacement by gender, age category and country over the 2000-2002 period



Primary total hip replacement

In most cases, total hip replacement (HR) is performed due to the breakdown of the joint or damage associated with over-use. While rheumatic disorders, and particularly arthritis, affect more women than men, gender differences are less pronounced for the hip than for other joints. Nevertheless, hip pain is more frequently reported by women and increases with age.

In the 21 Swiss cantons under investigation, the rates for primary total hip replacement in men (40.8 surgeries per 10'000 inhabitants, 95%CI [39.8-41.7]) and in women (39.6, 95%CI [38.7-40.4]) are similar. Men have higher rates than women in the first two age groups (45-59 years: men 19.2, 95%CI [18.4-20.1] vs women 13.1, 95%CI [12.4-13.8] / 60-69: men 56.5, 95%CI [54.3-58.8] vs women 48.5, 95%CI [46.6-50.5]), but there is no difference between genders in older age.

Cantonal rates do not show major variations in men (Figure 5) or in women (Figure 6) except in Graubünden and in Ticino, where they tend to be basically lower in men and in the youngest women. No canton appears to have substantially higher rates than others.

When we look at specific age and gender rates by nationality (Figure 7), the observed differences are even greater for HR than for KR. Rates for foreign men in all age groups are approximately only one-third of the rates reported for Swiss men. Differences are somewhat smaller in women but age-specific rates for foreign women are approximately half of those reported for Swiss women.

In men, the Swiss rates of HR are higher than the rates in New Zealand, Sweden, Finland and the USA, as shown in Figure 8. Interestingly enough, this is true for all age categories except for the oldest one. At 80 years and over, Swedish and Finnish rates are higher than in the previous age category, while HR rates decrease in Switzerland in this last age group. As a result, the oldest men in these Scandinavian countries have a HR more frequently.

For women, HR rates are lower in Switzerland than in Sweden and Finland at the age of 70 and over. Here again, Swiss rates decline after the age 80 years, while Swedish and Finnish rates are the highest in the oldest age category. Another interesting observation concerns gender differences in Switzerland and in Scandinavian countries. Whereas below the age of 70, the rates for men and women are similar in Scandinavian countries (in Switzerland they are higher in men than in women), the rates of HR are substantially higher in women than in men both in the 70-79 year range and at the age of 80 or above (in Switzerland they do not differ). Although the New Zealand rates are lower than the Swiss rates, HR is also more frequent in women than in men at the age of 80 or above.

When the rates of HR for foreign nationals living in Switzerland (Figure 7) are compared with the rates in other countries, it is found that they are similar to the US rates in men, but lower than the rates reported for New Zealand, Sweden and Finland. In women, the HR rates for foreign nationals living in Switzerland are comparable to the New Zealand and US rates, but they are considerably lower than the rates estimated for Sweden and for Finland.

Figure 5: Annual rate of total hip replacement in men by age category and residency over the 2000-2002 period

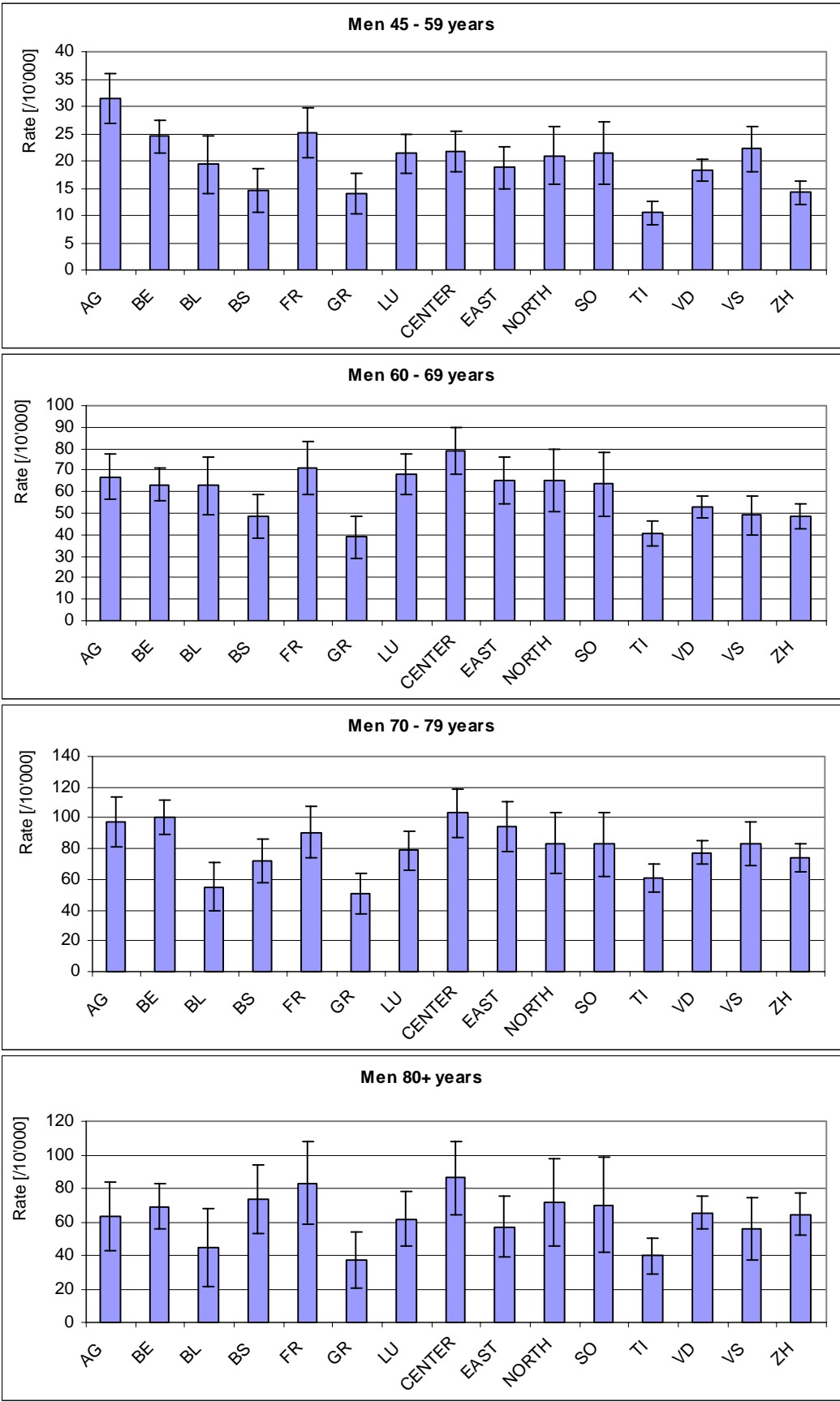


Figure 6: Annual rate of total hip replacement in women by age category and residency over the 2000-2002 period

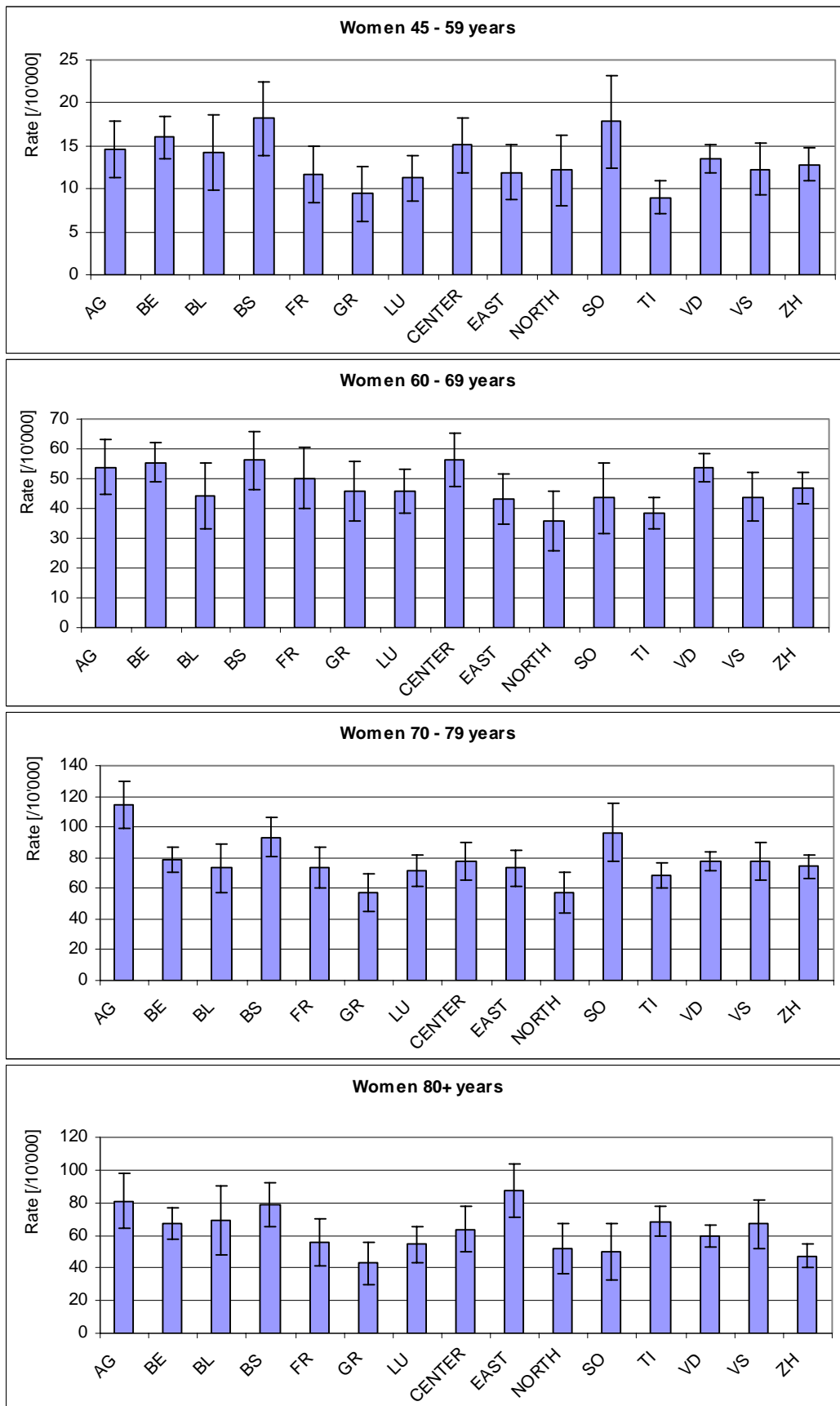


Figure 7: Annual rate of total knee replacement by gender, age category and nationality over the 2000-2002 period

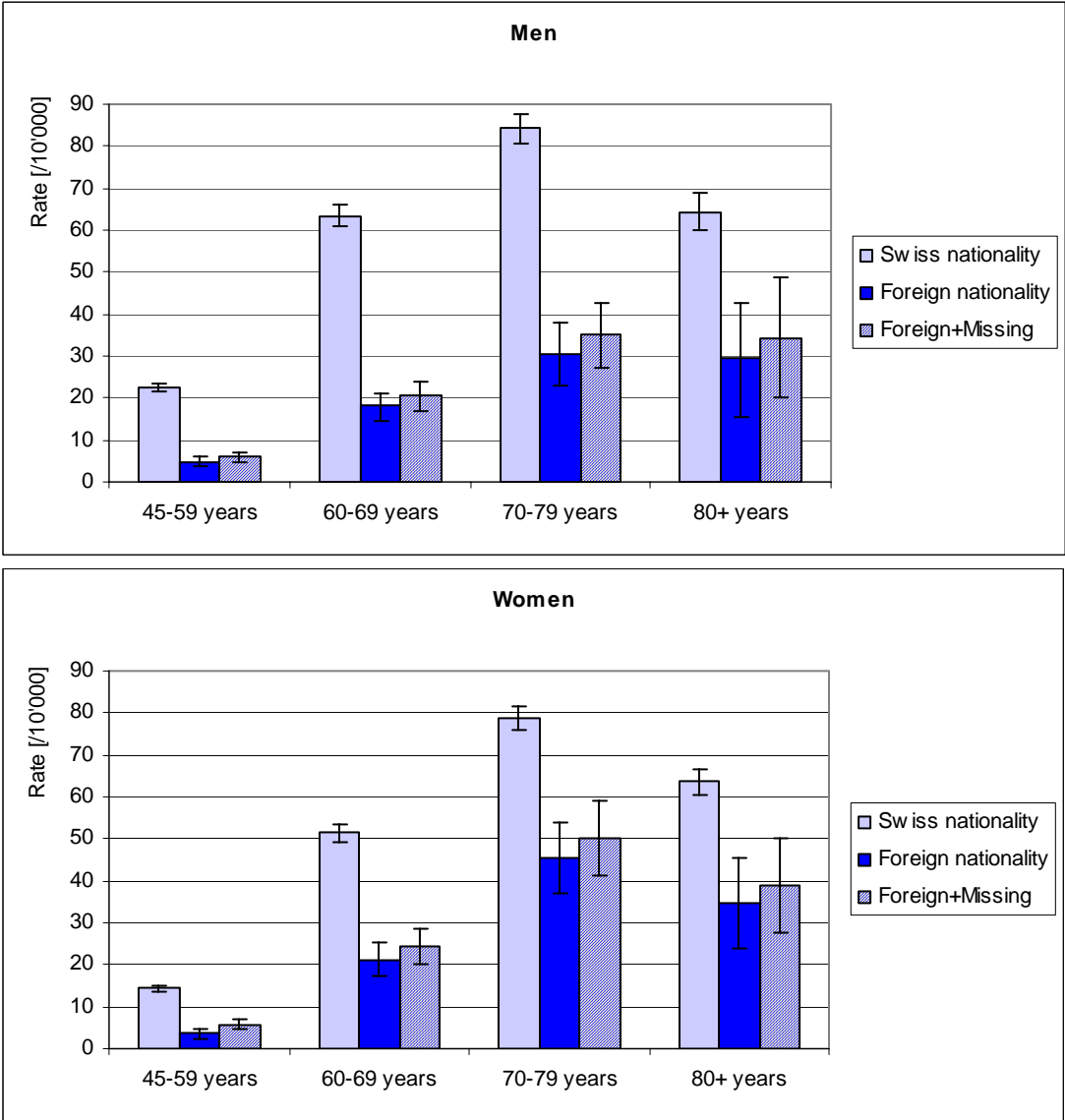
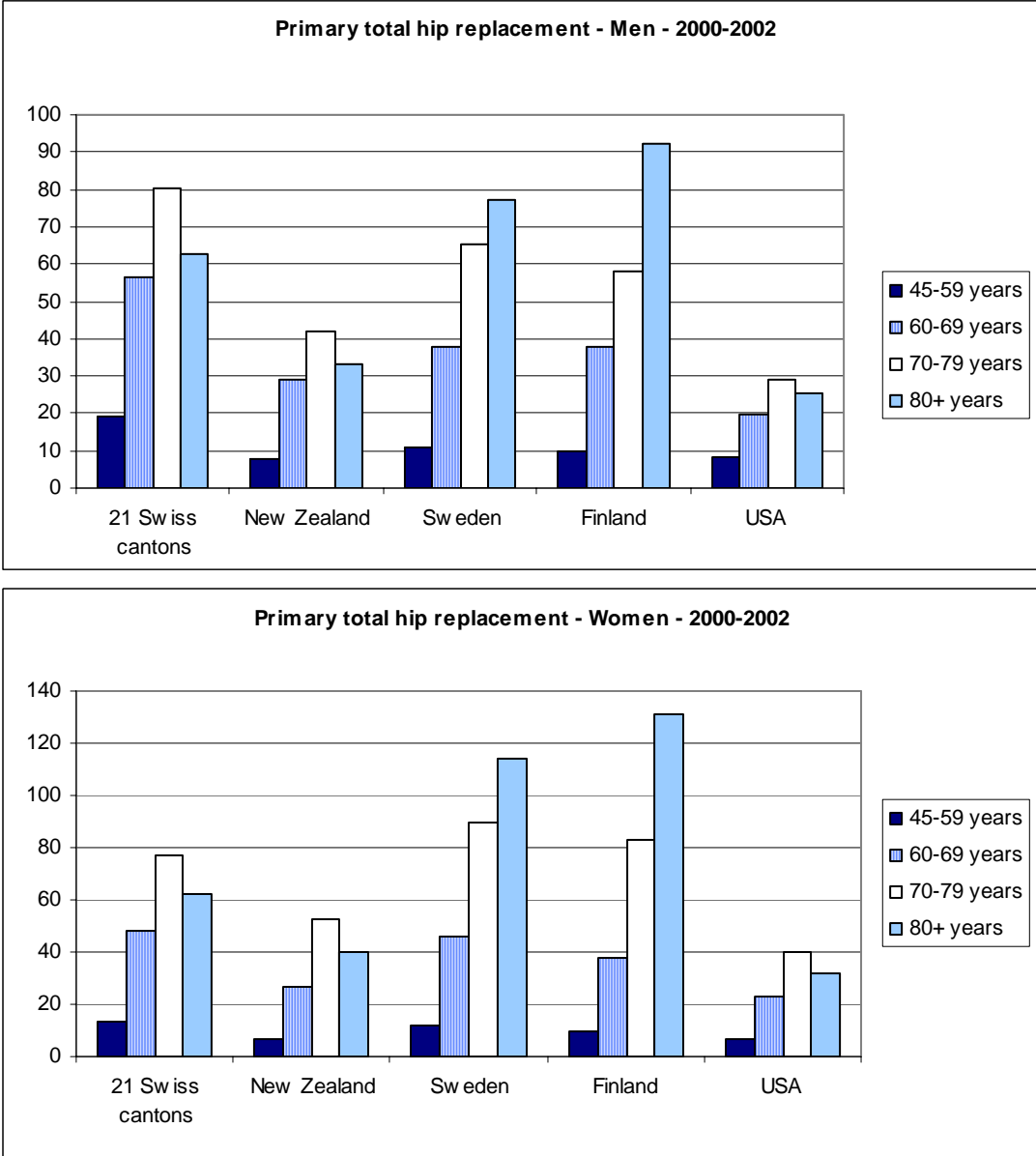


