





The Swiss Healthcare System

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Executive Summary

This work aims to give an overview of the Swiss healthcare market, in providing a short description of the status quo and how it works as well as it represents several potential areas for investments taken by private companies.

Ranking high in several comparative studies in terms of life-expectancy, doctor-to-population-ratio, technological equipment, number of hospitals per capita and in terms of consumer satisfaction, in the case of Switzerland those great performances produce at the same level high costs. Hence, in term of efficiency, the health-care system ranks only average.

However, Switzerland is not an ordinary Western-European country - facing the state of an investor-surplus that creates easy accessible and cheap money for the state and its cantons at the financial market, the country does not yet have the pressure of economizing its expenses. This fact may explain, why PPP-Projects in the health-care sector are not all developed yet, and the outsourcing of health-care services only exists as improvements in specialist knowledge and integrations in services lead to a higher practicability.

Hospitals are in 70% run by the cantons, and in 30% by private companies. Health-care experts forecast a total equality in terms of the juridical form of providers from a client's perspective in choosing health-care services - a fist step into this direction has already been undertaken with the reform of financing hospitals. In theory hospitals are already seen as equal, patient's chose freely among private and public ones that are part of the approved hospital list and their insurance covers the expenses on the basis of the used service. In practice, however, cantons still support "their" hospitals with hidden subsidies, which causes distortions in competition. In the past, before the amendments of financing have been announced, private hospitals did not receive any financial quotes by cantons. That's the reason why they established themselves in the premium sector, where competition is not purely based on prices but rather on quality and comfort. For the future, though, new market players may be advised to settle themselves in the area of the middle class, where they should try to get part of the hospital list.

In terms of the demographic change of the population, Switzerland does not differ from its Western-European neighbours - a tremendous shift towards an aging society is already taking place. The majority of elderly- and nursing homes is in private hands (40%), closely followed by the state (31%) As an uniqueness for the Swiss population, however, may be seen the long time elderly people remain in private households - in the age of 80 years, still 84% live there. But beyond this age, the situation changes quickly, as already 13% of the population between 80 and 84 years lives in nursery homes

and in the age from 90 to 94 years, even 43%. This is also the reason why 96% of the accommodationand nursery-days take place in nursery-, and not in elderly homes.

Health Tourism is one of the biggest growing sectors in Switzerland and despite the high-priced sector, the country represents the second largest market in Europe. 70% in this area are spent in spas and the remaining 30% in medical care. Changes in lifestyles and demography, a shift towards prevention and alternative practices as well as the increasing interaction between health and psychology may be mentioned as triggers. Wellness and medical tourism, can be seen as sub-segments of the health tourism and represent with its combination of surgery and tourism a relatively new type of non-exclusive niche tourism that can provide investment opportunities in the upcoming years. The absence of a global governing institution regulating or endorsing this market, just confirms this trend.

Future demand of healthcare will increase principally in three regions - in the cantons around Zurich, around Léman and in the canton of Thurgau. However, high efficiency and quality may have a more significant influence of the success or failure of a company than the saturation of the regional market.

Approach and Methodology

In order to determine definitions and descriptions of the healthcare system, its costs and finance structure, as well as information on key market players, key services providers both in the private and public sector and its possible relationship, we used of the key informant interviews, qualitative data analysis and meta-analysis.

In order to getting to know about future trends considering the demographic changes and the future challenges that the system has to face, we analysed global reports published by OECD, WTO, World Bank, etc. For determining efficiency and health as output variables, we described the health expectancy of Switzerland, its GDP per capita, demographics and public health risk indicators, its spendings on health, numbers of private and public hospitals and other medical centres, health workforce, health education as well as other economic and social indicators.

Secondary research activities: university databases, KPMG databases, statistical data for economic and social indicators.

Primary research activities: key important interviews, data analysis and meta-analysis.

1. National Macro-Trend and System

1.1. General overview of the Swiss health system

1.1.1. Data

According to the Bloomberg (2014), Switzerland ranks on the 15th place in terms of efficiency of the healthcare system and 3rd in terms of the highest life expectancy at birth (82.8 years). The doctor-to-population ratio is also one if the highest (3,920 per 1,000 inhabitants), the technological equipment indicator and the number of hospitals compared with geographic- and population size rank high as well (OECD, 2013).

