
Primary care in Switzerland gains strength

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Abstract

Background. Although there is widespread agreement on health- and cost-related benefits of strong primary care in health systems, little is known about the development of the primary care status over time in specific countries, especially in countries with a traditionally weak primary care sector such as Switzerland.

Objective. The aim of our study was to assess the current strength of primary care in the Swiss health care system and to compare it with published results of earlier primary care assessments in Switzerland and other countries.

Methods. A survey of experts and stakeholders with insights into the Swiss health care system was carried out between February and March 2014. The study was designed as mixed-modes survey with a self-administered questionnaire based on a set of 15 indicators for the assessment of primary care strength. Forty representatives of Swiss primary and secondary care, patient associations, funders, health care authority, policy makers and experts in health services research were addressed. Concordance between the indicators of a strong primary care system and the real situation in Swiss primary care was rated with 0–2 points (low–high concordance).

Results. A response rate of 62.5% was achieved. Participants rated concordance with five indicators as 0 (low), with seven indicators as 1 (medium) and with three indicators as 2 (high). In sum, Switzerland achieved 13 of 30 possible points. Low scores were assigned because of the following characteristics of Swiss primary care: inequitable local distribution of medical resources, relatively low earnings of primary care practitioners compared to specialists, low priority of primary care in medical education and training, lack of formal guidelines for information transfer between primary care practitioners and specialists and disregard of clinical routine data in the context of medical service planning.

Conclusion. Compared to results of an earlier assessment in Switzerland, an improvement of seven indicators could be stated since 1995. As a result, Switzerland previously classified as a country with low primary care strength was reclassified as country with intermediate primary care strength compared to 14 other countries. Low scored characteristics represent possible targets of future health care reforms.

Key words: Benchmarking, general practice, organization and administration, primary health care, quality indicators, Switzerland.

Introduction

International comparisons and studies within different countries have repeatedly shown that health care systems with a strong primary care sector achieve better health outcomes and cost savings than health care systems with underdeveloped primary care

sectors (1–4). This evidence has led to international declarations and political campaigns with the aim to consolidate primary care and establish more primary care centred health systems. As all member states of the World Health Organization (WHO), Switzerland agreed to the corresponding WHO declarations in

2008 and 2009 (5,6). Moreover, a popular initiative requesting a health care reform has been launched in 2009 and is currently still under development (7).

It is to note that Switzerland is among the countries with the highest per capita availability of physicians and nurses and Switzerland spends more on health care per capita (US\$ 5643) than any other country except the USA (US\$ 8508) and Norway (US\$ 5669) (8). Insurers account for around one-third of the health expenditures. Further sources of financing are government funding and individual out-of-pocket costs. Enrolment in a basic health insurance plan is mandatory for every person living in Switzerland; thus, there are virtually no uninsured people. Ambulatory care is mainly provided by practice physicians. Additionally, hospitals provide ambulatory care units. Both generalists and physicians may work as practice physicians. There exists no gatekeeper system regulating access to hospital care or specialized care. In general, each person is free to visit any health care provider/institution, unlike one signed certain special types of basic insurance contracts offering reduced premiums in exchange for agreeing to a limited choice of providers (e.g. managed care plans) (9).

The impact of campaigns designed to strengthen primary care could only be measured if a national baseline evaluation of the current strength of the primary care sector exists. Starfield *et al.* (10) developed a conceptual framework of primary care providing a set of indicators and a score measuring the strength of the primary care sector within different health systems.

Exerting that indicator set, the strength of primary care in the Swiss health care system has been assessed most recently by Macinko *et al.* (11), based on data of the Organization for Economic Cooperation and Development (OECD) from 1975 to 1995. The significance of that study is limited, considering the lapse of time and the secondary use of data that were originally not collected for the purpose of a primary care assessment.

Objective

The aim of our study was to assess the current strength of primary care in Switzerland scored against the indicator set of Starfield *et al.* and to track changes compared to the strength level determined by the last assessment in 1995.