Figure 8: Annual rate of total hip replacement by gender, age category and country over the 2000-2002 period



3.2.3 Interpretation

The interpretation of differences in surgical rates observed in Switzerland between genders, age groups and nationalities is not straightforward since many causes other than rationing (e.g. cultural, social, etc.) may explain variations in utilization of health services. In addition, international comparisons are always problematic due to the risk that different methods of data collection will produce data of unequal quality. These are the basic limitations of secondary data analyses, and therefore the following conclusions must be considered as initial indications based on imperfect data rather than as evidence.

While it may be argued that supply creates demand, the observation of cantonal rates of knee and hip replacements does not support the assumption of systematic overuse in places characterized by a high density of hospital beds. Hip replacement rates are rather uniform in all cantons and regions, and if knee replacements are more frequent in some cantons, the observed variations among cantons or regions do not always reflect the local density of hospital beds.

In general, knee and hip replacements are not more frequent in Switzerland than in countries with explicit rationing policies, and in some cases Swiss rates are lower.

Knee replacements rates are lower than those reported in the USA. Men in cantons that have low rates of knee replacement have about the same probability of surgery as men in New Zealand, Sweden or Finland. Swiss women have higher rates than men; their rates compare with the rates in the USA and Finland. In all countries, knee replacement rates decrease at the age of 80+.

The correlation between hip replacement utilization and age is of particular interest. While this type of intervention increases with age in Sweden and in Finland, we find decreasing rates at the age of 80+ in Switzerland for both genders. As a result, rates in the last age category are lower in Switzerland than in Sweden and Finland.

Our data suggest that foreign residents in Switzerland have much lower rates of knee and hip replacement than residents of Swiss nationality in all age and gender categories. In addition, foreign residents in Switzerland experience lower rates of knee and hip replacements than rates that are reported in New Zealand, Sweden and Finland.

In conclusion, Swiss rates of knee and hip replacement do not appear excessive when compared with countries with explicit rationing policies. The low rates in Switzerland in old age (particularly for hip replacement in women) and for foreign residents (for knee and hip replacements) point to a potential problem of access and deserves further investigation.

4 THE OPINIONS OF MEMBERS OF PATIENTS' ASSOCIATIONS

If health care rationing truly existed, then persons suffering from chronic conditions who are frequent users of health care services should experience it more often than other individuals. Given this assumption, it is appropriate to ask those individuals or their relatives about their access to care from the first presentation of their disease to rehabilitation and long-term care. This was the purpose of a qualitative survey conducted by the Lausanne University Institute of Social and Preventive Medicine in collaboration with the Bern University Institute of Social and Preventive Medicine⁴⁶.

4.1 METHODS

Three chronic diseases (multiple sclerosis, rheumatoid arthritis and chronic obstructive pulmonary disease) and three mental health conditions (Alzheimer's disease, psychosis or schizophrenia, and mental retardation) were selected for the survey in order to cover a variety of situations.

The corresponding patients' associations were contacted in the winter of 2002-2003. They sent information about the survey to their members in the French- and German-speaking regions of Switzerland. Volunteers (patients or their close relatives) were first registered on a list and then randomly sampled after stratification of the list. In each stratum, which was defined by the condition and the linguistic region, six subjects were selected for a semi-structured telephone interview.

The interview covered the patients' socio-demographic characteristics, questions on access to care during the diagnosis process, treatment in the past two years (including general practitioners, specialists, medication, psychological support, periodic case assessments, hospitalization, emergency care, rehabilitation and long-term care), health insurance coverage and health care costs. The interview ended with the subject's opinion regarding health care rationing based on personal experience and reasons for being a member of a patients' association. The questions were designed to solicit both concrete experiences of limited access to care and the subject's interpretation of such experiences in terms of rationing. This approach was adopted because it was uncertain that respondents would have a common understanding of the concept of rationing. One of the purposes of the survey was to investigate the extent to which instances of limited access were perceived or not perceived to be the result of health care rationing in Switzerland.

All 72 interviews were conducted in 2003 and recorded, transcribed and translated into French (if interviews had been in German). Information was abstracted using a standard form adapted for the specific chronic condition in order to facilitate systematic analysis. Results

⁴⁶ For data collection in German-speaking regions.

were first summarized for each chronic condition. Then each aspect of care was scrutinized for all the pathologies included in the qualitative survey.

4.2 RESULTS

The main results for each chronic condition are presented in Tables 5 (physical health) and Table 6 (mental health). Subjects whose physical health was affected by chronic diseases felt they had good access to medical care for diagnosis, medication and medical treatment. In some cases, however, they complained about the fact that at the beginning of their disease it was difficult for general practitioners to recognize their symptoms as manifestations of a severe condition. This was particularly the case for multiple sclerosis and rheumatoid arthritis.

Once the diagnosis was established, access to specialized care was not felt to be a problem. Specialized consultations and assessments were reported. General practitioners demonstrated a high level of availability, even if several subjects felt that their expectations regarding support and coordination of care were not adequately met.

Table 5: Main difficulties in access to care, by chronic physical health condition

| Chronic condition | Results |
|---------------------------------------|---|
| Multiple sclerosis | <ul style="list-style-type: none"> • Follow-up by primary care physician, available but support not always optimal (low level of familiarity with the disease and associated needs, limited information and coordination) • Assessments by specialists was the rule but diagnosis was sometimes delayed in long-term cases • Low level of costly medication due to causes other than limited access (negative effects of treatment, etc.) • Limited professional home care support, inadequate and insufficient in cases of severe physical handicaps • Limited reimbursement for support devices (e.g. wheel chairs), home care and rehabilitation care (e.g. physical therapy) |
| Rheumatoid arthritis | <ul style="list-style-type: none"> • In one-third of cases, late recognition of the disease by the primary care physician • Overall, good access to medical care • Good access to medication but biotherapy often received in an experimental context • Problems with access to surgery, inappropriately performed as day surgery in some circumstances, shortening of post-surgery hospital stays considered to be a problem |
| Chronic obstructive pulmonary disease | <ul style="list-style-type: none"> • Overall, good access to medical care • High level of support from physicians • High level of investment by informal caregivers and little demand for professional home care • Incomplete reimbursement of costs related to O₂ therapy |

Hospital care was not always described as optimal. Subjects with rheumatoid arthritis who need frequent surgical interventions complained of restricted access to hospital resources. They felt compelled to have day surgeries rather than in-patient surgeries, and in the case of hospital stays they complained of premature discharge. Limitations regarding rehabilitation care, which was not always available and not always sufficiently specialized, and restrictions on reimbursement by health insurance funds were also mentioned by several subjects in multiple sclerosis, rheumatic arthritis and chronic pulmonary disease subgroups.

Problems of access tend to involve the care required in order to live at home with a severe physical handicap. Professional home help was considered inadequate for long-term needs, particularly from an organizational point of view, and quantitatively not commensurate with the needs of multiple sclerosis patients. In addition, inadequate reimbursement for devices such as wheelchairs by health and social insurance funds was often cited as a problem by multiple sclerosis and rheumatic arthritis subjects. The costs to users of home oxygen therapy were also cited by subjects suffering from a chronic obstructive pulmonary disease.

Although problems of limited availability, inadequate quality and insufficient reimbursement were reported in the areas of rehabilitation and long-term care, they were not interpreted by subjects with chronic, physical health disorders as a manifestation of discrimination related to any of their personal characteristics. Furthermore, access to the care provided by general practitioners or by specialized physicians did not appear to be a difficulty, although coordination and support by the medical profession were sometimes felt to be a potential area for improvement.

In contrast, Table 6 shows that access to appropriate medical care was perceived to be a problem in subgroups with chronic mental health conditions. Relatives of subjects with Alzheimer's disease complained about the lack of responsiveness from general practitioners who were reluctant to recognize the diagnosis in the early stages of the disease. This resulted in delayed treatment and a lack of support for some patients and their informal caregivers. Specialized consultations and complete assessments was the result, in some cases, of the initiative of relatives rather than of referrals by general practitioners. Late recognition of signs and symptoms by primary care physicians, despite caregivers' insistence, was also mentioned by relatives of subjects suffering from psychosis or schizophrenia, a situation that can be aggravated by the patient's denial of disease. Parents of subjects with mental retardation also indicated that ordinary diseases were sometimes ignored and the specific needs of subjects neglected, a phenomenon attributed to health care professionals' limited familiarity with the problems of mental disease.

Subjects suffering from Alzheimer's disease and psychiatric diseases did not report limited access to medication. Some relatives of subjects with mental retardation even mentioned over-medication in institutional settings (e.g. in the event of hospitalization). This was also mentioned by relatives of demented subjects in connection with nursing home stays. However, many complaints were reported concerning the lack of institutional response to the psychogeriatric needs of Alzheimer's patients. Activities offered in nursing homes to

relatively young patients affected by this disease were perceived as inappropriate, and non-specific rehabilitation as a waste of resources.

Table 6: Main difficulties in access to care, by chronic mental health condition

| Chronic condition | Results |
|--------------------------|---|
| Alzheimer's disease | <ul style="list-style-type: none"> • Late recognition of signs and symptoms by primary care physicians, despite caregivers' insistence • Age-related discrimination from physicians who consider dementia as a normal manifestation of aging that does not deserve specific care • Specialized investigations easily available but obtained directly by the patient's relatives rather than after referral • Good access to medication • Insufficient specialized institutional and human resources for psycho-geriatric cases • Lack of appropriate institutions and of activities appropriate for middle-aged adults in institutions • Insufficient and inappropriate professional home care support • Low level of satisfaction with rehabilitation care (not available, poor quality) • Insufficient reimbursement for transportation, surveillance, short stays in institutions, and support devices. |
| Psychosis, schizophrenia | <ul style="list-style-type: none"> • Primary care physicians slow to recognize signs and symptoms, despite caregivers' insistence, until the first emergency situation • Inadequate early treatment of the disease • Limited access to psychiatric hospitals and psychiatric support before or after crises • Good access to medication • Lack of psychiatric treatment and support in the patient's normal environment |
| Mental retardation | <ul style="list-style-type: none"> • Discrimination through lack of recognition of specific needs and lack of consideration for common (undetected) health problems, leading informal caregivers to fear that care will be inadequate after their own death • Modest access to preventive care • Overmedication in hospital settings • Periodic re-evaluation of needs by specialist was not the rule |

Access to selected specific care was considered inadequate. Examples cited included home care services provided by organizations with a high turn-over of personnel and fixed schedules that do not correspond to the needs of Alzheimer's patients, and reimbursement for transportation, surveillance, short stays in institutions and devices that permit patients to live

in the community and informal caregivers to be involved. Psychiatric subjects also faced difficulties after the diagnosis was made in getting necessary care in their living environment and in being admitted to psychiatric hospitals when they were not in a crisis situation.

A feeling of discrimination was reported both by the Alzheimer's subgroup, in which case discrimination related to old age, and by relatives of subjects suffering from mental retardation. Rationing was perceived more frequently by individuals in psychiatric disease or mental retardation subgroups.

4.3 INTERPRETATION

Although less than half of the participants in this survey felt personally concerned about rationing, many problems of access were reported, and some of these problems suggest implicit rationing at different levels.

As a general rule, medical care for physical health problems is not a problem once the diagnosis has been established. Subjects with rheumatic arthritis and with chronic obstructive pulmonary disease reported good access to medical care. Drugs of the latest generation are prescribed and reimbursed for chronic conditions, whether physical or mental.

However, limited availability of resources in certain areas and/or limited health insurance reimbursements impose restrictions on the use of the following types of care:

- psychiatric care and support in patient's own living environment
- in-patient psychiatric care
- psychogeriatric care
- rehabilitation for chronic physical and mental conditions.

These restrictions are liable to compromise the development of patient health.

Negative attitudes on the part of professionals reinforce this risk. Such attitudes have been reported in cases of multiple sclerosis, Alzheimer's disease, psychotic diseases and mental retardation. In these groups, professionals showed signs of insufficient responsiveness to the early signs of the disease, if not discrimination. Interestingly enough, these conditions are all characterized by limited treatment options: curative treatments do not exist for multiple sclerosis or for mental retardation. In the case of Alzheimer's disease and psychotic disorders, improvement may be brought about by treatment and rehabilitation, but the health care system lacks the resources to meet the needs of all patients. Although negative attitudes on the part of professionals may result from inadequate knowledge about these diseases, they may also constitute an implicit strategy for dealing with insufficient resources or with the limits of medical science.

Patient autonomy and their capacity to live in their natural environment is also compromised by limited availability and/or limited reimbursement for resources such as support devices, professional home care services or short stays in nursing homes.

5 THE OPINIONS OF PRIMARY CARE PHYSICIANS

The extent to which health care resources are perceived as sufficient or limited by primary care physicians working in private practice was investigated in a survey conducted at the national level by the Lausanne University Institute of Social and Preventive Medicine in 2003-2004.