The high rankings, however, also have their costs: Switzerland has one of the highest levels of total health expenditure. In 2013, it accounted for 11.5% of the GDP (OECD average: 9.5%), which makes about \$5,489 per person (OECD average: \$3,265) and it is forecasted to peak at the amount of 15.8% in 2060 (Legislature Financial Plan, 2012). Nowadays, the majority of this expenditure, about 65,2%, is still financed by public spending (Daley / Gubb, 2013). From a consumer satisfaction perspective, according to Euro Health Consumer Index of 2015, the Swiss healthcare system ranks second in the world.

A short overview of how this system works is necessary to identify possible future opportunities and will be given in the following section.

In 1994, Switzerland approved the Health Insurance Law that, and since 1996, it imposes the mandatory basic health assurance to all the Swiss residents. In addition, "non-residents with a regular income-generating activity and non-residents employed by a company whose headquarters are located in the country" (OECD, 2011) are obliged to have a health insurance.

The dynamics of this market, ruled by the social insurance law, have to follow three main principles:

- 1. Health insurers cannot make profits on contracts for mandatory health insurance;
- 2. Consumers have free choice of their insurer;
- 3. Insurers are compelled to accept any applicant (OECD, 2011).

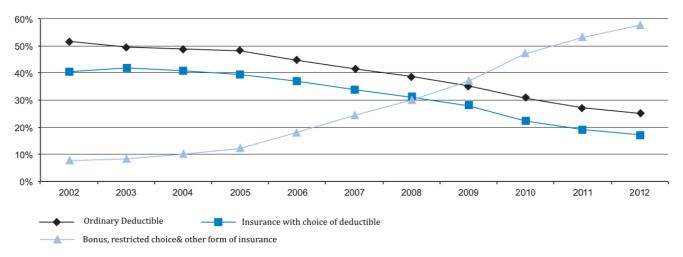
Basic package

The health services basket covered by health insurance is defined by the Federal Office of Public Health (FOPH) (2013) at the national level ('basic' package) and it has to be the same for all insurance providers. It covers all treatments and diagnostic services related to illness, accident and maternity and has to meet three principles: effectiveness, appropriateness and efficiency. Some chronically treatments are partially included while the dental care as well as prosthesis and eye examinations, since January 2011, are not included anymore, which leads to a high share of out of pocket financing.

There exist three types of insurances that differ according to the premium paid, the deductible and the choice of doctors and hospitals:

- · Ordinary basic health insurance;
- Insurance with limited choice of providers;
- Insurance with the choice of deductible.

Graph 1: Trends of the different types of health insurance between 2002 and 2012.



Source: Federal Statistic Office, 2014B.

Currently, there work 67 health insurance providers in Switzerland (FOPH, 2014).

LAMal (Swiss Federal Law on Health Insurance)

In Switzerland, the health-care providers are extremely regulated. The market of healthcare is protected especially due to the protection of patients as this is regarded as one of the most important issues. In this way, pre-existing providers are also protected from external potential competitors. Moreover, the law limits entrepreneurial actions: for example, the prices of the health-care are fixed at state level. In this way, competitiveness regards rather the quality of services instead of quantity.

The disposition about the dynamics of the legislation system in the healthcare sector is really complex in Switzerland, but its central pillar is the Swiss Federal Law on Health Insurance (LAMla): it has been adopted in 1996 and, even if the name would suggest that it regards only the insurance system, it also regulates the whole healthcare system in Switzerland. It points out the main issues of it as, for example, the mandatory insurance for all the residents.

In recent years, it has been object to several reforms, which aimed to eliminate weaknesses of the system, as for instance the lack of transparency in terms of costs and quality of service providers, inefficiencies and low coordination between all the entities. The first revision was made in 2001 and it mostly regarded the technical aspects of the health-care.

The second one focused on quantitative aspects that should have lead to a reduction of costs. The third and last one, made on 2007, is still on track: it concerns the new regulation about the healthcare system, but has been subject to several debates in Switzerland. Therefore, it has been split in several 'packages': one of this regards the new way of hospital's financing that will be explained in more detail later.

In general, since 2011, the government seems to be inclined to innovate the surveillance law about the insurance's providers: the FOPH (or optionally, a monitoring agency) would play as well a key role in approving premium levels (OECD, 2011).

Again, the main purpose of this new law is to increase the transparency in order to protect patients and hence, it is extremely important to monitor the effects of these reforms in the future years.

1.1.2. Focus on the costs of the system

In 2011, Switzerland ranked at third position among the most expensive health-care systems in all 34 OECD countries after USA and Norway in accordance with health-care expenditures (HCE) per capita. Moreover, it ranked at the sixth place according to HCE in terms of the share of GDP (OECD, 2013). The total HCE increased up to more than 68 million Swiss francs, which represents a share of 11.5% of GDP in 2013, whereas the OECD average showed 9,5% of GDP (FSO, 2014B).