Methods

The study was designed as mixed-modes survey with a self-administered questionnaire that could be completed either via a web platform or on paper. The German questionnaire was derived from the indicator set for the evaluation of the strength of primary care within health care systems by Starfield *et al.* (10). The set includes 15 indicators describing 9 health system and 6 primary care practice characteristics. Assessing the strength of primary care, 0–2 points are assigned to each indicator displaying to what extent the health care system under evaluation matches the characteristics. In order to obtain an overall 'Primary Care Score', the unweighted points of all 15 indicators are averaged.

In our study, the original indicator set was translated to German language according to guidelines for obtaining semantic, idiomatic, experiential and conceptual equivalence in translation by using back-translation techniques and committee review (12). In a first step, this process was independently performed by two of the study authors (SD and TM). In a second step, both results were compared, resolving differences through consensus of all study authors.

Consequently, the indicator set was transformed to a questionnaire with 15 items.

The questions were designed as closed multiple choice questions with three answers each, connoting the absence, the poor development or a high level of development of the characteristics. Thus, the three answers per question corresponded to 0, 1 or 2 points within the scoring system suggested by Starfield *et al.* (10). The participants were asked to rate the concordance of Swiss primary care with the characteristics by selecting one answer in relation to each item while being unaware of the related points.

The preliminary version questionnaire was pretested by five independent study assistants considering comprehensibility and usability. One year prior to the pilot test, three of these study assistants had individually used the original indicator set of Starfield *et al.* (10) and recorded the results. After pilot testing, we compared their individual results obtained by administration of the original indicator set and the results obtained by application of the pilot questionnaire in order to evaluate the validity of the questionnaire. Two study assistants obtained the same results with both instruments. One study assistant obtained a one point lower point total with the original indicator set. The difference was considered to be insignificant.

After pilot testing, the questionnaire was sent out to 40 selected addressees, who represent Swiss primary and secondary care, patient associations, funders, health care authority, policy makers and experts in health services research focused on primary care. Therefore, leading members of the respective professional associations, executive bodies and institutions were identified by internet, telephone and e-mail research. Where more than five representatives in leading positions were identified, we randomly selected five in order to ensure a balanced influence of all stakeholders. [Supplementary Table 1](#) provides details on the selection of addressees.

Addressees of whom official e-mail addresses were eligible were contacted via e-mail. Addressees of whom only postal addresses were eligible were contacted via mail. In February 2014, all addressees received an invitation note describing the purpose of the study and providing an internet link to a web survey platform (SurveyMonkey®) with a personal log-in number. Alternatively, the addressees could request a paper questionnaire and return it via fax or mail.

The data collection period lasted 8 weeks following the roll-out period. After 4 and 6 weeks of data collection, reminders were sent out to all non-responders at that time.

Data analysis

Data analysis was performed by assessing how many points each participant had indirectly assigned to the individual items by selecting an answer. Secondly, it was assessed which point level (0–2) had been assigned most frequently per item. The respective point level was determined to represent inter-rater consensus. Consequently, the average point level determined by inter-rater consensus across all items was defined to represent the current Primary Care Score of Switzerland. The results were then compared to literature reports of primary care assessments in other countries, which base on the same or rather slightly modified indicator set (11,13,14).

Results

Between February 2014 and March 2014, 40 representatives were asked to fill in the questionnaire. Twenty-seven logged into the online survey. Paper questionnaires were not used. At least one

representative per stakeholder group participated (Supplementary Table 1). Twenty-three of the participants answered all of the 15 items. Two participants finished four and eight items, respectively.

Two other participants did log in but did not answer any question. The latter were excluded from further analysis. This corresponds to a response rate of 62.5%.