5.1 METHODS

The mail survey of primary care physicians targeted 4,982 general practitioners, including those certified as specialists in general medicine, and all physicians specializing in internal medicine who were working in private practice and were registered with FMH, the Swiss medical association, in 2003. Physicians whose private practice was located in a hospital were excluded.

A stratified sample of 2,684 physicians was randomly drawn from the FMH list. Strata were defined by the canton of professional practice and by medical specialty (general vs internal medicine). Physicians in the sample received a mailed questionnaire in the autumn of 2003, followed by two follow-up letters. In order to make up for any shortcomings in the FMH list, a card was enclosed with the questionnaire on which respondents could check reasons for non participation such as physician retirement, specialized practice that does not include primary care, or death.

The questionnaire was anonymous. It included questions dealing with patient access to specialized consultations, out-patient tests and examinations, and hospital care. A section was dedicated to the care provided to patients in nursing homes. In conclusion, general practitioners were asked whether selected patient categories had greater difficulties in receiving necessary care. Their opinion concerning the effect of possible limited access on patient health and on their current professional practice was also solicited. Most questions were very specific and designed to elicit categorical answers, but they were followed by short open-ended questions designed to elicit details and clarifications. Respondents were instructed to consider only *necessary* care. Questions referred to access within a *reasonable time period*, which was defined as one that did not compromise the patients' health or his/her potential for recuperation, and did not induce or prolong suffering.

After coding of open-ended questions by two physicians, analyses were performed on weighted data, taking into account both the stratified sampling process and non-responses. The response rate was 70%, with 1,736 valid questionnaires, 139 cards returned indicating non-eligibility, and 5 questionnaires excluded from weighted analysis since answers required for allocation to an appropriate stratum had been left blank.

5.2 RESULTS

5.2.1 Out-patient and home care

According to almost all primary care physicians, getting an appointment for a specialized consultation within a reasonable amount of time is not a problem in the areas of cardiology, general surgery, gastroenterology, pulmonology or ear, nose and throat (Table 7). Difficulties were reported slightly more frequently in the areas of rheumatology or gynaecology and obstetrics. Some 20-30% of primary care physicians reported limited access to consultations in orthopaedics, ophthalmology, neurology and dermatology.

Table 7: Is it always possible to arrange for a specialized consultation within a reasonable time period, if needed?

| Specialty | % No | % Yes | % Don't know |
|--------------------------------|------|-------|--------------|
| Gastroenterology | 3.9 | 95.5 | 0.5 |
| General surgery | 3.9 | 95.3 | 0.8 |
| Cardiology | 4.8 | 94.3 | 0.8 |
| Ear, nose and throat | 5.2 | 94.0 | 0.8 |
| Pulmonology | 5.6 | 91.9 | 2.5 |
| Gynaecology and obstetrics | 13.8 | 82.0 | 4.2 |
| Rheumatology | 14.8 | 83.4 | 1.7 |
| Orthopaedics | 23.0 | 75.4 | 1.6 |
| Ophthalmology | 23.8 | 74.8 | 1.4 |
| Neurology | 25.2 | 73.4 | 1.4 |
| Dermatology | 27.9 | 70.2 | 1.9 |
| Pain and invalidating symptoms | 37.8 | 35.7 | 26.5 |
| Psychiatry | 65.3 | 32.4 | 2.3 |

Pain and palliative care consultations were also included, but a quarter of respondents could not answer this question. The major problem is psychiatry, with two thirds of primary care physicians indicating that arranging for an out-patient psychiatric consultation within a reasonable time period is not always possible.

The problem with psychiatry also emerged from the information that was collected regarding access to tests, exams and specialized treatments. Nearly seven out of ten respondents reported problems with access to psychotherapies (Table 8). In contrast, procedures such as laboratory tests, standard radiology, cat-scans, MRIs, ultrasound exams, arterial or venous Dopplers, gastroscopies and colonoscopies were very rarely reported as being difficult to schedule within a reasonable time period.

While pace-makers are usually obtained within a reasonable time period, a slightly greater number of physicians reported unreasonable waits for coronary angiographies or dilatations.

Access to nursing care at home was rarely mentioned as a problem. In the area of rehabilitation care, physiotherapy seems to be accessible, but ergotherapy and speech therapy were more frequently reported to be difficult to obtain.

Table 8: Is it always possible to arrange for the following tests, exams or treatments within a reasonable time period, if needed?

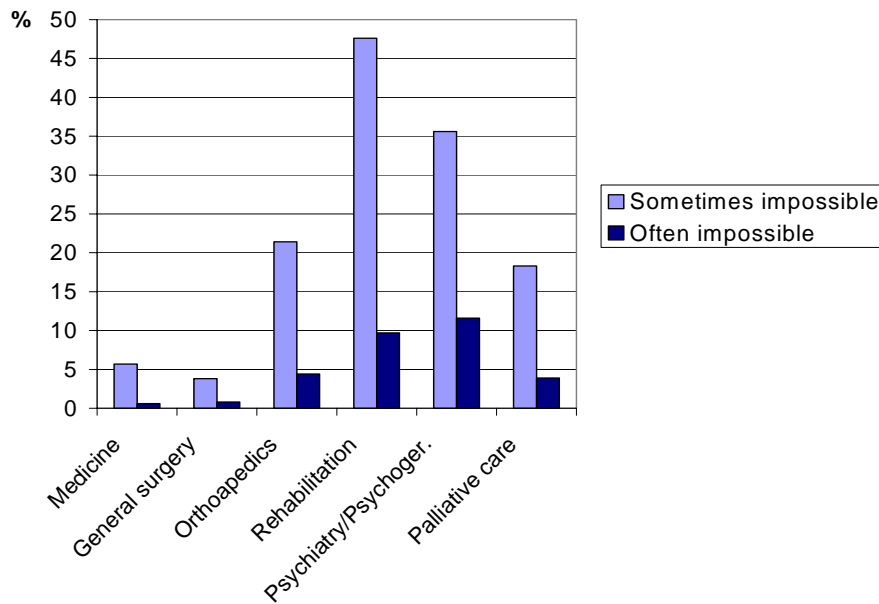
| Specialty | % No | % Yes | % Don't know |
|--------------------------------------|-------------|--------------|---------------------|
| Laboratory | 0.2 | 99.5 | 0.3 |
| Standard radiology | 0.7 | 98.9 | 0.4 |
| Cat-scans | 3.1 | 96.5 | 0.5 |
| Magnetic resonance imaging | 6.6 | 92.5 | 0.9 |
| Gastroscopy | 3.2 | 96.1 | 0.7 |
| Colonoscopy | 3.9 | 95.2 | 0.8 |
| Ultrasonography | 1.2 | 98.3 | 0.5 |
| Arterial or venous Doppler | 5.9 | 92.3 | 1.8 |
| Pace-maker installation | 5.5 | 76.0 | 18.4 |
| Coronary arteriography or dilatation | 12.0 | 77.4 | 10.6 |
| Physiotherapy | 5.9 | 93.5 | 0.6 |
| Ergotherapy | 13.7 | 67.9 | 18.5 |
| Speech therapy | 22.2 | 41.9 | 35.9 |
| Home care, nurse | 7.5 | 87.3 | 5.2 |
| Home care, BADL care | 4.5 | 92.2 | 3.2 |
| Psychiatry | 69.8 | 25.4 | 4.8 |

5.2.2 Hospital care

Primary care physicians were asked both about difficulties in getting patients admitted to hospitals (Figure 9) and about possible premature hospital discharges (Figure 10).

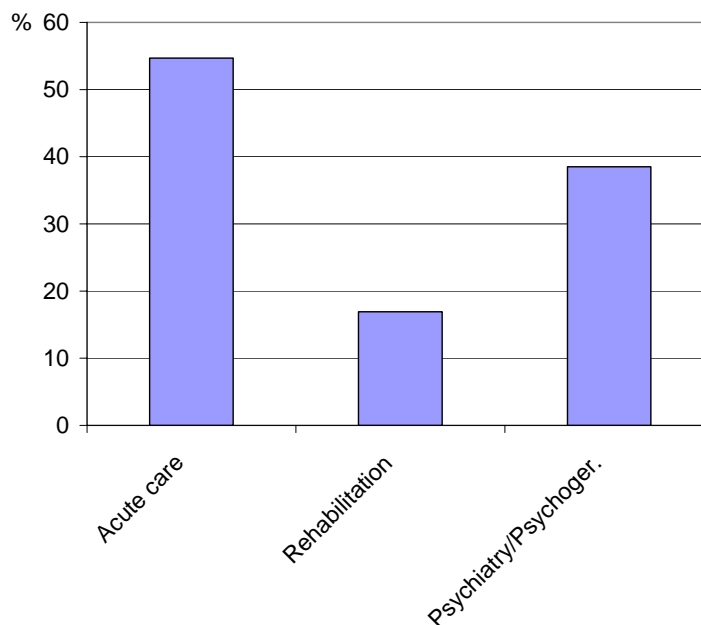
Unreasonable waits for hospital admission were rarely mentioned in connection with medical and general surgery departments. By contrast, 21% of primary care physicians indicated problems with access to orthopaedic departments. A majority of physicians also reported difficulties in getting patients admitted to rehabilitation hospitals, and many indicated problems with health insurance as a reason for the limited access to rehabilitation hospitals. Admission to psychiatric or psycho-geriatric hospitals is not always possible within a reasonable time period according to 47% of primary care physicians. This involved demented or depressive patients in particular (but not exclusively). Admission to palliative care hospital units is mentioned as a problem by 18% of respondents.

Figure 9: Proportion of primary care physicians reporting limitations in hospital admissions, by type of hospital service



More than half of primary care physicians reported that their patients were sometimes discharged prematurely from acute care hospitals, but few of them reported this to be a frequent occurrence. One quarter of respondents indicated that older patients were more likely to be discharged prematurely from acute care hospitals, and one out of five reported that having no private insurance is another risk factor. Although admissions to rehabilitation hospitals are not always possible, few physicians reported premature discharge once patients have been admitted. Almost four out of ten primary care physicians complained of premature discharges from psychiatric hospitals.

Figure 10: Proportion of primary care physicians reporting premature hospital discharges, by type of hospital service

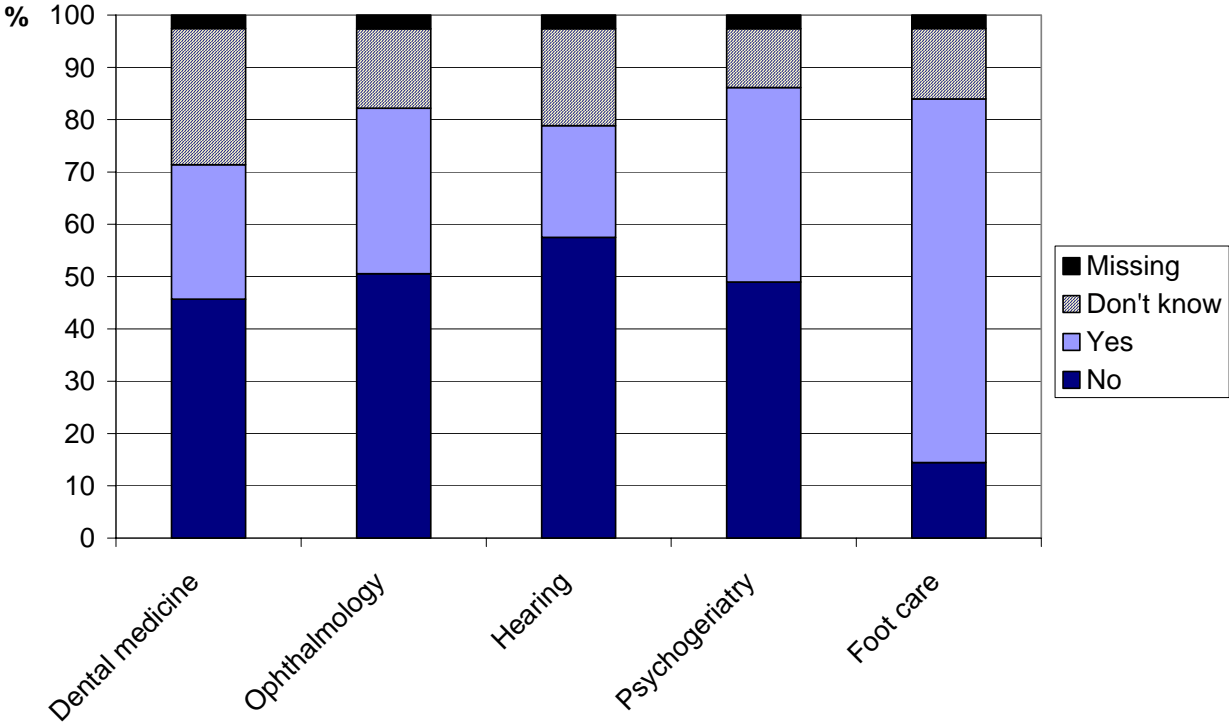


5.2.3 Care in nursing homes

A majority of respondents cared for patients living in nursing homes. According to nearly half of the respondents, institutionalized patients did not receive the benefit of regular dental care consultations. Fifty one percent indicated that ophthalmologic consultations were not regularly provided, 58% for hearing examinations and 49% for psycho-geriatric consultations. In addition, a sizable percentage of respondents were unable to answer these questions (Figure 11). However, a large majority indicated that such consultations could always be arranged within a reasonable time period, if necessary.

Almost all reported that medication was accessible in nursing homes, irrespective of the price. However, half of primary care physicians providing care to institutionalized older patients mentioned an inadequate level of remuneration for the time they dedicated to these patients, and one third reported the same for the time spent in specialized training. More than a quarter also reported that the time they can devote to their nursing home patients is not sufficient.

Figure 11: Proportion of primary care physicians of patients in nursing homes reporting that their patients benefited from regular examinations or care in certain areas



5.2.4 Opinions regarding the effects of limited access to care

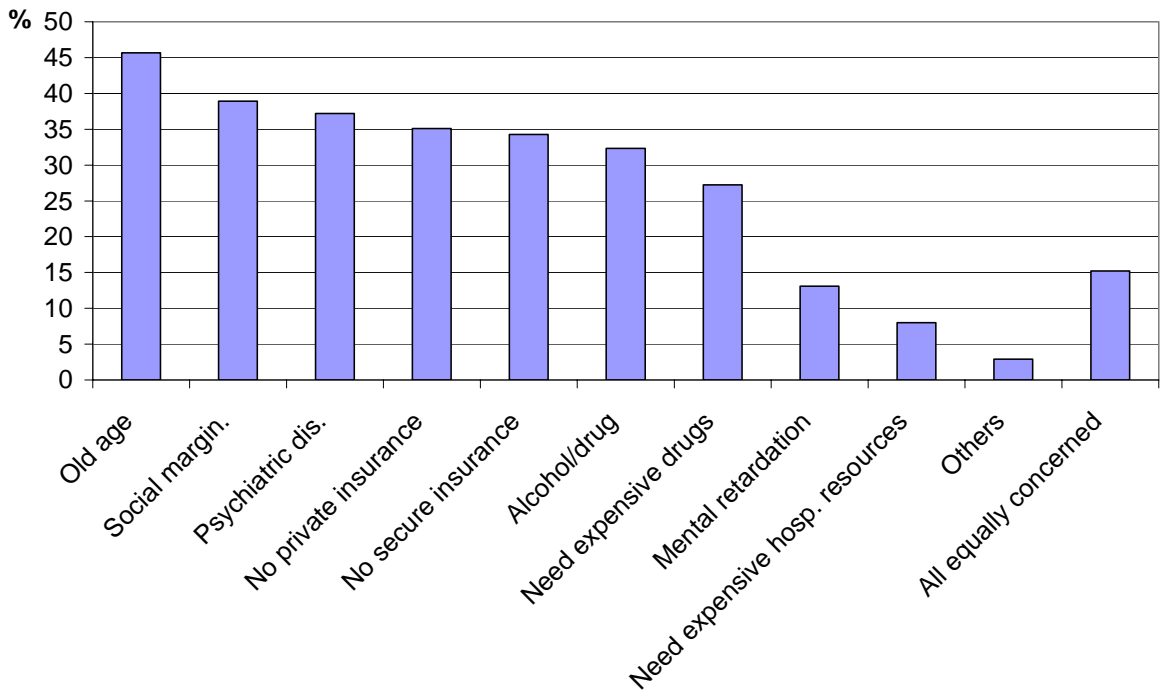
At the end of the questionnaire, physicians were asked whether the access limitations that they had mentioned, if any, actually affected patient health on the whole. Half of primary care

physicians indicated that it was occasionally the case, but only one in twenty thought that a large number of patients were affected. One third indicated that there were either no limitations or limitations that had no impact on health. The remaining percentage had no opinion.