Following increases have taken place in the last years (in CHF million): Health-care providers for hospitals raised their costs from 23,206 in 2011 to 25,491 in 2012 (+9,8%), providers in the area of nursing and residential care facilities from 11,311 to 11,78 (+4,1%) and out-patient providers from 19,937 to 20,614 (+3,4%).

In 2012, more than half (54.8%) of the costs for health-care system were accounted for by hospitals (37.5%), nursing homes (13.3%) and institutions for disabled persons (4.1%). Out-patient service providers (doctors and dentists, physiotherapists, psychotherapists, home nursing care, other paramedical services, laboratories, others) accounted for 30.3% of the costs (see graph 2) (FSO, 2014B).

Healthcare expenditure for type of provider

Hospitals Nursing homes Disable Institutions Doctor Other

15,38%

44,01%

Graph 2: Healthcare expenditure in terms of providers

Source: re-elaborated by authors

Divided at the level of the service type, in- and out-patient treatments were the most expensive ones (in CHF million): 29,325 (21,267) in 2011 and 31,403 (22,494) in 2012, which reflects a rise of 7,1% (+5,8%).

1.1.3. How healthcare is financed

Two types of financing exist in Switzerland: public and private ones. The public financing offers three packages: mandatory statutory health insurance (SHI); directly financed by government to healthcare providers; and a social insurance of contributions that covers the cost of treatment in case of accidents, disability insurance and military insurance.

According to the Federal Statistical Office (2014B), the state covers 20% of the total costs of Swiss health-care (in CHF million): in 2011 it amounted 12,566 and in 2012 13,795 (+9,8%); the largest part of financing is the social insurance, which amounted (in CHF million) 26,761 in 2011 and 28,568 in 2012 (+6,8%). This part makes 41% of the total state funding.

Mandatory SHI, regulated by law and supervised by the Federal Office of Public Health, is purchased on an individual basis from a number of competing non-profit insurers. Costs are redistributed among insurers by a central fund operated by the Common Institution under the Federal Health Insurance Law, in accordance with a risk equalization scheme regulated for cantons (Camenzind, 2012).

Public acute care hospitals are partially funded by the cantons and partially by contributions from insurers. If the cantons need subsides, the state may provide them to ensure a sufficient supply of acute care services within the canton.

Cantonal governments also subsidize outpatient care, public health programs and medical homes. All government spending is financed by general taxation. Swiss government provides people with low incomes access to the competitive insurance market, placing income/wealth on the basis of a ceiling on the cost of insurance.

The private financing or voluntary health insurance (VHI) is regulated by the Swiss Financial Market Supervisory Authority. It includes private insurance and private households. According to the FSO (2014B), compared with the year 2011, funding from private insurances decreased by 12,2% from 5,536 to 4,863 (in CHF million) in 2012. In contrast to this, funding from private households increased from 16,159 in 2011 to 17,045 in 2012 (+5,5%). Together these two funds present 32,2% of the total funding.

A study of Camenzind (2013) shows that health insurers offering life insurance services may reject applicants due to their medical history. Supplementary and complementary private insurance products in Switzerland, unlike the universal product, can be sold on a risk-rate for profit basis (even when the insurer operates in the universal marketplace on community-rated non-profit basis) and insurers are permitted to refuse enrolment.

LAMal - financing

As mentioned before, one of the most significant parts of the last reform of 2007 regards the way of financing hospitals in Switzerland. The four major points are:

- Services are compensated with a lump sum: one part is fixed (average costs for all disease patterns) and the other one depends on the patient's severity treatment;
- public and private hospitals are on the same financing level;
- costs are supported for the 55% (at least) by cantons and the other 45% by providers;
- free choice of hospital by the patient.

Before, the cantons had to bear the costs of any investment at hospitals, now, after the amendments, hospitals have to pay themselves for investments undertaken. This is planned in the following way: Every hospital gets a fixed lump sum that is calculated from the basis price (also called "base lump sum": the average costs over all disease patterns). The base lump sum should be nearly the same in every canton. Moreover, a variable part will be added, which differs in the kind and degree of severity of the treatment (Swiss Diagnosis Related Groups – SwissDRG). In this lump sum, as mentioned before, also the costs of investments are included now as they are no longer borne by the canton due to their rising costs and limited budgets. The ideal base sum is oriented towards the most efficient managed hospital in the same canton.