Table 1. Evaluation of Switzerland's primary care characteristics

Item no.	Characteristics	Points assigned by inter-rater consensus	% of respondents determining the inter-rater consensus	Description of the achieved point level of Switzerland	Description of the maximum possible point level
1	System characteristics Type of system	0	64	There are no incentives to distribute medical resources and practices equitably. They are predominantly locally concentrated	National policies influence the location of primary care providers so that they are distributed throughout the population rather than concentrated in certain geographic areas
2	Financing	1	60	Predominantly financed by social insurance systems	Tax-based financing of the health care system
3	Type of practitioner	2	100	Most physicians providing primary care are generalists (general or family practitioner, internist and similar professionals)	Most physicians providing primary care are generalists (general or family practitioner, internist and similar professionals)
4	% of generalists	1	56	31–49% of active physicians are generalists	≥50% of active physicians are generalists
5	Earning relative to specialists	0	83	Primary care practitioner average earnings are ≤80% of specialists' earnings	Primary care practitioner average earnings are >90–100% of specialists' earnings
6	Cost sharing	1	79	Share of patients' co-pays is rather low and/or there are ceilings on the level of payments	There are none or very low requirements for co-payments
7	Patient lists	1	71	Patient lists do exist, but on voluntary basis	The health care system is based on requirements for personal lists, linking a patient to a specific physician/practice
8	24-Hour coverage	2	58	24-Hour coverage exists by legal obligation	24-Hour coverage exists by obligation
9	Academic departments	0	57	Family medicine is accorded low priority or prestige in medical education and training	Academic departments of family medicine are as departments of other medical specialities
10	Practice characteristics First contact	1	65	There are incentives to reduce direct access to specialist, but official referral is not compulsory	Decision about the need for specialty services are exclusively made after consulting a primary care physician
11	Longitudinality	1	74	Relationship with physician over time exists by default rather than intent	Relationship with physician over time exists based on enrolment or registration with a particular physician
12	Comprehensiveness	2	52	Most services out of a catalogue are provided by primary care physicians	Most services out of a catalogue are provided by primary care physicians
13	Coordination	0	83	Lack of formal guidelines for the transfer of information between specialists and primary care practitioners	Formal guidelines exist for the transfer of information between specialists and primary care practitioners
14	Family-centredness	1	74	Primary care practitioners are partly responsible for the whole family, partly for an individual person only	Primary care practitioners are explicitly responsible for the whole family
15	Community orientation	0	78	Only few or no clinical data are used to plan or organize services	Clinical community data are used to plan or organize services

Supplementary Table 2 displays how many participants selected an answer corresponding to a point level of 0, 1 or 2 in relation to each item.

Table 1 displays the relation between questionnaire items and the nine health system and six primary care practice characteristics defined by Starfield *et al.* (10). Furthermore, it displays which point level was assigned to each characteristic based on inter-rater consensus and provides a description of the features underlying the point level.

Based on inter-rater consensus, Switzerland obtained 13 out of 30 possible points: five characteristics were rated as '0', seven characteristics as '1' and three characteristics received the highest rating of two points. The lowest point total assigned by a participant was 6, and the highest was 18. The average point total of all participants was 12.3 with a standard deviation (SD) of 3.2. The average point total of system characteristics was 7.8 (SD 1.8) and the average point total of practice characteristics was 4.4 (SD 1.7).

The system characteristics obtained 8 out of 18 possible points. Zero points were assigned because of the absence of incentives to distribute medical resources equitably, the low earnings of primary care practitioners compared to specialists and the low priority and prestige of primary care in medical education and training. One point was assigned because of a present system predominantly financed by social insurances (instead of a tax-based system), the percentage of generalists of all practicing physicians, the rather low share of costs for patients and because of the existence of patient lists on voluntary basis. Two points were assigned because of the high percentage of generalists in primary care and the legal obligation for 24-hour coverage.

The practice characteristics obtained 5 out of 12 possible points. Zero points were assigned because of the lack of formal guidelines for the transfer of information between generalists and specialists and the minimal use of clinical data to plan and organize services. One point was assigned because of the existence of incentives to reduce direct access to specialists, longitudinality of physician-patient relations and the partial family-centredness. Two points were assigned because of the broad range of services provided by primary care practitioners.

The final Primary Care Score of Switzerland, defined as average point level achieved in relation to all characteristics, was 0.9. The result varied between 0.7 and 1.1 when calculated from the answers of respondents representing different stakeholder groups.

Previous studies have assessed the strength of primary care in various countries based on the same indicator set of Starfield *et al.* (11,13,14). Compared to the latest available international data from Starfield and Shi (14) and Stigler *et al.* (13), Switzerland achieved a mid-range Primary Care Score and, therefore, can be classified as an intermediate primary care country (Table 2). Both system characteristics and practice characteristics ranged in the middle field of the 15 assessed countries.