Among physicians concerned about the effects of limited access on health, nearly three quarters indicated that limited access was generally managed without reference to explicit criteria. Half, or nearly half, reported that limited reimbursements by health insurance funds compromised access to preventive examinations or screening tests, to out-patient psychiatric care and to in-patient or out-patient rehabilitation care.

In the opinion of 46% of respondents, older patients are particularly disadvantaged by limited access to care (Figure 12). Patients without private supplementary insurance or on the margins of society, patients needing costly medications, and psychiatric patients were also frequently reported to be particularly vulnerable.

Figure 12: Subgroups exposed to discrimination, according to primary care physicians who believe that limited access to care sometimes or often has an impact on patient health



Primary care physicians were divided regarding the need for more explicit criteria for managing access to limited care. Two out of ten had no opinion, and the remaining 80% were equally split between those favouring and those opposed to more explicitness.

5.3 INTERPRETATION

There is always the danger that surveys asking professionals about the problems they face in their daily practice will be used as a vehicle for presenting subjective opinions and defending corporate interests rather than for reporting facts. In this survey, there is little evidence of that since responses are well differentiated according to the type of care. In some areas, virtually all physicians agreed that access was always possible, but in other areas significant percentages reported limitations.

The majority of primary care physicians reported problems of access to care in the field of psychiatry, particularly – but not limited to – out-patient care.

Rehabilitation care was also reported to be difficult to obtain, with many physicians noting that health insurance regulations were responsible for limiting access. The lack of insurance coverage was also mentioned as a factor in inadequate access to preventive care and to psychiatric treatment.

Admission to medical and general surgery divisions of acute care hospitals was not cited as being difficult, but a substantial percentage of physicians reported waits for orthopaedic surgery, and half of all respondents complained of premature discharges from acute care hospitals.

Many physicians involved in providing care to nursing home residents reported no regular examinations to assess major components of geriatric health (psychogeriatric, vision, hearing, dental health) and complained about the limited time they had available to dedicate to these patients.

Half of physicians reported that current limitations in access to care occasionally had negative repercussions on their patients' health, particularly for elderly patients, those without private insurance, individuals who are poorly integrated socially, patients in need of costly medications or hospital resources, and patients needing psychiatric care. According to a majority of respondents, resource allocation today is essentially implicit, but there was no agreement on the desirability of more explicit criteria.

6 THE OPINIONS OF HOSPITAL PHYSICIANS AND DIRECTORS

Parallel with the survey of primary care physicians, a similar survey on access to care was conducted by the Lausanne University Institute of Social and Preventive Medicine in 2003-2004 in order to obtain the opinions of medical and administrative heads of general acute care and psychiatric or psychogeriatric hospitals in Switzerland.

6.1 METHODS

The hospital survey targeted all general acute care, psychiatric or psychogeriatric hospitals in Switzerland that were considered to be public facilities based on legal form and financing. General acute care hospitals were defined as institutions with at least one medical and one surgical or orthopaedic wards. Both hospitals administrators and medical heads were identified based on the Swiss Medical Yearbook⁴⁷.

The director and the physicians in charge of the departments of medicine, surgery and psychiatry at each hospital were contacted. In the case of multi-site hospitals, the general director was selected. In cases where two or more physicians shared medical direction of a service, one of the chief physicians was chosen at random. At several psychiatric hospitals, the director was also the chief physician and one single contact was made. A total of 468 questionnaires were mailed to eligible subjects in the autumn of 2003, followed by two follow-up mailings. Subjects included 122 heads of departments of medicine, 120 heads of departments of surgery or orthopaedics, 47 heads of departments of psychiatry or geriatric psychiatry, 112 administrators of acute care hospitals, and 35 administrators of psychiatric or psychogeriatric hospitals.

The questionnaires used the same terminology that was used in the survey of primary care physicians (see Chapter 5): respondents were instructed to consider only access to *necessary* care, and questions referred to access within a *reasonable time period*, which was defined as one that did not compromise the patients' health or potential for recuperation and did not induce or prolong suffering.

The contents of questionnaires addressed to chief physicians covered access to the department or service for which they were directly responsible, to internal hospital resources after admission, to drugs during in-patient stays, and to rehabilitation, as well as intra- and inter-hospitals referrals (e.g. to intensive care units). Several items had to be modified in order to take into account specific areas of hospital specialties. For example, questionnaires to psychiatrists included questions on access to treatment after discharge. In cases of limited access, respondents were asked to specify whether explicit criteria had been set by medical or by administrative services in order to decide who has priority. The questionnaires sent to hospital administrators covered essentially the same areas. All questionnaires ended by

⁴⁷ FMH, Annuaire Médical Suisse 2003

soliciting opinions regarding the effect of possible limited access on patient health and on groups subject to discrimination, if any. The hospital questionnaire consisted basically of very specific questions, but these were also supplemented by short open-ended questions designed to solicit details and clarifications.

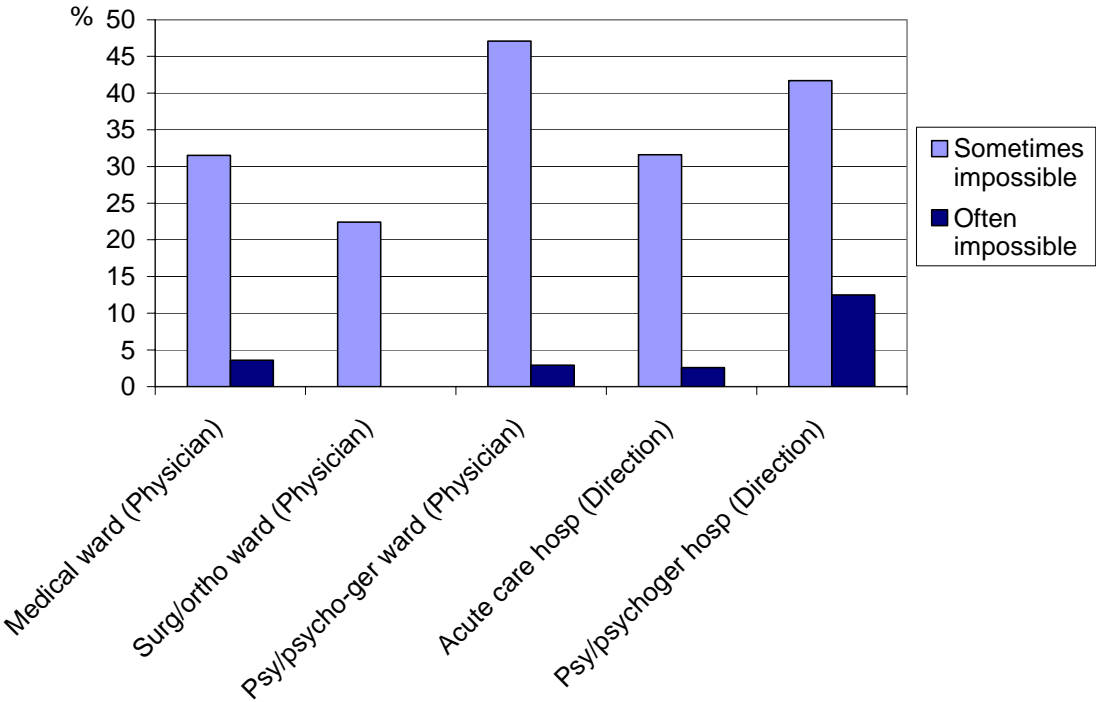
The response rate was 76.2% for departments of medicine, 80.8% for departments of surgery or orthopaedics and 74.5% for psychiatric or psychogeriatric departments or hospitals. The rate was slightly lower for hospital administrators: 67.9% at general acute care hospitals, and 68.6% at psychiatric or psychogeriatric hospitals. Analyses were performed on unweighted data.

6.2 RESULTS

6.2.1 Hospital admission

According to one third of physicians in charge of departments of medicine and one fifth of surgeons or orthopaedists, admission to their respective departments was not always possible within a reasonable time period (Figure 13). The percentage was 50% for psychiatric or psychogeriatric wards. Similar figures were obtained from hospital administrators: one third of the administrators of general acute care hospitals and 54% of those of psychiatric or psychogeriatric hospitals reported limited access.

Figure 13: Proportion of hospital physicians in charge of departments and of hospital administrators reporting limitations in hospital admissions, by type of ward or hospital



A minority of medical respondents reported the existence of explicit medical or administrative criteria that would systematically apply in the event of limited access in order to decide who has priority. The only exception was that explicit medical criteria were reported by six out of ten physicians in charge of psychiatric or psychogeriatric wards. These criteria are based essentially on clinical evaluation of vital risk, emergency and case severity.

A majority of medical heads of departments who faced difficulties in admitting all patients within a reasonable time period, in all three types of services, reported the use of emergency services by private practitioners in order to obtain immediate admission for non-urgent cases. This opinion was shared by 88% of administrators of general acute care hospitals and by 64% of administrators of psychiatric or psychogeriatric hospitals.

6.2.2 Intra-hospital resources

Fewer than 10% of chief physicians in charge of departments of medicine, surgery or orthopaedics and of directors of acute care hospitals indicated that access to laboratory, radiology, CAT scans, pain consultation or dialysis was sometimes a problem (Figure 14). Access to MRIs appeared to be more limited, with 40% of physicians in charge of departments of medicine reporting occasional problems. Physicians in charge of departments of medicine also reported limited access to respiratory and mobilization physiotherapy more frequently than did surgeons. A smaller proportion of hospital directors reported problems with access to MRIs or physiotherapy. In-hospital specialized rehabilitation was reported easy to obtain after myocardial infarction or after coronary artery bypass grafts, but one fourth of physicians in charge of departments of medicine indicated limited access in cases of stroke. Some 15% reported difficulties in cases of multiple sclerosis or after hip or knee prosthetic surgery.

One fourth of surgeons in general acute care hospitals reported that operating rooms were not always available within a reasonable time period; this opinion was shared by a similar proportion of administrators.

Occasional limited access to intra-hospital resources was more frequently noted in psychiatric or psychogeriatric hospitals, where a majority of physicians reported that the time available for psychotherapy treatments did not meet the needs (Figure 15). Thirty to forty percent also reported that physiotherapy and other rehabilitation resources (ergotherapy, workshops, etc.) were not always available within a reasonable time period; twenty to thirty percent of administrative directors agreed with this view.

Figure 14: Proportion of respondents reporting limited access to intra-hospital resources in acute care hospitals, by type of respondent

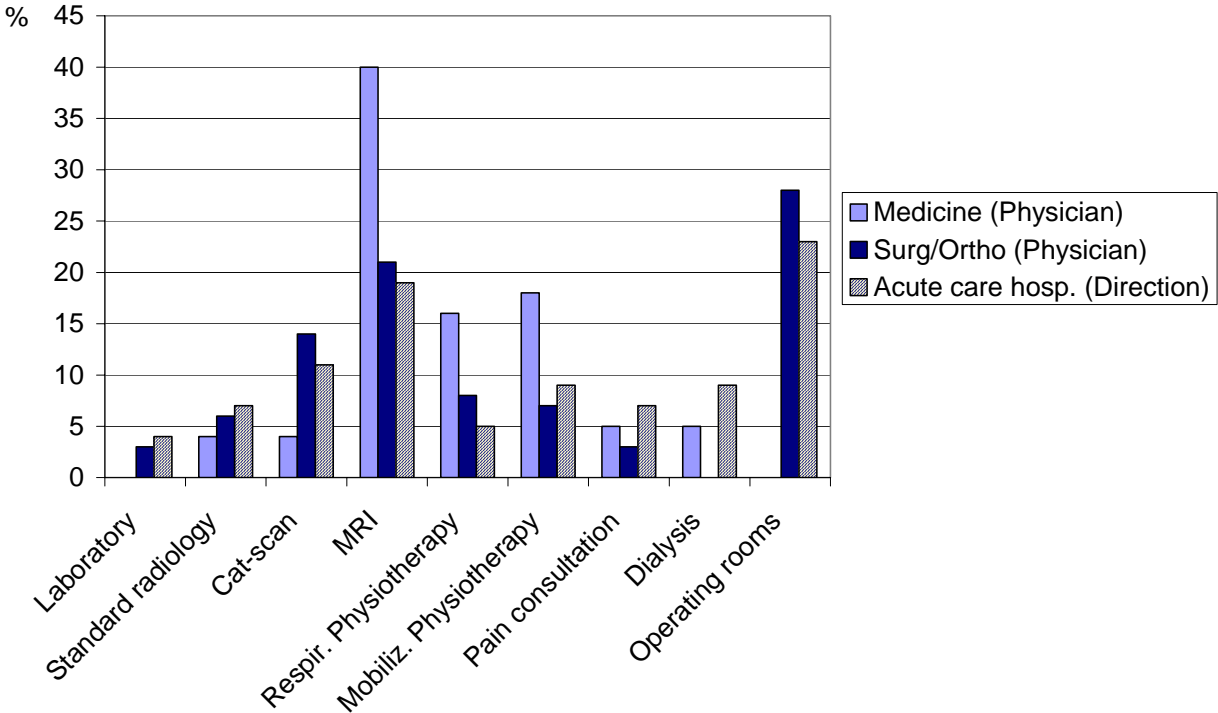
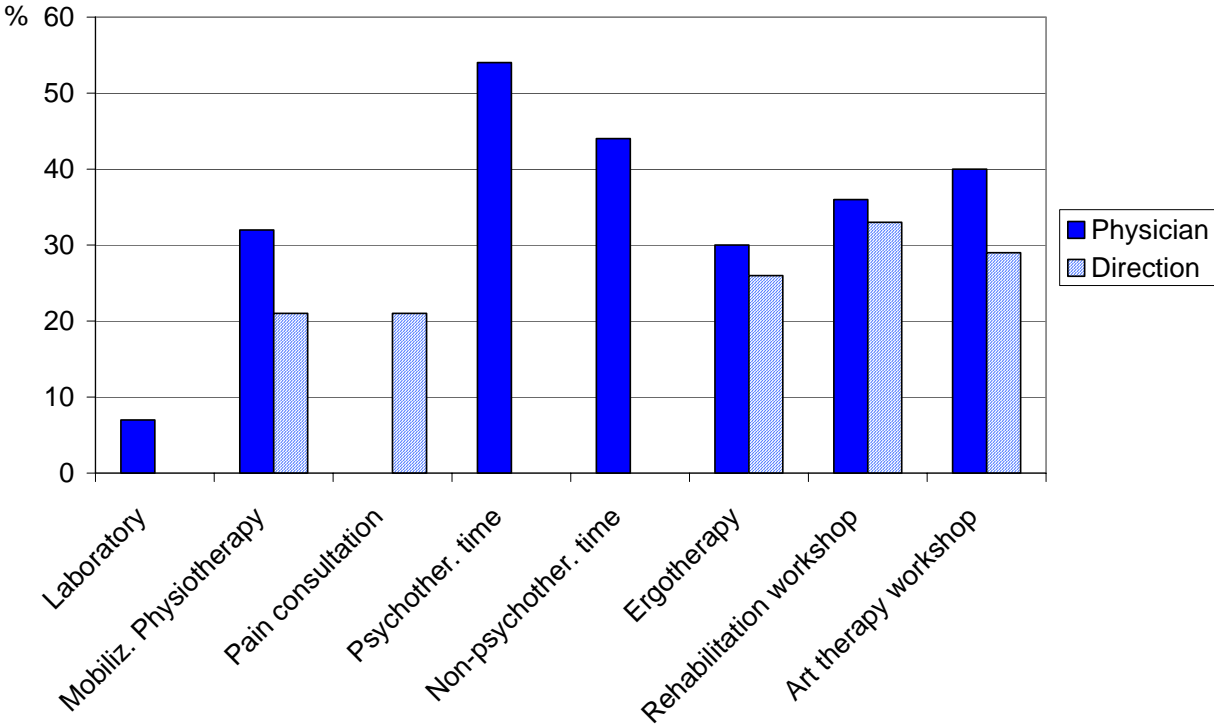