Another important issue of the new reform is the list of cantonal hospitals. In this list, hospitals are shown that fulfil specific requirements about quality and efficiency and, at the same time, are confirmed to the new financing system. Now, the private hospitals can adhere to this list and patients are totally free in the choice of the hospital (also outside their canton). Being part of this list means that the 55% of the costs are sustained by cantons and 45% by insurance providers.

Hospitals that that are not part of this list, they can contract conditions with insurance providers. In these situations, the patient's treatment will be paid for 45% by the compulsory insurance provider and 55% by the complementary one. If a hospital cannot even succeed in this type of contract, the future treatments will be fully paid by the compulsory insurance provider and, in lack of this, by the patient himself. These hospitals are not shown in the list.

Figure 1: The new way of financing after the reform

	Patient taken in a Listed Hospital	Patient taken in a Hospital with Contract	Patient taken in a non-Listed Hospital
Training courses for doctor (university & research)	Canton	Canton	Canton
Costs (also investments)	55% by the canton	Complementary Insurance/ patient	Complementary insurance/ patient
	45% by the mandatory insurance	max. 45% by the mandatory insurance	·
Complementary Services	Complementary Insurance/ patient	Complementary Insurance/ patient	

Source: Credit Suisse, 2013A.

Moreover, the principal aim of this reform is to motivate hospitals in order to cut unnecessary costs and operate in the most efficient way with a high quality of the offered services. Not all cantons and hospitals have adopted this new method of financing because, as mentioned before, the revisions of LAMla are still argument of discussion.

2. Service Providers

2.1. Description of public and private providers

As public and private providers play different roles in each field of the healthcare system, in this chapter the most important ones (based on the overall expenditure, see chapter before) will be described.

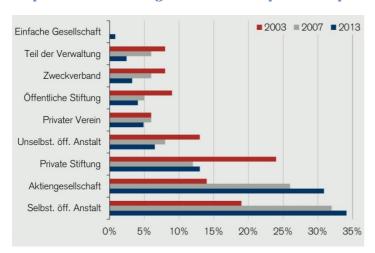
2.1.1. Hospitals

The state sector plays the major role in the provision of hospitals. In 2011, 69% of the general hospitals were public or subsidized and the other 31% in private hands.

Public Hospitals

Public hospitals are in most cases owned by the cantons, and if not, they are in the hands of the municipality (Rohner, 2015). Usually, the hospital itself has a right of disposal and to manage it. There are big differences concerning the actual diffusion of the property in each of the 26 different cantons, which is seen as a major drawback and challenge for the future of the Swiss health system. Graph 3 shows the legal structures of public hospitals, each in comparison with the last years.

The graph highlights a trend towards autonomy. Potential creditors prefer hospitals with independent juridical forms and sufficient liabilities to hospitals that operate within the public administration. Most hospitals are nowadays in Switzerland independent public institutions (34%), followed by public limited companies (31%) and private foundations (13%). Among private hospitals, there are 76% public limited companies and 16% private foundations.



Graph 3: Amount of legal structures of public hospitals in Switzerland

Source: Credit Suisse, 2013B.

In the last 20 years, nearly no investments have been undertaken in the real estate of public hospitals, which means that their renovation is seen as a milestone in the next years.

The problem here is that hospitals with different infrastructural backgrounds now have to face all the same challenges in financing new projects, especially as the requirements are seen as high. This is the reason of why some of them are still financed by the cantons, as the investments have been planned in the old system (before the amendments undertaken in 2007 at LAMal). For the future, however, a hybrid ownership structure of the property is needed, where operational key buildings stay in the ownership of the hospital company and every further complementary service as well as non-operational property should switch into the hands of private investors/companies. An early step into the transitional Swiss market may promise high chances as well as competitive advantages (Credit Suisse, 2013B). More information on future ownership structures will be analysed below, at paragraph 2.2. Private-Public-Partnerships.

Private Hospitals

Since the last reform, the services of private hospitals are now also in the list of cantonal hospitals and hence covered by insurances. This means that private and public hospital are considered "equal" not only in a financial point of view but also from the perspective of the patient, who now can choose freely among different hospitals (Credit Suisse, 2013A).