A further study of Macinko *et al.* (11) used a slightly modified indicator set, which considered only 10 of the 15 items (four system characteristics and six practice characteristics). System characteristics included geographic distribution, financing, primary care provider and primary care co-payment. Practice characteristics included longitudinality, first contact, comprehensiveness, coordination, family-centredness and community orientation. Macinko *et al.* evaluated the Swiss health care system based on OECD data from 1995 and determined its Primary Care Score with 0.25 at that time.

In our study, applying Macinko's modified indicator set, Switzerland obtained 9 out of 20 possible points. The system

characteristics obtained 4 out of 8 possible points and the practice characteristics obtained 5 out of 12 possible points. Compared to 1995, higher ratings were obtained in 7 out of 10 characteristics (Supplementary Table 3). No improvement was observed in the characteristics geographic distribution, coordination and community orientation, which were all still rated with zero points.

Compared to 17 OECD countries evaluated with Macinko's framework, Switzerland achieved a low to intermediate Primary Care Score of 0.9. The system characteristics lay below the median of five points, whereas the practice characteristics lay on the median of five points. Table 3 illustrates Switzerland's position in the international comparison based on the modified indicator set and illustrates the change in primary care strength in Switzerland during the last 20 years, which led Switzerland to outrank some of the other countries.

Discussion

Since 1995 this is the first study to measure the role of primary care in the Swiss health care system applying an indicator set in line with the original of Starfield *et al.* We aimed to fill in the gap and specifically collected data from Swiss experts and stakeholders with insights into the health care system. In Austria, Stigler *et al.* (13) used a similar approach by interviewing authors of peer reviewed publications about the Austrian health system and primary care. We stretched this focus and included also health professionals from Swiss primary and secondary care, patients, funders, legislative power, policy makers and experts in health services research in order to reflect the structure of the current health care system.

Our results show that Swiss primary care currently is of medium strength and that it has gained strength since the 1990s. Results of the Primary Health Care Activity Monitor for Europe (PHAMEU) project suggested this development already in 2009–10 (15). However, the PHAMEU project was based on a different conceptual framework of primary care and indicators other than Starfield's. Thus, its results were not directly comparable to the Swiss assessment of 1975–95. Now, the results of our assessment authenticate the evolution of Swiss primary care. During the last 20 years, Switzerland's primary care status raised from low to medium. We explain this finding with the inception of the Federal Law on Health Insurance (Krankenversicherungsgesetz, KVG) in 1996 that provides the basis of today's mandatory health insurance system (16). The reform enabled formerly uninsured populations to access primary care very easily and to afford long-term relationships with a family physician, lowered patients' co-pays and allowed for the development of managed care plans. Moreover, it established a standard range of medical services by publishing a catalogue of insurance covered diagnostic services and treatments. These features may account for better ratings in terms of the score items 'longitudinality', 'family-centredness', 'cost sharing', 'first contact' and 'comprehensiveness'.

Strength and limitations

It is clearly a strength of our study that it reverts to the established indicator set of Starfield *et al.* and allows therefore an evaluation of system changes over time. The inclusion of stakeholders from different levels of the health care system and a high response rate of survey addressees (62.5%) objectifies the scoring. We did not control for personal characteristics of the respondents such as age, sex or professional background because we were interested in a synopsis of different point of views. Determinants of differing point of views were out of scope of this study. Nonetheless, it can be noted that the Primary Care Score showed only

Table 2. Switzerland's Primary Care Score in relation to 14 countries that applied the identical assessment tool

Country	Points achieved			Primary Care Score (average point level across all items) (max. 2)
	System characteristics (max. 18)	Practice characteristics (max. 12)	Point total (max. 30)	
High primary care strength				
UK ^a	18.0	11.0	29.0	1.9
Denmark ^a	16.0	10.0	26.0	1.7
Finland ^a	15.0	7.0	22.0	1.5
The Netherlands ^a	13.0	10.0	23.0	1.5
Spain ^a	12.5	8.0	20.5	1.4
Intermediate primary care strength				
Canada ^a	11.5	6.0	17.5	1.2
Australia ^a	10.0	7.0	17.0	1.1
Sweden ^a	10.0	4.0	14.0	0.9
Switzerland^b	8.0	5.0	13.0	0.9
Japan ^a	8.5	4.0	12.5	0.8
Low primary care strength				
Austria ^c	4.0	3.0	7.0	0.5
Belgium ^a	5.6	0.0	5.6	0.4
Germany ^a	6.0	0.0	6.0	0.4
United States ^a	4.0	1.5	5.5	0.4
France ^a	5.0	0.0	5.0	0.3

Values in bold indicate Switzerland's current Primary Care Score in 2014.