Figure 15: Proportion of respondents reporting limited access to intra-hospital resources in psychiatric/psychogeriatric hospitals, by type of respondents



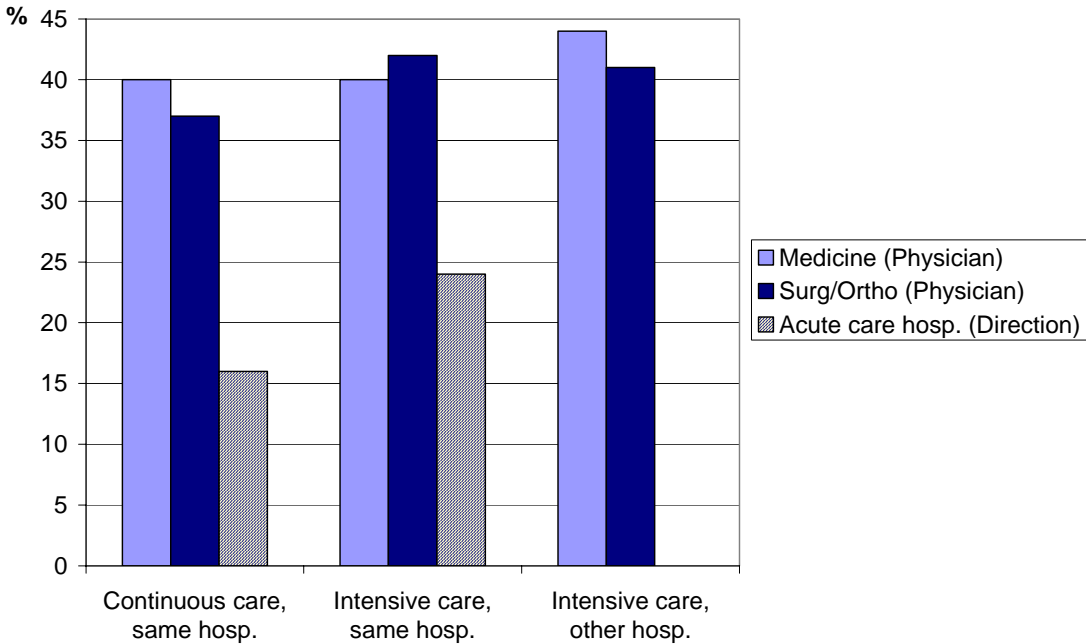
In all facilities, limited access was in general attributed by administrators to the lack of financial resources for hiring trained personal. In addition, almost all physicians added that patients with private insurances did not benefit from better access.

According to nearly all physicians in acute care or psychiatric/psychogeriatric institutions, hospital administrations do not request justification for the prescription of costly medications. Exceptions to this rule included expensive new anti-fungal drugs and coagulants: 12-13% of respondents indicated that such mechanisms were in place for these groups. Some 10 to 20% of hospital directors reported that justification for costly prescriptions was mandatory at their facilities. However, 30% of responding physicians and 35% of hospital directors reported prescribing on the basis of clinical guidelines that include cost effectiveness considerations. More than half of these physicians but only a minority of the administrators admitted that such guidelines limit access for certain categories of patients such as the oldest patients, patients with co-morbidities and patients with a poor prognosis.

6.2.3 Transfer to special units: rehabilitation, continuous and intensive care (acute care hospitals)

Four out of ten physicians in charge of departments of medicine or surgery/orthopaedics reported that they sometimes had problems transferring patients within a reasonable time period to continuous care or to intensive care units within their hospital (if such units exist) or in other hospitals. This situation was reported by a much lower percentage of hospital administrators when asked about internal transfers, as shown in Figure 16.

Figure 16: Proportion of physicians in charge of departments of medicine or surgery/orthopaedics and directors of acute care hospitals reporting limited access to continuous and intensive care units

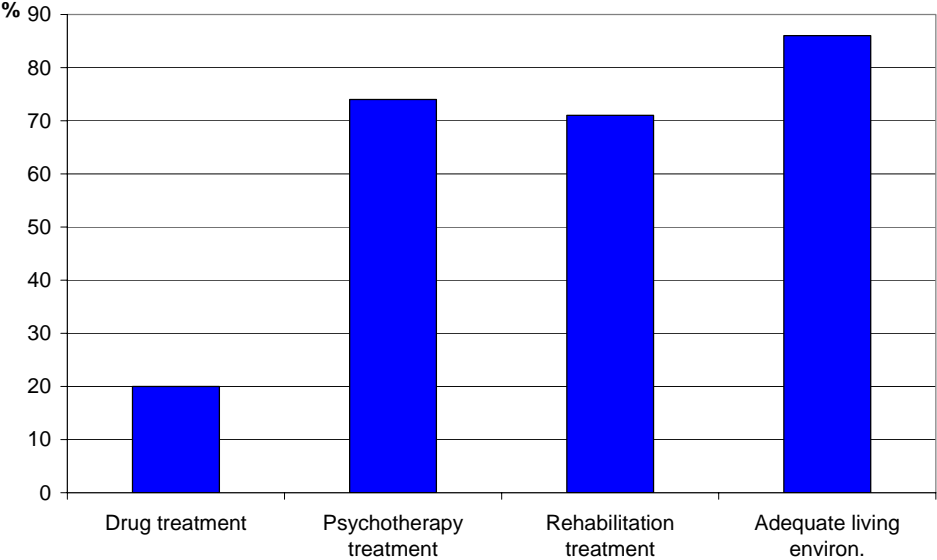


Transfers to specialized rehabilitation hospitals were reported as always possible by only 37% of physicians in charge of departments of medicine and by half of responding surgeons or orthopaedists.

6.2.4 Hospital discharge planning (psychiatric and psychogeriatric departments)

The majority of chief physicians of psychiatric or psychogeriatric departments or hospitals reported easy access to medication after hospital discharge, and only 20% reported occasional problems (Figure 17). In contrast, they had a pessimistic view concerning access to other health services needed by their patients after a hospital stay. A large majority reported difficulties arranging for psychotherapy and rehabilitation treatments after discharge and finding adequate living environments for their patients.

Figure 17: Proportion of physicians in charge of psychiatric or psychogeriatric departments or hospitals reporting occasional difficulties in arranging for certain types of post-discharge care



6.2.5 Opinions regarding the effects of limited access to care

Overall, half of physicians in charge of departments of medicine or surgery/orthopaedics in public general acute care hospitals reported that there were no limitations in access to care or that current limitations had no impact on patient health. Nearly half of the respondents in charge of departments of medicine and one third of those in charge of departments of surgery or orthopaedics believed that current limitations had some impact on patient health. One fourth of hospital administrators had the same view (Figure 19). At psychiatric or psychogeriatric hospitals, more than 80% of chief physicians and 70% of hospital administrators reported negative effects on health.

Fewer than 20% of physicians in charge of departments of medicine (fewer than 30% of surgeons) believed that all patients were equally exposed to the negative effects of limited access. The first factor mentioned was old age, followed by social marginalization, uncertain health insurance coverage (e.g. illegal migrants) and alcohol or drug abuse. For almost all population subgroups mentioned in Figure 19, physicians in charge of departments of medicine were more likely to report discrimination. An exception is the lack of private health insurance, which was more often reported as a discriminating factor by surgeons.

Social marginalization and old age were also the discriminating factors most frequently mentioned by psychiatrists, who reported almost unanimously that they did not believe that all patients were affected to the same extent by a limited access to health care (Figure 20).

Figure 18: Opinion of chief physicians in public hospitals regarding the impact of limited access to care, if any, on patient health, by type of hospital department

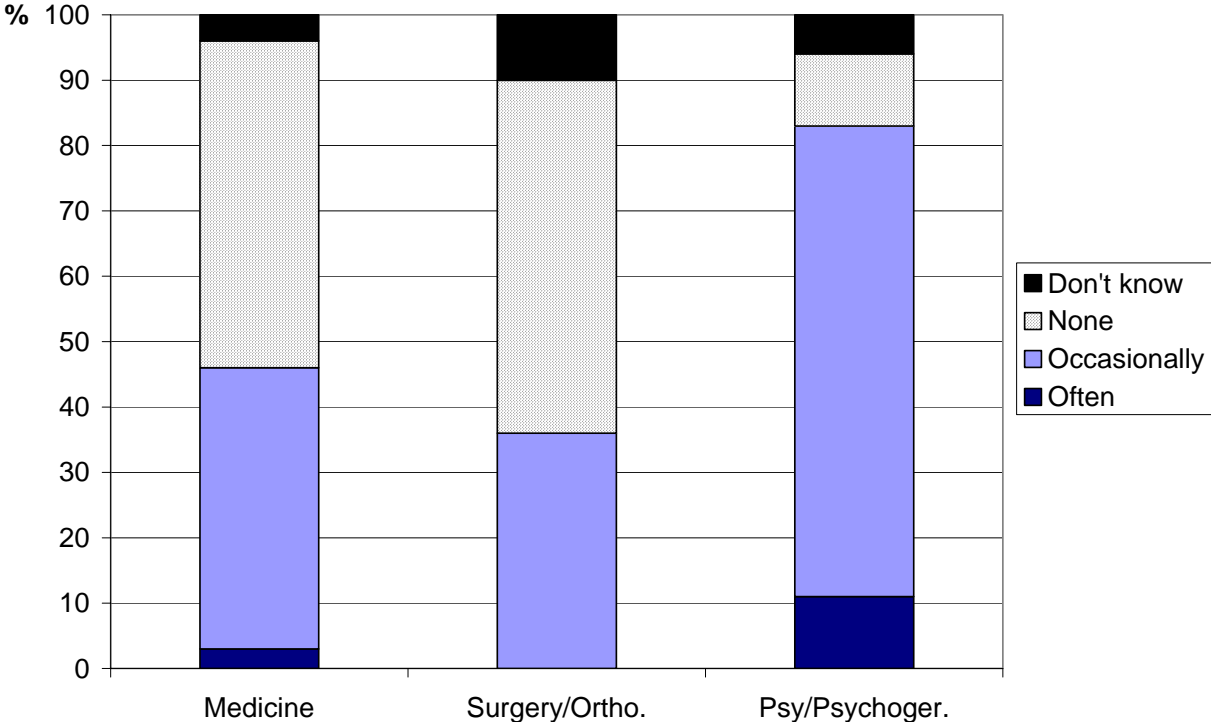


Figure 19: Subgroups facing discrimination, according to physicians in charge of departments of medicine and surgery/orthopaedics who believed that limited access to care sometimes or often has an impact on patient health

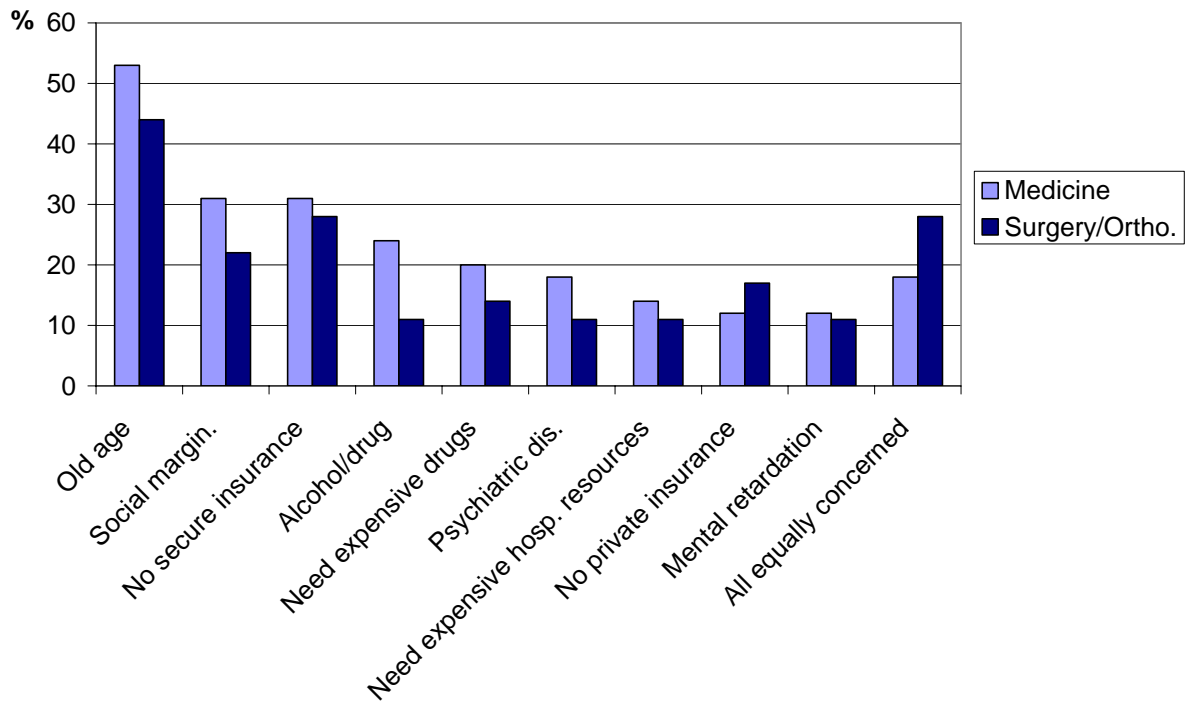
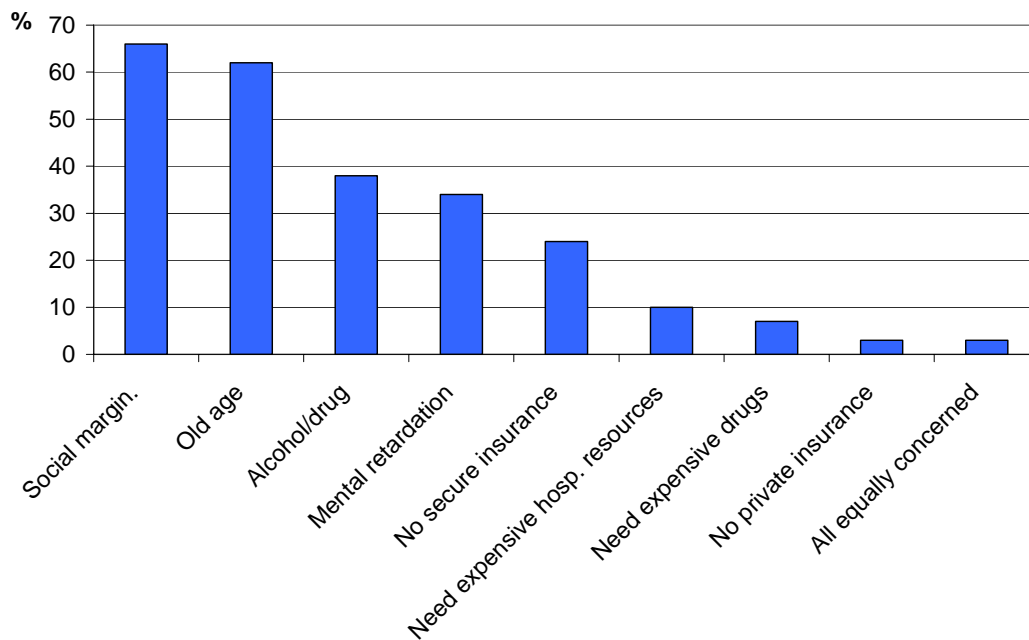


Figure 20: Subgroups facing discrimination, according to physicians in charge of psychiatric or psychogeriatric departments or hospitals who believed that limited access to care sometimes or often has an impact on patient health



Finally, two thirds of physicians in charge of departments of medicine or surgery/orthopaedics and eight psychiatrists out of ten indicated that limited access led to inefficiencies in their daily activities. This opinion was shared by half of the administrators of general acute care hospitals and by three quarters of the administrators of psychiatric or psychogeriatric hospitals.