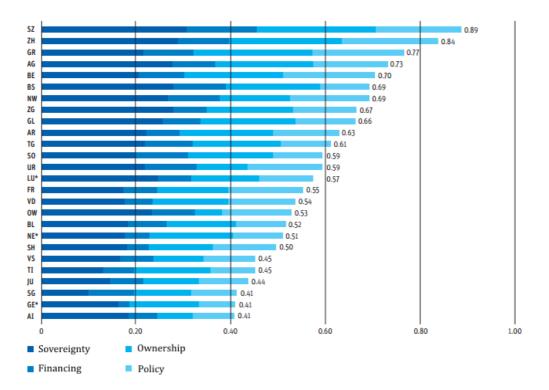
According to a report provided by the private hospitals association in Switzerland, this is only partly true. In fact, cantons still have many several important roles: they manage hospitals, approve prices of healthcare services, organize the specialized medicine, and administrate the premium of providers, finance hospitals and so on. Taking this into consideration, it is not easy to be 'above the parties' and, sometimes, cantons support public hospitals with 'hidden' subsidies, which leads to a distortion in the market competition.

Graph 4, provided by the consulting company Polynomics (2014), shows the compatibility between competition and the policy regulation of the different cantons. The scale considers values between 1 and 0. A value near 1 identifies a favourable environment for competition, whereas 0 shows the opposite, namely an unfavourable one. It considers several index regarding the sovereignty, financing, ownership and policy. As the graph shows, there exist big differences among the different cantons. Most favourable in are the cantons of Zurich and Schwyz, the least favourable are Appenzell Innerrhoden and Geneva¹. In general, the smaller the canton, the fewer hospitals there exist and the more unlikely it is that distortions in the competition exist.

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¹ Names and acronyms of the different cantons:

ZH: Zürich, **BE:** Bern, **LU:** Luzern, **UR:** Uri, **SZ:** Schwyz, **OW:** Obwalden, **NW:** Nidwalden, **GL:** Glarus, **ZG:** Zug, **FR:** Fribourg, **SO:** Solothurn, **BS:** Basel-Stadt, **BL:** Basel-Landschaft, **SH:** Schaffhausen, **AR:** Appenzell Ausserrhoden, **AI:** Appenzell Innerrhoden, **SG:** St. Gallen, **GR:** Graubünden, **AG:** Aargau, **TG:** Thurgau, **TI:** Ticino, **VD:** Vaud, **VS:** Valais, **NE:** Neuchâtel, **GE:** Geneva, **JU:** Jura.



Graph 4: Compatibility between competition and policy regulation.

Source: Polymomics AG, 2014.

Another controversial point of the reform is the duty of hospitals in terms of asking for authorization in order to make investments (Credit Suisse, 2013A). In a competitive context, certain flexibility for firms to invest without asking for authorization is indispensable. As it is shown above, there are several juridical forms in which potential competitors can enter the market. Some forms are more favourable than others: if a hospital belongs to the public administration, it has less flexibility than a private one.

Private hospitals cover a large portion of specialised medicine or rehabilitation (they covered respectively 67% and 76% in 2011). This is explained by the fact that, prior the new financing law, private hospitals had to renounce the financial quote by cantons and so they focused their activities on premium services and in competition regarding more the quality and the comfort level on patient's recovery (Credit Suisse, 2013A). Therefore, as this market is already pretty saturated, Von Greyerz (2015), head of the Health Strategies Division at the Federal Office of Public Health in Switzerland, advices provider of hospital not to enter the premium section any more, but to focus on hospitals in the mid-range segment and strive for a listing in the hospital register. As soon as cantons, insured people and hospitals will gain more experience with the new LAMal, ideally more mergers will occur (Credit Suisse, 2013B).

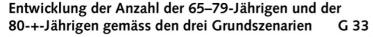
For the future she believes that patients will not distinguish any more between private and public run hospitals. They will rather chose the place according to whether the services are part of the hospital, which overall quality they have, how they are equipped etc.. Moreover, she does not believe that a unification of the law concerning hospitals will take place in the future, she rather sees some small cantons merging and executing together the planning of hospitals. In the northwestern and central region of Switzerland mergers are already taking place with the target of creating an united hospital-area (Credit Suisse, 2013B).