^aScore assessed by Starfield and Shi (14).

^bScore assessed by the present study.

^cScore assessed by Stigler *et al.* (13).

Table 3. Switzerland's Primary Care Scores of 1995 and 2014 in comparison to 17 OECD countries according to the modified indicator set of Macinko *et al.* (11)

Country	Points achieved			Primary Care Score (average point level across all items) (max. 2)
	System characteristics (max. 8)	Practice characteristics (max. 12)	Point total (max. 20)	
High primary care strength				
UK ^a	8	11	19	1.9
Denmark ^a	8	10	18	1.8
Spain ^a	7.5	9	16.5	1.65
The Netherlands ^a	5	10	15	1.5
Finland ^a	7	7	14	1.4
Italy ^a	6	8	14	1.4
Australia ^a	7	6	13	1.3
Norway ^a	6	7	13	1.3
Intermediate primary care strength				
Canada ^a	6.5	5	11.5	1.15
Sweden ^a	7	4	11	1.1
Switzerland 2014^b	4	5	9	0.9
Japan ^a	2.5	5	7.5	0.75
Portugal ^a	4	3	7	0.7
Low primary care strength				
Belgium ^a	4	0	4	0.4
Greece ^a	4	0	4	0.4
Germany ^a	3	0	3	0.3
USA ^a	1	2	3	0.3
<i>Switzerland 1995^a</i>	<i>1.5</i>	<i>1</i>	<i>2.5</i>	<i>0.25</i>
France ^a	2	0	2	0.2

Values in bold indicate Switzerland's current Primary Care Score in 2014 and values in italics indicate Switzerland's Primary Care Score assessed in 1995.

^aScore assessed by Macinko *et al.* (11) based on OECD data.

^bScore assessed by the present study.

marginal variation when calculated from the answers of different representatives—all within the range of a country with intermediate primary care strength. Thus, we consider the synopsis as well balanced without under- or over-representation of a particular stakeholder group.

A general methodological problem of primary care assessments remains, however, unsolved and must be taken into account as possible limitation of the study. The Primary Care Score is composed of unweighted indicators. One could argue that the importance of

indicators might change over time due to societal and demographic changes. For instance, the increase of chronic conditions in the population enhances the importance of long-term care management and thus the importance of indicators such as ‘Longitudinality’ and ‘Coordination’. On the other hand, modern lifestyle, particularly in urban areas, has changed the traditional architecture of families, diminishing the importance of indicators such as ‘family-centredness’. A score relying on unweighted indicators neglects these differences.

Nevertheless, it is to note that until to date no measurement instrument including weighted indicators exists. Therefore, the indicator set used in this study can still be considered as state-of-the-art.

Another advantage is that our results allow direct deduction of future targets for health care reforms that would be supposed to strengthen primary care in Switzerland. That differentiates our study once again from the PHAMEU project. The latter was primarily designed to compare different countries’ health systems and not to point out individual and specific weaknesses of the different health care systems. The 77 indicators used in that project were grouped in seven different categories and comparisons were made based on category scores (3,15). Hence, weaknesses were not reported in detail. In contrast to that, we report the scoring of every single indicator and identify substantial weaknesses where 0 points were assigned.

Conclusion

Against this background, we conclude that the developments of the last 20 years have led to a small increase in primary care strength, but the following fields require future development in Switzerland: inequitable local distribution of medical resources, relatively low earnings of primary care practitioners compared to specialists, low priority of primary care in medical education and training, lack of formal guidelines for information transfer between primary care practitioners and specialists and disregard of clinical routine data in the context of medical service planning. Based on this documentation, researchers are enabled to evaluate the impact of future health care reforms.

Supplementary material

Supplementary material is available at *Family Practice* online.

Declaration

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