Limited access also generated frequent tension, if not exhaustion, in hospital caregivers according to at least 70% of respondents in all categories. The proportion exceeded 80% among psychiatrists and administrators of psychiatric or psychogeriatric hospitals.

6.3 INTERPRETATION

Responses from physicians in charge of hospital departments and from hospital managers were similar in many areas. They agree in the following cases.

Access to the hospital was not always possible within a reasonable time period, but problems were essentially described as occasional rather than frequent. A larger proportion of respondents reported such problems in psychiatric or psychogeriatric hospitals. A minority mentioned the existence of explicit criteria for deciding who must be admitted first. When such criteria were mentioned, respondents indicated that clinical decisions were decisive. In hospitals that occasionally had situations of limited access, a majority of both physicians and administrators reported that emergency services were used by private practitioners in order to obtain admission for patients who could have waited.

Few problems of access to intra-hospital resources were reported in acute care hospitals. Exceptions include access to MRIs, physiotherapy and specialized rehabilitation, problems that were more often reported by departments of medicine. However, surgeons and administrators reported limited access to operating rooms in one quarter of public acute care hospitals. An even larger percentage reported difficulties in obtaining access to continuous or intensive care or in transferring patients to a rehabilitation hospital, irrespective of the type of responding department. Fewer administrators of hospitals housing continuous or intensive care units reported problems of access than did physicians.

The general opinion was that private insurance did not offer an advantage in terms of access to limited resources. While half of responding physicians believed that the current situation had a negative impact on patient health, nearly one half of physicians in charge of departments of medicine and one third of physicians in charge of surgical departments had a different opinion. They believed that some patients were discriminated against and cited old age and social marginalization as the principal factors.

Physicians and directors at psychiatric or psychogeriatric institutions had a more negative view of the current situation. More of them not only reported difficulties with admission but also problems with access to major components of intra-hospital care such as psychotherapy for hospitalized patients or in-patient rehabilitation treatment. Moreover, a large proportion of physicians reported problems with arranging for all types of care after hospital discharge except for medication. Like their colleagues in acute care hospitals, they did not believe that

privately insured patients had an advantage. However, only a few of them felt that the current situation had no effect at all on patient health, and a majority felt that socially marginalized and older patients were more likely to be impacted by limited access to care. The majority of administrators of psychiatric hospitals also expressed the opinion that current access limitations have an impact on patient health.

7 CONCLUSIONS

Various sources cited in Chapters 3 to 6 initially seem to hold contrasting views regarding the current situation in the Swiss health care system. This is due to the fact that each source discusses different aspects of the health care system and has its own recognised limitations. The Swiss Health Surveys and the Medical Hospitals Statistics have not been specifically designed in order to explore the question of access to care in Switzerland; secondary analyses are always restricted by the quality, the quantity and the relevance of available data, as it was the case in our work⁴⁸. Our national data sources did not allow to study a large range of care and, for example, we faced considerable uncertainty concerning the coverage of surgery and the uniformity of data collection in hospitals statistics. This limited the scope and interpretation of our analyses and resulted in a concentration on surgeries like hip and knee replacements that are both unlikely to be miscoded or to be performed as day cases. Even with this type of interventions, differences in utilization rates noted in our work on the basis of hospital statistics point to the need for further research and cannot be interpreted without nuance as a manifestation of health care rationing, since we lack detailed information on the whole range of potential determinants of utilization. On the other hand, surveys described in this report are essentially opinion surveys that collect a subjective appreciation of the current situation by members of patients' associations, physicians and hospital administrators. We could fear that a majority of respondents might take advantage of such surveys to complain about access problems in all fields in order to protect their own interests: this was not confirmed. As participation rates were high, there was no indication of self-selection of the most dissatisfied physicians. Then, the proportions of reported problems showed considerable variability across the diversity of health services investigated. Few respondents complained of a difficult access to cat-scans and, by contrast, a large proportion reported problems in some other domains. In addition, health care users, primary care physicians working in private practice, physicians in charge of hospital services and hospital administrations do not necessarily all share the same interests and we would not expect a large proportion of all respondents categories to report a specific problem if access is, indeed, sufficient. While conclusions from each part of our work taken in isolation must be cautious due to the discussed methodological limitations, we postulated that multiple imperfect sources may produce valuable information, provided that they are not all submitted to the same biases or deficiencies and that they produce convergent results. In the following conclusions, we emphasize the common elements that emerged from different parts of our research.

⁴⁸ For a detailed discussion concerning the quality of these data sources and its impact on the feasibility of analyses, see B. Santos-Eggimann, S. Cornaz, N. Chavaz Cirilli. *Rationnement implicite en Suisse: Exploration des domaines et des populations à risque. Recours aux services de santé selon les données de la Statistique des hôpitaux et de l'Enquête suisse sur la santé*. Lausanne: Institut Universitaire de Médecine Sociale et Préventive, Février 2005.

- **There is little evidence to support rationing of physician-provided out-patient care for somatic diseases.** Most primary care physicians reported that it was easy to get appointments in their own practices, in many specialty practices and for a wide range of medical tests and procedures. Members of patients' associations such as those devoted to rheumatic arthritis or chronic pulmonary diseases experienced good access to care. Indicators of health care utilization in Swiss health surveys did not show variations relating to potential discriminating factors in the area of care for basically somatic conditions (hypertension, joint pain, etc.).
- However, there are some indications, both from Swiss health surveys and from responses provided by primary care physicians, that individuals who have private insurance, a higher level of education and/or a higher income have better access to **preventive medicine**. Data also agree regarding limitations in access to **out-patient rehabilitation**. Primary care physicians reported that access to physiotherapy, ergotherapy and speech therapy was more frequently a problem than access to cardiology, for example. Many members of patients' associations reported limited access to rehabilitation care. The negative impact of health insurance regulations was noted by both physicians and patients. In addition, patients sometimes indicated the non-availability of specialized rehabilitation in their environment and their perception that inappropriate rehabilitation treatments were being offered in out-patient care.
- All sources point to a real problem when it comes to access to **psychiatric care**. Private practitioners have difficulties in getting patients admitted to psychiatric hospitals and in arranging for psychotherapy for their patients. Physicians and administrators in charge of psychiatric hospitals cannot always admit all patients within a reasonable time period. Hospital psychiatrists complain of insufficient hospital resources and confirm that it is difficult to arrange for psychotherapeutic and rehabilitation care when patients are discharged to the community. Members of patients' associations concerned with mental health conditions complain of insufficient care when patients are not in critical situations. In contrast, none of these groups reported difficulties in obtaining drug treatment.
- **The lack of availability and the weakness of health insurance reimbursement for the care provided by institutions dedicated to rehabilitation and to support care** results in limited access to the type of care needed by chronic patients, as repeatedly reported by members of patients' associations. Difficulties in obtaining admission or transfer to rehabilitation hospitals was also reported both by primary care physicians and by physicians in charge of departments of medicine or surgery at public hospitals. In addition, informal caregivers of patients affected by chronic diseases who are willing to keep their relatives in the community emphasized how difficult it was to obtain adequate help at home as well appropriate support from primary care physicians, who were depicted as available but non-responsive. It may be hypothesized that many of them feel caught between the expectations of their patients or families and the current deficiencies of the health care system.

- **Access to care in nursing homes** should be further investigated. While primary care physicians reported full access to medication in this setting, many of them indicated that services such as dental examinations, vision and hearing tests and psychogeriatric assessments, which should be performed regularly in the case of older, chronically diseased individuals living in institutions, were not organized systematically. A non-negligible proportion were unable to answer this type of question. In addition, a large proportion reported that they did not have enough time to give to their institutionalized patients and that the area suffered from under-financing.
- Access to hospitals for **surgical interventions** remains difficult to evaluate. At public hospitals, limited capacity in medicine was reported by a slightly greater proportion of chief physicians than limited capacity in surgery or in orthopaedics, and the general opinion was that privately insured patients did not have better access. In contrast, primary care physicians reported more problems in getting patients admitted to orthopaedic wards than to wards for medicine or general surgery. They also expressed the opinion that patients with private insurance had better access. This may reflect the fact that patients with private insurance can have surgery in private clinics, which were not covered by the survey described in Chapter 6. Two elements suggest that access to orthopaedic surgery is somewhat limited in Switzerland. The first is that Swiss rates of knee and hip replacement are not higher than those observed in several countries in which an explicit rationing policy has been adopted. For example, hip replacement rates seem to be markedly lower in older Swiss women than in older Swedish or Finnish women. The second argument is that one fourth of medical heads of surgery or orthopaedics departments and administrative directors of public general acute care hospitals indicated that operating rooms were not always available within a reasonable time period at their respective hospitals. In addition, analyses of the medical discharge statistics of Swiss hospitals pointed to particularly low rates of surgical interventions in foreign residents compared with Swiss nationals, which is a troubling and unexplained finding. Knee and hip replacement rates for foreigners living in Switzerland are lower than rates in countries that have a system of rationing in place. This result requires further research.
- **In view of the access problems described in this report, there is evidence of the existence of rationing in Switzerland in the fields of psychiatric care, rehabilitation care and support, and long-term care for individuals with chronic diseases.** Rationing is largely implicit at the macro- and meso-levels since the political decisions that resulted in the current supply and financing situation in the Swiss health care system were neither particularly transparent in terms of process nor explicit in terms of expected and actual effects. Moreover, the rules for allocating access to resources that are limited but not totally non-existent are not any more explicit. At a micro-level, therefore, allocation appears to be essentially implicit, based on the opinion of a large majority of Swiss primary care physicians.
- The impact of limited access to care in Switzerland has not been quantified. However, the opinions of primary care physicians, physicians in charge of hospital departments and

hospital administrators have been collected. Half of primary care physicians indicated that current limitations occasionally had a **negative impact on patient health**. The proportion was slightly lower among physicians in charge of departments of medicine or surgery/orthopaedics, nearly one half and one third of whom, respectively, shared this opinion. The proportion was much higher among medical heads of psychiatric departments, however; more than eighty percent of whom were convinced that the current limitations of access to care had a negative impact. Hospital administrators tended to be more optimistic. Nevertheless, one fourth of directors of acute care hospitals and 70% of directors of psychiatric hospitals thought that limited access to care had a negative impact on the health of some patients.

- Population subgroups that were consistently mentioned by physicians as being victims of the current situation are **older persons** and **patients with a poor level of social integration**. Foreign nationality was not isolated as a discriminating factor, but it may have been included in the latter category by some survey respondents. Results of the survey of members of patients' associations suggest that **mental retardation and psychiatric disorders** are other risk factors for discrimination. This view is consistent with results from the survey of primary care physicians and of hospital directors.

Our results support the conclusion that implicit rationing exists in Switzerland and point both to areas and populations that are at risk. Although the surveys essentially elicited subjective information and opinions, similar views were expressed by different groups of respondents who had different interests. Although this approach was based on a number of imperfect elements, it nevertheless provides valuable insights into the current state of the Swiss health care system. In a context of rapid changes in the health care system, instruments such as quantitative surveys of primary care physicians and hospital medical and administrative directors should be used periodically in order to document the development of limited access to health care and its impact on the health of the population.

REFERENCES

A) Quoted

- Aaron HJ, Schwartz WB. Efficiency and inefficiency in British health care. The painful prescription. Rationing hospital care. The Brookings Institution Washington, D.C., 1984: 89-112.
- Asch DA, Ubel PA. Rationing by any other name. *N Eng J Med* 1997; 336(No. 23):1668-1671.
- Baker R. The inevitability of health care rationing: A case study of rationing in the British national health service. In: Strosberg MA, Wiener JM, Baker R, Fein IA, editors. *Rationing America's Medical Care: The Oregon Plan and Beyond*. The Brookings Institution Washington, D.C., 1992: 208-229.
- Baumberger J. Managed care. In: Kocher G, Oggier W ed. *Système de santé suisse 2004-2006: Survol de la situation actuelle*. 2nd ed. Bern: Verlag Hans Huber, 2005.
- Calltorp J. Priority-setting in health policy in Sweden and a comparison with Norway. *Health Policy* 1999; 50:1-22.
- Clarkeburn H. Implicit rationing in Britain. *Family Practice* 1998; 15(No. 3):190-191.
- Coast J, Bevan G, Frankel S. An equitable basis for priority setting? In: Coast J, Bevan G, Frankel S, editors. *Priority setting: The health care debate*. 1996: 141-166.
- Coast J, Donovan J. Conflict, complexity and confusion: The context for priority setting. In: Coast J, Donovan J, Frankel S, editors. *Priority setting: The health care debate*. 1996: 3-34.
- Fuchs VR. The "rationing" of medical care. *N Eng J Med* 1984; 311(No. 24):1572-1573.
- Gilliand P. Coûts et financement du système de santé Suisse. In: Kocher G, Oggier W ed. *Système de santé suisse 2004-2006: Survol de la situation actuelle*. 2nd ed. Bern: Verlag Hans Huber, 2005.
- Gobet P, Roux P. Jeunes et personnes âgées face au rationnement des soins. *Médecine et Hygiène* 1995; 53:2405-2412.
- Grimley Evans J. This patient or that patient. In: BMJ Publishing Group, editor. *Rationing in action*. Latimer Trend & Compagny Ltd, Plymouth, Great Britain, 1993: 118-124.
- Grumet GW. Sounding board. Health care rationing through inconvenience. *N Eng J Med* 1989; 321(No. 9):607-611.
- Hadorn DC, Holmes AC. The New Zealand priority criteria project. *BMJ* 1997;314:131-141.
- Hall MA. Physician bedside discretion. Making medical spending decisions. The law, ethics, & economics of rationing mechanisms. Oxford University Press, New York, Oxford, 1997: 113-169.
- King D, Maynard A. Public opinion and rationing in the United Kingdom. *Health Policy* 1999; 50:39-53.
- Klein R. Dimensions of rationing: Who should do what? *BMJ* 1993; 307:309-311.
- Klein R, Williams A. Setting priorities: What is holding us back - inadequate information or inadequate institutions? In: Coulter A, Ham C, editors. *The global challenge of health care rationing*. Open University Press, Buckingham -Philadelphia, 2000: 15-26.
- Lundquist JP. Verdeckte Rationierung im Spital? *Bulletin des Médecins Suisses* 1999; 80(No. 45):2647-2648.
- Mancelle A, Dossier. *Courrier du Médecin Vaudois* 2001;3:3.
- Maynard A. Rationing health care: an exploration. *Health Policy* 1999;49:5-11.
- Mechanic D. Dilemmas in rationing health care services: the case for implicit rationing. *BMJ* 1995; 310:1655-1659.
- Muntwyler J, Follath F. Medikamentöse Therapie der Herzinsuffizienz: Eine Analyse der aktuellen Behandlungspraxis bei ambulanten Patienten in der Schweiz. *Schweiz Med Wochenschr* 2000; 130:1192-1198.
- Niquille M, Koehn V, Magnenat P, Paccaud F, Yersin B. Utilization of hospital resources by alcoholic and nonalcoholic patients: A prospective study. *J Gen Intern Med* 1991; 6:215-222.
- Oelz O. Rationierung im Spital: Realitäten und Entscheidungswege. *Praxis* 2000; 89:1188.