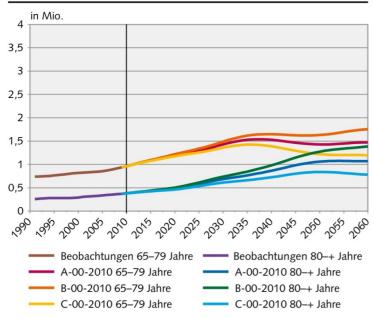
2.1.2. Elderly and nursing homes

In order to write about demand and supply in the area of elderly- and nursery homes, it is important to have a look at the demographic situation and development in Switzerland. As in many other European countries, also in Switzerland an increasing demographic ageing of the population will occur (Haug, 2003). On a national level, the decreasing number of births plays the most influential role in the demographic shift towards an ageing society, and as the birth rate since 1972 lies below the amount that would be necessary in order to produce a demographic reproduction, the proportion of elderly people has been increasing since then. Moreover, the life expectancy has grown as fewer people have died prematurely and hence, could exploit their biological life potential - which is caused by better social and economic supply (wealth effects) as well as by medical developments. Biological factors, however, set limits to an unlimited increase in life expectancy, in any case, until the process of ageing can be genetically influenced (Höpflinger / Hugentobler, 2005).

According the development of elderly people in Switzerland, there exist three scenarios. At scenario AA-00-2010, the amount of people between 65 and 79 years will increase from 962.000 up to 1,472.000 people (=53%). This scenario will take place with a high probability in between 24% (scenario CC-00-2010) up to 82% (scenario BB-00-2010). The amount of people being older than 80 years will probably increase more. It is supposed to climb from 382.000 people (= 5% of the total population) in 2010 up to 1,071.999 people (=12% of the total population) in Switzerland in 2060. According to the "higher" scenario, this number might raise even up to 1,387.000 people, which reflects more than a tripling of this age. The "lower" scenario forecasts 781.000 people, which represents though even more than a doubling (see graph 5).

Graph 5: Development of amount of people from 65-79 years and above 80 years according to the three basic scenarios.





Source: Bundesamt für Statistik (BFS), 2010.

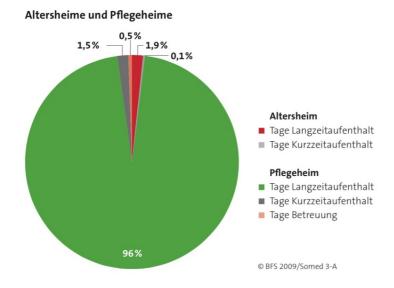
The ratio for those in need for care is in Switzerland between 10 to 11.15% of all the people being 65 years old and older. Until the age of 79 years, less than 10% are in need for care. At the age from 80 until 84, already one-fifth and among the people who are 85 years old, one-third is in need for care (Höpflinger / Hugentobler, 2005).

In Switzerland, elderly people tend to stay at home (in a private household) as long as possible. That is the reason why in the age of 80 years still 90% lives in private households. However, beyond that age, the proportion of people living in elderly- and nursing homes raises tremendously. Already 13% of people between 80 and 84 lives in elderly and nursing homes. In the age from 90 to 94 years, 43% live in institutional households and above 95 years, the majority does not live in a private household any more (Höpflinger / Hugentobler, 2005).

According to this data, it can be seen as a trend that elderly people tend to stay in a private household as long as possible, with the help of ambulant care (so-called "Spitex). Once those people reach a critical age and require professional help, however, the move into a nursery home, which is specialised in very elderly people being in need for care. The need for care is nowadays the single biggest factor contributing to the decision whether to move to a stationary elderly or nursing home (Höpflinger / Hugentobler, 2005).

Graph 6 shows the same outcome. Most of the time is spent in nursery homes in terms of a long-term stay (96%).

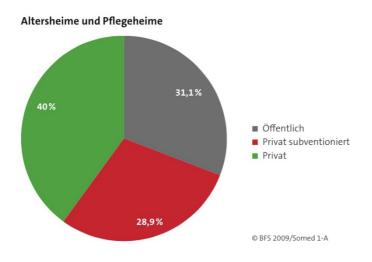
Graph 6: Amount of accommodation- and nursery-days in Switzerland in 2008



Source: Curaviva, 2010.

The amount of institutions, subdivided according to their juridical forms, shows a majority of privately run elderly- and nursery homes, namely 40% or 638 institutions out of a total of 1.539 in Switzerland in 2009. Followed by public institutions with the amount of 495 or 31,1% and then private-subsidized institutions with a total of 460 institutions, holding 28,9% in 2009 (see graph 7).

Graph 7: Amount of institutions according their legal and economic status.



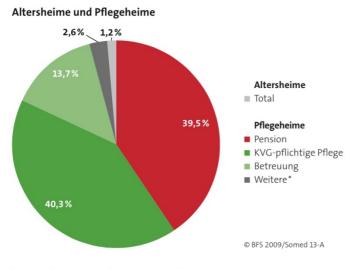
Source: Curaviva, 2010.