OFS/ Office fédéral de la statistique. Annuaire statistique de la Suisse 2005. Chap. 1, T1.1.1. Zürich, Verlag Neue Zürcher Zeitung, 2005.

Rissanen P, Häkkinen U. Priority-setting in Finnish healthcare. *Health Policy* 1999; 50:143-153.

Santos-Eggimann B. Le rationnement implicite en Suisse: proposition pour une exploration des domaines et des populations à risque. Rapport à l'Office Fédéral des Assurances Sociales. Lausanne: Institut universitaire de médecine sociale et préventive, Octobre 2001.

Strebel U. Zurückhaltung bei der Einführung von Neuerungen zu Lasten der Solidargemeinschaft. *Bulletin des Médecins Suisses* 1999; 80(No. 45):2662-2664.

Ubel PA, Arnold RM. The unbearable rightness of bedside rationing. *Arch Intern Med* 1995; 155:1837-1842.

Ubel PA, Goold S. Recognizing bedside rationing: Clear cases and tough calls. *Annals of Internal Medicine* 1997; 126:74-80.

B) Additional, non-quoted

Aaron HJ. The Oregon experiment. In: Strosberg MA, Wiener JM, Baker R, Fein IA, editors. *Rationing America's Medical Care: The Oregon Plan and Beyond*. The Brookings Institution Washington, D.C., 1992: 107-111.

Aaron HJ, Schwartz WB. Rationing health care: The choice before us. *Science* 1990; 247:418-422.

Age concern England. *Turning your back on us - older people and the NHS*. London: Age Concern, 2000.

Alemayehu E, Molloy DW, Guyatt GH, Singer J, Penington G, Basile J et al. Variability in physicians' decisions on caring for chronically ill elderly patients: An international study. *CMAJ* 1991; 144(No. 9):1133-1138.

Anderson JL. Medical therapy for elderly patients who have had myocardial infarction: Too little to the late in life? *Annals of Internal Medicine* 1996; 124(No. 3):337-338.

Arndt K, Coy P, Schaafsma J. Implicit rationing criteria in non-small-cell lung cancer treatment. *British Journal of Cancer* 1996; 73:781-788.

Asch SM, Sloss EM, Hogan C, Brook RH, Kravitz RL. Measuring underuse of necessary care among elderly Medicare beneficiaries using inpatient and outpatient claims. *JAMA* 2000; 284(No. 18):2325-2333, 2374-2376.

Asch DA, Ubel PA. Rationing by any other name. *N Eng J Med* 1997; 337(No. 19):1396.

Avorn J. Benefit and cost analysis in geriatric care. Turning age discrimination into health policy. *N Eng J Med* 1984; 310(No. 20):1294-1301.

Ayres PJ. Rationing health care: Views from general practice. *Soc Sci Med* 1996; 42(No. 7):1021-1025.

Baertschi B. Le prix de la santé et le coût des soins. Rationnement, santé publique et justice. *Médecine et Hygiène* 1999; 57:1464-1466.

Bailly AS, Bernhardt M. La "clause du besoin": Un choix de société*. *Médecine et Hygiène* 2001; Juin 2001:S24-S28.

Barakat K, Wilkinson P, Deaner A, Fluck D, Ranjadayalan K, Timmis A. How should age affect management of acute myocardial infarction? A prospective cohort study. *The Lancet* 1999; 353:955-959, 940-941.

Baumann-Hölzle R. Ethisch faire Leistungsverteilung im Gesundheitswesen. *Praxis* 2000; 89:1185-1186.

Baumann-Hölzle R. Faire Leistungs- und Güterverteilung im Gesundheitswesen. *Bulletin des Médecins Suisses* 1999; 80(No. 45):2638-2642.

Baumann-Hölzle R. Rationierung im Gesundheitswesen. *Bulletin des Médecins Suisses* 1999; 80(No. 45):2635-2637.

Bergmark A, Parker MG, Thorslund M. Priorities in care and services for elderly people: A path without guidelines? *J Med Ethics* 2000; 26:312-318.

Bertel O, Wettstein A. After als Rationierungskriterium? *Praxis* 2000; 89:1189.

Bloom BS, Fendrick AM. The tension between cost containment and the underutilization of effective health services. *Int J Technol Assess Health Care* 1996; 12(No. 1):1-8.

- Borrell C, Fernandez E, Schiaffino A, Benach J, Rajmil L, Villalbi JR et al. Social class inequalities in the use of and access to health services in Catalonia, Spain: What is the influence of supplemental private health insurance? *Int J Qual Health Care* 2001; 13(No. 2):117-125.
- Bowie C, Richardson A, Sykes W. Consulting the public about health service priorities. *BMJ* 1995; 311:1155-1158.
- Bowling A. Health care rationing: The public's debate. *BMJ* 1996; 312:670-674.
- Brett AS, McCullough LB. When patients request specific interventions. *N Eng J Med* 1986; 315(No. 21):1347-1351.
- Brock DW, Wartman SA. When competent patients make irrational choices. *N Eng J Med* 1990; 322(No. 22):1595-1599.
- Brody B, Wray N, Bame S, Ashton C, Petersen N, Harward M. The impact of economic considerations on clinical decision making: The case of thrombolytic therapy. *Med Care* 1991; 29(No. 9):899-910.
- Brooks A. Viagra is licensed in Europe but rationed in Britain. *BMJ* 1998; 317, 760-761-765.
- Browling A. Ageism in cardiology. *BMJ* 1999; 319, 1353-1355.
- Brunner HH. Formes de rationnement des prestations médicales sous l'angle de la situation actuelle en Suisse. *Bulletin des Médecins Suisses* 1997; 78(No. 17):609-616.
- Brühwiler B. Verdeckte Rationierung im klinischen Alltag. *Bulletin des Médecins Suisses* 1999; 80(No. 45):2645-2646.
- Busse R. Priority-setting and rationing in German health care. *Health Policy* 1999; 50:71-90.
- Callahan D. Balancing efficiency and need in allocating resources to the care of persons with serious mental illness. *Psychiatric Services* 1999; 50(No. 5):664-666, 1087-1088.
- Callahan D. Controlling the costs of health care for the elderly. Fair means and foul. *N Eng J Med* 1996; 335(10):744-746.
- Carrasquillo O, Lantigua RA, Shea S. Preventive services among Medicare beneficiaries with supplemental coverage versus HMO enrollees, Medicaid recipients, and elders with no additional coverage. *Med Care* 2001; 39(No. 6):616-626.
- Chevrolet J-C. Pourra-t-on soigner tout le monde? *Médecine et Hygiène* 2001; Juin 2001:S17-S19.
- Churchill LR. Should we ration health care by age? *J Am Geriatr Soc* 1988; 36(No. 7):644-647.
- Conseil d'Etat du Canton de Vaud. Rapport du Conseil d'Etat au Grand Conseil sur le postulat Paul-Arthur Treyvaud demandant de clarifier les principes de la distribution généralisée des soins et de la lutte contre le rationnement des soins ainsi que d'étudier l'opportunité de légiférer en la matière. 240 (R.61/00), 1-42. 2001.
- Cook DJ, Guyatt GH, Jaeschke R, Reeve J, Spanier A, King D et al. Determinants in Canadian health care workers of the decision to withdraw life support from the critically ill. *Canadian Critical Care Trials Group. JAMA* 1995; 273(No. 9):703-708.
- Coyte PC, Wright JG, Hawker GA, Bombardier C, Dittus RS, Paul JE et al. Waiting times for knee-replacement surgery in the United States and Ontario. *N Eng J Med* 1994; 331(No. 16):1068-1071.
- Davidson W, Molloy DW, Bedard M. Physician characteristics and prescribing for elderly people in New Brunswick: Relation to patient outcomes. *CMAJ* 1995; 152(No. 8):1227-1234.
- Davidson W, Molloy DW, Somers G, Bedard M. Relation between physician characteristics and prescribing for elderly people in New Brunswick. *CMAJ* 1994; 150(No. 6):917-921.
- Dean M. Rationing care by age deemed unfair. *The Lancet* 1994; 343:1278.
- Dean M. London perspective. Is your treatment economic, effective, efficient? *The Lancet* 1991; 337:480-481.
- Domenighetti G, Maggi J. Définition des priorités sanitaires et rationnement. L'opinion des Suisses, des Administrateurs hospitaliers et des Départements sanitaires des Cantons. Université de Lausanne, editor. Cahier no. 00.01, 1-33. 2000. HEC Lausanne, département d'économétrie et d'économie politique. Cahiers de recherches économiques.
- Domenighetti G, Maggi J. Priorités sanitaires et rationnement: L'opinion des Suisses, des Administrateurs hospitaliers et des Départements sanitaires des cantons. *Sécurité sociale* 2000; 5:270-274.

- Doyal L. Needs, rights, and equity: Moral quality in healthcare rationing. *Quality in Health Care* 1995; 4:273-283.
- Doyal L, Wilsher D. Withholding cardiopulmonary resuscitation: Proposals for formal guidelines. *BMJ* 1993; 306:1593-1596.
- Dupley NJ, Burns E. The influence of age on policies for admission and thrombolysis in coronary care units in the United Kingdom. *Age Ageing* 1992; 21:95-98.
- Durand AM. Rationing by any other name. *N Eng J Med* 1997; 337(No. 19):1395.
- Dürr M, Vogler H. Wieso überhaupt eine Rationierungsdiskussion? *Praxis* 2000; 89:1833-1840.
- Ebrahim S. Do not resuscitate decisions: Flogging dead horses or a dignified death? Resuscitation should not be withheld from elderly people without discussion. *BMJ* 2000; 320:1155-1156.
- Eddy DM. Clinical decision making: From theory to practice. Rationing by patient choice. *JAMA* 1991; 265(No. 1):105-108.
- Editorial. Do doctors short-change old people ? *The Lancet* 1993; 342(8862):1-2.
- Elixhauser A, Luce BR, Taylor WR, Reblando J. Health care CBA/CEA: An update on the growth and composition of the literature. *Med Care* 1993; 31(No. 7):JS1-JS11, suppl.
- Fattore G. Clarifying the scope of Italian NHS coverage. Is it feasible? Is it desirable? *Health Policy* 1999; 50:123-142.
- Favrod-Coune CA. Editorial. *Courrier du Médecin vaudois* 2001; 3:1-12.
- Fayers P, Bjordal K. Should quality-of-life needs influence resource allocation? *The Lancet* 2001; 357:978.
- Federman DD. Rationing medical care - A comparative perspective. *N Eng J Med* 1994; 331(No. 16):1089-1091.
- Feek CM, McKean W, Hennevelde L, Barrow G, Edgar W, Paterson RJ. Experience with rationing health care in New Zealand. *BMJ* 1999; 318:1346-1348.
- Felder S. Costs of dying: alternatives to rationing. *Health Policy* 1997; 39:167-176.
- Ford ES, Cooper RS. Racial/ethnic differences in health care utilization of cardiovascular procedures: A review of the evidence. *Health Serv Res* 1995; 30(No. 1):237-252.
- Forschungsinstitut für Management im Gesundheitswesen an der FHS. *Prioritätensetzung im schweizerischen Gesundheitswesen. KTI-Projekt 4234.1, 1-3. 2001. St-Gall, FMiG.*
- Frankel S. The epidemiology of indications. *J Epidemiol Community Health* 1991; 45:257-259.
- Gaminde I. Priorities in healthcare: A perspective from Spain. *Health Policy* 1999; 50:55-70.
- Gatsonis CA, Epstein AM, Newhouse JP, Normand SL. Variations in the utilization of coronary angiography for elderly patients with an acute myocardial infarction. An analysis using hierarchical logistic regression. *Med Care* 1995; 33(No. 6):625-642.
- Gillick MR. Limiting medical care: Physicians' beliefs, physicians' behavior. *J Am Geriatr Soc* 1988; 36(No. 8):747-752.
- Goold SD. Allocating health care: Cost-utility analysis, informed democratic decision making, or the veil of ignorance? *J Health Polit Policy Law* 1996; 21(No. 1):69-98.
- Greenfield S, Blanco DM, Elashoff RM, Ganz PA. Patterns of care related to age of breast cancer patients. *JAMA* 1987; 257(No. 20):2766-2770.
- Grimes DS. Rationing health care. *The Lancet* 1987; March 14:615-616.
- Groupe de travail interdisciplinaire et indépendant - "Répartition juste des ressources dans le domaine de la santé publique" (liste des membres page 9. Manifeste pour une répartition équitable des remèdes dans le domaine de la santé publique. *Bulletin des Médecins Suisses* 1999; 80(No. 45 (Suppl.)):1-9.
- Grytten J, Rongen G, Sorensen R. Can a public health care system achieve equity? The Norwegian experience. *Med Care* 1995; 33(No. 9):938-951.
- Guisan Y. Médecine globale ou médecine de l'individu? *Médecine et Hygiène* 2001; Juin 2001:S4-S7.
- Guisan Y. Rationnement ou primes astronomiques: un choix terrible. *Courrier du Médecin Vaudois* 2001;3:8-9.