In the area of costs, data shows that the main cost units are located in nursery homes (7,552.382 thousand CHF, more than 98%), respectively the biggest stake forms nursing under the health

insurance law (LAMal) – 3,167.772 thousand CHF (40,3%), followed by pension (3,102.482 thousand CHF – 39,5%) and then care in general (1,075.150 thousand CHF – 13,7%) (see graph 8).

Graph 8: Operating costs divided by main costs units in 2008 in Switzerland.

Betriebskosten nach Hauptkostenträger Total Schweiz, 2008 (in Prozenten)



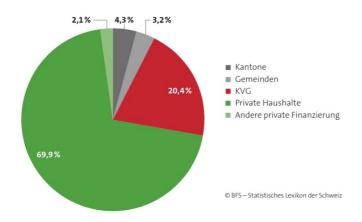
* Weitere: Therapie, Arzt, Medikamente SL, Material MiGel

Source: Curaviva, 2010.

The financing costs of the institutions for elderly and chronically sick people is borne in a majority proportion by private households (5,026.3 million CHF - 69,9%), followed by the health insurance law (KVG) with 1,468.7 million CHF (20,4%), and 310.4 million CHF (4,3%) are borne by cantons, 230.9 million CHF (3,2%) by municipalities and the rest of 153.4 million CHF (2,1%) by other financial sources (see graph 9).

Graph 9: Financing of the institutions for elderly and chronically sick people in Switzerland in 2007.

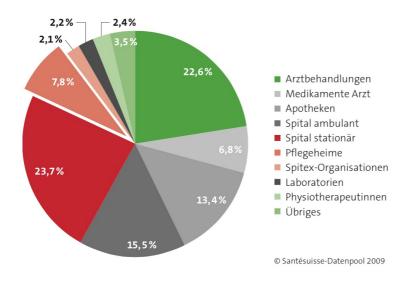
Finanzierung der Institutionen für Betagte und Chronischkranke Total Schweiz, 2007 (in Prozenten)



Source: Curaviva, 2010.

Once a person attends a treatment, costs arisen in the basic insurance are split in the following 10 biggest cost items (in million CHF)(Curaviva Schweiz, 2010): 55577 (23,7%) for stationary hospitals, 5310 (22,6%) for treatments by doctors, 3638 (15,5%) by ambulant hospitals, 3149 (13,4%) for pharmacies, 1603 (7,8%) by Spitex-organisations, 502 (6,8%) by medication provided by doctors and 565 (3,5%) by physiotherapists.

Graph 10: The ten biggest cost items of the basic insurance after the start of the treatment in 2008.



Source: Curaviva, 2010.

In summary, in Switzerland, it can be seen as a trend that elderly people tend to stay in private households as long as possible with the help of Spitex-Organisations, which represents the cheapest

option and the costs are mostly borne by private people. Once they need care and nursery, however, they move directly to a highly qualified and specialized nursery home and not into elderly homes, as their physical deficiencies are more fatal.

2.1.3. Public-Private-Partnerships

According to Rohner (2015), an Expert in PPP-Projects in Switzerland, there exist hardly any PPP-projects in the health-care area so far; the only ones are described underneath. In dividing the healthcare system according to a process model, the first level, the level of performance, is not willing to enter any partnerships - neither between public and private nor between themselves. The second level, the management field, is neither a possibility for partnerships, due to political protection. The third level, support-processes, where also transversal clinical services account to, like for instance laboratories, pathology, pharmacy, anaesthesia, radiology etc., show already very few examples.

PPP-projects are feasible, according to Rohner (2015), in the area of transversal services that are near the patient but not located directly at the patient. However, those projects are restricted to peripheral hospitals (=primary health-care centres), especially, when they are not owned by the cantons that "protect" their hospitals from any outside influence with all their political power.

If hospitals are not owned by the canton, neither by private companies, they might be owned by the municipality. The city of Zurich, for instance, runs two relatively big hospitals. At the level of municipality ownership, there are "special-purpose associations" and they already exist (Rohner, 2015). According to him, the two biggest private hospital providers are the companies "Hirslanden" and "Genolier" that operate nearly in every canton.

As an obstacle can be seen that the acquisition of an investor (the tender and then his/her construction of the building) is from a legal point of view still insecure, and no one has so far fought for this at court. Moreover, the real advantage efficiency cannot be used, as investors are not allowed to operate the hospital (Rohner, 2015).