- Hadley J, Steinberg EP, Feder J. Comparison of uninsured and privately insured hospital patients. Condition on admission, resource use, and outcome. *JAMA* 1991; 265(No. 3):374-379.
- Hall MA. Introduction: Who decides ? The law, ethics, and economics of rationing mechanisms. Oxford University Press, New York, Oxford, 1997: 3-13.
- Hall MA. Third-party rules. Making medical spending decisions. The law, ethics, and economics of rationing mechanisms. Oxford University Press, New York, Oxford, 1997: 63-112.
- Ham C. Retracing the Oregon trail: The experience of rationing and the Oregon health plan. *BMJ* 1998; 316, 1965-1969.
- Ham C. Health care rationing. The British approach seems likely to be based on guidelines. *BMJ* 1995; 310:1483-1484.
- Ham C, Coulter A. Explicit and implicit rationing: Taking responsibility and avoiding blame for health care choices. *J Health Serv Res Policy* 2001; 6(No. 3):163-169.
- Hanratty B, Lawlor DA, Robinson MB, Sapsford RJ, Greenwood D, Hall A. Sex differences in risk factors, treatment and mortality after acute myocardial infarction: An observational study. *J Epidemiol Community Health* 2000; 54:912-916.
- Harvey I. Philosophical perspectives on priority setting. In: Coast J, Donovan J, Frankel S, editors. *Priority setting: The health care debate*. 1996: 83-110.
- Heginbotham C. Health care priority setting: A survey of doctors, managers, and the general public. In: *BMJ Publishing Group, editor. Rationing in action*. Latimer Trend & Company Ltd, Plymouth, Great Britain, 1993: 141-156.
- Hoaglund FT, Oishi CS, Gialamas GG. Extreme variations in racial rates of total hip arthroplasty for primary coxarthrosis: A population-based study in San Francisco. *Ann Rheum Dis* 1995; 54:107-110.
- Ineichen Th. Rechtsfragen zur Rationierung. *Praxis* 2000; 89:1841-1845.
- James M, St Leger S, Rowsell KV. Prioritising elective care: A cost utility analysis of orthopaedics in the north west of England. *Journal of Epidemiology and Community Health* 1996; 50, 182-189.
- Jecker NS, Berg AO. Allocating medical resources in rural America: Alternative perceptions of justice. *Soc Sci Med* 1992; 34(No. 5):467-474.
- Jencks SF, Cuerdon T, Burwen DR, Fleming B, Houck PM, Kussmaul AE et al. Quality of medical care delivered to Medicare beneficiaries. A profile at state and national levels. *JAMA* 2000; 284(No. 13):1670-1676.
- Johannesson M, Johansson P-O. The economics of ageing: on the attitude of Swedish people to the distribution of health care resources between the young and the old. *Health Policy* 1996; 37:153-161.
- Kalb PE, Miller DH. Utilization strategies for intensive care units. *JAMA* 1989; 261(No. 16):2389-2395.
- Kassirer JP. Our endangered integrity - It can only get worse. *N Eng J Med* 1997; 336(No. 23):1666-1667.
- Katz SJ. Rationing by any other name. *N Eng J Med* 1997; 337(No. 19):1395-1396.
- King's Fund. Age discrimination in health and social care. King's Fund 1-12. 2001.
- Kinnunen J, Lammintakanen J, Myllykangas M, Ryyanen OP, Takala J. Health care priorities as a problem of local resource allocation. *Int J Health Plann Manage* 1998; 13(No. 3):216-229.
- Klein R. Rationing health care. *BMJ* 1984; 289(No. 6438):143-144.
- Lamping DL, Constantinovici N, Roderick P, Normand C, Henderson L, Harris S et al. Clinical outcomes, quality of life, and costs in the North Thames Dialysis Study of elderly people on dialysis: A prospective cohort study. *The Lancet* 2000; 356:1543-1550.
- Lancry PJ, Sandier S. Rationing health care in France. *Health Policy* 1999; 50:23-38.
- Lewis PA, Charny M. Which of two individuals do you treat when only their ages are different and you can't treat both? *J Med Ethics* 1989; 15(No. 1):28-34.
- Lindholm L, Rosen M, Emmelin M. An epidemiological approach towards measuring the trade-off between equity and efficiency in health policy. *Health Policy* 1996; 35:205-216.

- Long MJ, Stevenson Marshall B. The relationship of impending death and age category to treatment intensity in the elderly. *Journal of Evaluation in Clinical Practice* 2000; 6(No. 1):63-70.
- Luft HS. Health maintenance organizations and the rationing of medical care. *Milbank Memorial Fund Quarterly / Health and Society* 1982; 60(No. 2):268-306.
- Majeed FA, Cook DG. Age and sex differences in the management of ischaemic heart disease. *Public Health* 1996; 110:7-12.
- Martin JM. Rationnement thérapeutique: Quelques thèses pour stimuler le débat actuel. *Médecine et Hygiène* 1999; 57:833-834.
- Maynard A, Sheldon T. Rationing is needed in a national health service. *BMJ* 2001; 322:734-735.
- McKee M, Figueras J. Setting priorities: Can Britain learn from Sweden? *BMJ* 1996; 312:691-694.
- Miles SH. Informed demand for "non-beneficial" medical treatment. *N Eng J Med* 1991; 325(No. 7):512-515.
- Milmoie McCarrick P. The aged and the allocation of health care resources. National Reference Center for Bioethics Literature, editor. [13], 1-12. 1990. Washington, DC, Kennedy Institute of Ethics, Georgetown University. Scope Note Series. National Library of Medicine, National Institutes of Health.
- Molloy DW, Guyatt GH, Alemayehu E, McIlroy W, Willan A, Eisemann M et al. Factors affecting physicians' decisions on caring for an incompetent elderly patient: An international study. *CMAJ* 1991; 145(No. 8):947-952.
- Myllykangas M, Ryyananen OP, Kinnunen J, Takala J. Attitudes to cuts in expenditure and increased fees in health care. *Public Health* 1997; 111(No. 2):71-75.
- Myllykangas M, Ryyananen OP, Kinnunen J, Takala J. Comparison of doctors', nurses', politicians' and public attitudes to health care priorities. *J Health Serv Res Policy* 1996; 1(No. 4):212-216.
- Neukomm R. Politische Überlegungen zur Rationierungsdiskussion. *Praxis* 2000; 89:1187.
- Norheim OF. Increasing demand for accountability: Is there a professional response? In: Coulter A, Ham C, editors. *The global challenge of health care rationing*. Open University Press Buckingham - Philadelphia, 2000: 222-232.
- Norheim OF. Limiting access to allogeneic bone marrow transplantation in five European countries: What can we learn about implicit rationing? *Health Policy* 2000; 52:149-156.
- Nuckton TJ, List ND. Age as a factor in critical care unit admissions. *Arch Intern Med* 1995; 155(No. 10):1087-1092.
- Nyffeler R. La population suisse face au budget global et au rationnement des soins. *Bulletin des Médecins Suisses* 1999; 80[No. 16], 963-973.
- Oelz O. Erkenne die Lage (1): Plädoyer für eine offene Rationierungsdiskussion. *Schweiz Med Wochenschr* 2000; 130(No. 44):1634-1638.
- Orentlicher D. The illusion of patient choice in end-of-life decisions. *JAMA* 1992; 267(No. 15):2101-2104.
- Paccaud F. Rationnement des soins: mode d'emploi. *Courrier du Médecin Vaudois* 2001;3:4-5.
- Peen J, Dekker J. Social deprivation and psychiatric service use for different diagnostic groups. *Soc Sci Med* 2001; 53:1-8.
- Reagan MD. Sounding board. Health care rationing. *N Eng J Med* 1988; 319(No. 17):1149-1151.
- Relman AS. The trouble with rationing. *N Eng J Med* 1990; 323(No. 13):911-913.
- Robinson JC. The end of managed care. *JAMA* 2001; 285(No. 20):2622-2628.
- Roland M. General practitioner referral rates. *BMJ* 1988; 297:437-438.
- Rosner F, Kark P, Packer S. Oregon's health care rationing plan. *JGIM* 1996; 11:104-108.
- Rössler D. Probleme der Rationierung. *Praxis* 2000; 89:1847-1851.
- Ryyananen OP, Lehtovirta J, Soimakallio S, Takala J. General practitioners' willingness to request plain lumbar spine radiographic examinations. *Eur J Radiol* 2001; 37(No. 1):47-53.
- Ryyananen OP, Myllykangas M, Kinnunen J, Halonen P, Takala J. Prioritization attitudes among doctors and nurses examined by scenario method. *Int J Technol Assess Health Care* 2000; 16(No. 1):92-99.

- Ryynanen OP, Myllykangas M, Kinnunen J, Takala J. Attitudes to health care prioritisation methods and criteria among nurses, doctors, politicians and the general public. *Soc Sci Med* 1999; 49(No. 11):1529-1539.
- Ryynanen OP, Myllykangas M, Kinnunen J, Takala J. Doctors' willingness to refer elderly patients for elective surgery. *Family Practice* 1997; 14(No. 3):216-219.
- Ryynanen OP, Myllykangas M, Vaskilampi T, Takala J. Random paired scenarios--a method for investigating attitudes prioritisation in medicine. *J Med Ethics* 1996; 22(No. 4):238-242.
- Sabin JE. Fairness as a problem of love and the heart: A clinician's perspective on priority setting. In: Coulter A, Ham C, editors. *The global challenge of health care rationing*. Open University Press, Buckingham - Philadelphia, 2000: 117-122.
- Sabin JE. "Mind the gap": Reflections of an American health maintenance organisation doctor on the new NHS. In: BMJ Publishing Group, editor. *Rationing in action*. Latimer Trend & Company Ltd, Plymouth, Great Britain, 1993: 189-197.
- Samet J, Hunt WC, Key C, Humble CG, Goodwin JS. Choice of cancer therapy varies with age of patient. *JAMA* 1986; 255(No. 24):3385-3390.
- Schopper D, Baumann Hölzle R, Tanner M. Rationierung im Gesundheitswesen: Was könnte die Schweiz von anderen Ländern lernen? *Bulletin des médecins suisses* 2002; 83: 256-263.
- Schwartz WB, Aaron HJ. Rationing hospital care. *N Eng J Med* 1984; 310(No. 1):52-56.
- Scott SN, Lees A. Developing a prioritisation framework: Experiences from a Scottish Health Authority. *Health Expectations* 2001; 4:10-17.
- Selker HP, Griffith JL, Dorey FJ, D'Agostino RB. How do physicians adapt when the coronary care unit is full? A prospective multicenter study. *JAMA* 1987; 257(No. 9):1181-1185.
- Senioren-Arbeitsgruppe "Rationierung im Gesundheitswesen" des Zentrums für Gerontologie der Universität Zürich. Thesen zur Rationierung im Gesundheitswesen aus der Sicht von Betagten. *Praxis* 2000; 89:1211-1213.
- Schelling HR, Wettstein A. Einstellungen von Seniorinnen und Senioren zur Rationierung im Gesundheitswesen - vor und nach einer Vorlesungsreihe. *Praxis* 2000; 89:1200-1210.
- Shoemaker W, Boyd James C, Fleming AW, Hardin E, Ordog GJ, Sterling-Scott R et al. De facto rationing of emergency medical services. In: Strosberg MA, Wiener JM, Baker R, Fein IA, editors. *Rationing America's Medical Care: The Oregon Plan and Beyond*. The Brookings Institution Washington, D.C., 1992: 151-156.
- Schoch-Thomann M. "Rationierung im Gesundheitswesen". Sanitätsdepartement Basel-Stadt. *SanInfo*, Sonderausgabe, Avril 1999, 1-32.
- Shortt S. Venerable or vulnerable? Ageism in health care. *J Health Serv Res Policy* 2001; 6(No. 1):1-2.
- Singer DE, Carrasquillo O, Mulley GP, Thibault GE. Rationing intensive care - physician responses to a resource shortage. *N Eng J Med* 1983; 309(No. 19):1155-1160.
- Smith R. Rationing: The search for sunlight. Rationing decisions should be explicit and rational. *BMJ* 1991; 303:1561-1562.
- Soumerai SB, McLaughlin TJ, Spiegelman D, Hertzmark E, Thibault G, Goldman L. Adverse outcomes of underuse of B-blockers in elderly survivors of acute myocardial infarction. *JAMA* 1997; 277(No. 2):115-121.
- Stepan A, Sommersguter-Reichmann M. Priority-setting in Austria. *Health Policy* 1999; 50:91-104.
- Strauss MJ, LoGerfo JP, Yeltatzie JA, Temkin N, Hudson LD. Rationing of intensive care unit services. An everyday occurrence. *JAMA* 1986; 255(No. 9):1143-1146.
- Stulz P. Rationierung in der Chirurgie und Spitzenmedizin. *Praxis* 2000; 89:1857-1861.
- Sutton GC. Will you still need me, will you still screen me, when I'm past 64? Breast screening policy is based on ageism. *BMJ* 1997; 315:1032-1033.
- Teres D. Civilian triage in the intensive care unit: The ritual of the last be. *Critical Care Med* 1993; 21(No. 4):598-606.
- Tu JV, Pashos CL, Naylor CD, Chen E, Normand SL, Newhouse JP et al. Use of cardiac procedures and outcomes in elderly patients with myocardial infarction in the United States and Canada. *N Eng J Med* 1997; 336(No. 21):1500-1505.

- Tuckfelt M. Rationing by any other name. *N Eng J Med* 1997; 337(No. 19):1395.
- Turner NJ, Haward RA, Mulley GP, Selby PJ. Cancer in old age - is it inadequately investigated and treated? *BMJ* 1999; 319:309-312.
- Van der Grinten TED, Kasdorp JP. Choices in Dutch health care: Mixing strategies and responsibilities. *Health Policy* 1999; 50:105-122.
- Walley T, Haycox A, Barton S. Drug rationing in the UK National Health Service. Current stat and future prospects. *Pharmacoeconomics* 1997; 12(No. 3):339-350.
- Weber M. Die Zuteilung von Spenderorganen bei Betagten. *Praxis* 2000; 89:1190-1191.
- Welch HG. Should the health care forest be selectively thinned by physicians or clear cut by payers? *Annals of Internal Medicine* 1991; 115(No. 3):223-226.
- Wensing M, Jung HP, Mainz J, Olesen F, Grol R. A systematic review of the literature on patient priorities for general practice care. Part 1: Description of the research domain. *Social Science and Medicine (Oxford)* 47[No. 10], 1573-1588. 1998.
- Wensing M, Mainz J, Ferreira P, Hearnshaw H, Hjortdahl P, Olesen F et al. General practice care and patients' priorities in Europe: An international comparison. *Health Policy* 1998; 45(No. 3):175-186.
- Wetle T, Cwikel J, Levkoff SE. Geriatric medical decisions: Factors influencing allocation of scarce resources and the decision to withhold treatment. *The Gerontologist* 1988; 28(No. 3):336-343.
- Wettstein A. Demenz, ein rationales Rationierungskriterium? *Praxis* 2000; 89:1195-1197.
- Wettstein A. Rationale Mittelallokation statt drohende Rationierung von erwünschten Leistungen für Betagte. Das Beispiel Neurorehabilitation. *Praxis* 2000; 89:1192-1194.
- Wettstein A. Rationierung im Gesundheitswesen: Betagte als Opfer? *Praxis* 2000; 89:1179.
- Wiener JM. Rationing in America: Overt and covert. In: Strosberg MA, Wiener JM, Baker R, Fein IA, editors. *Rationing America's Medical Care: The Oregon Plan and Beyond*. The Brookings Institution Washington, D.C., 1992: 12-23.
- Widmer H. Die Sicht des Allgemeinpraktikers. *Praxis* 2000; 89:1852-1856.
- Williams A. The rationing debate. Rationing health care by age. *BMJ* 1997; 314:820-825.
- Wing AJ. Why don't the British treat more patients with kidney failure? *BMJ* 1983; 287(No. 6400):1157-1158.
- Zawacki BE. ICU physician's ethical role in distributing scarce resources. *Critical Care Med* 1985; 13(No. 1):57-60.
- Zweifel P, Telser H. Rationierung: Der Königsweg im Gesundheitswesen? *Praxis* 2000; 89:1181-1184.