Despite the fact, that Swiss hospitals will need in the future investments of about 20 billion CHF (PPP Schweiz, 2013), Rohner (2015) does not see the need of private partners in order to help fulfilling the projects, as Switzerland is at the moment in a state of an investor-surplus and therefore the cantons have no problems in refinancing themselves cheaply at the financial market. Neither the fact that Switzerland ranks among the countries with the highest life expectancy in the world (Statista, 2013) could speak for private investors in a PPP, as again cantons will not have any problems in financing their projects. "Economizing" does not yet exist in Switzerland, especially when it comes to public projects in the area of healthcare (Rohner, 2015).

Already accomplished projects:

On the third level of the healthcare system, the service-processing level, exist a few partnerships. One in the area of surgery, where a university hospital works together with a private partner. The private operator provides medical service in terms of six surgery rooms of ambulant surgery. Moreover, the he pays for the nursery staff as well as for the anaesthesiologists and operates the administrative management of the centre (PPP in der Schweiz, 2014A). The second project operates between the hospital of an administrative district and a private Swiss clinical complex. The public partner provides technical equipment for their common institute of radiology, whereas the private partner undertakes the acquisition of a magnetic resonance scanner (PPP in der Schweiz, 2014B).

Another project has been realized in the area of residences and care facilities between the city Rheinfelden and the company *Seniocare AG*. Together they established the residence and care facilities company *Salmenpark AG*. The property stays at the investor *PSP Swiss Property AG* and the provider company rents it. Investor and building owner: *PSP Swiss Property AG*, Architects: *Atelier ww Architekten, Zurich,* construction management: *Caretta + Weidemann, Basel,* operating company: *Wohnund Pflegezentrum Salmenpark AG* (PPP in der Schweiz, 2014C).

Also in the area of radiology operates the hospital of the canton Luzern and the Swiss paraplegic centre. Together they founded a subsidiary called Radiologie Luzern Land AG. They share furniture, operation and management of a magnetic resonance tomography and further duties in the area of radiology (PPP in der Schweiz, 2008).

The city of Opfikon and the company Tertianum AG operate together a centre for senior citizens. Investment and operation are undertaken by the private partner, the public partner covers a certain risk of vacancies of nursing beds for a limited period. Moreover, the state sector influences the provider via a yearly contract. The centre offers 54 nursing places and 54 apartments for elderly people, an underground car park, a restaurant with 70 seats available, a library, a fitness-room, internet-rooms and further related rooms (PPP in der Schweiz, 2009).

2.1.4. Outsourcing of healthcare services

Structural changes and growing market dynamics in the healthcare sector increase the hospitals' needs for cost-savings and process optimization (Mettler / Rohner, 2009).

In Switzerland, many factors are involved in the outsourcing process and it depends on the particular situation hospitals are dealing with such as size, financial status, government funding, cantons policy and leadership. According to Häfliger (2001), long-term savings of outsourced services for Swiss hospitals could differ from 50 000 CHF to 7 800 000 CHF per year, depending on the type of hospital: University hospitals, psychiatrists, region-owned or private ones.

Swiss hospitals make use of outsourcing in the area of support services like housekeeping, laundry services or catering, which have traditionally been areas for external suppliers (DeJohn, 2008).

A trend can be seen towards commissioning suppliers that can provide all FM services from one source, such as the Charité Facility Management model (CFM, 2007). The model integrates patient services, combining all patient and support systems, such as catering, housekeeping, laundry, security and plant operations designed to add value to patients as well as staff. Moreover, hospitals benefit from specialist knowledge, infrastructure and the expertise of external service providers. Several authors expect an increase in the outsourcing of facility management services.

3. Health tourism in Switzerland

3.1. Short market analysis: Swiss Tourism

Health tourism is the pursuit of medical care and wellness treatment abroad and simultaneous use of conventional forms of tourism (Connel, 2006). In the following paragraphs, a brief overview of the actual situation of the Swiss tourism is given.

3.1.1. **Demand**

The Swiss hotel industry, with 35.6 million overnight stays in 2013 over the previous year, registered an increase of 2.5% and, therefore, a recovery compared to the last two years.

With a share of 45 % of total overnight stays, Switzerland is the largest country of origin of its tourists while Germany represents the most important foreign market with 13% of the share. The difficult economic situation, triggered in 2008 by the financial crisis, has seriously decreased the demand for overnight stays, especially by foreign clients. The appreciation of the Swiss Franc against the Euro has exacerbated this difficult situation especially in 2011 (Swiss Hotel Association, 2014). The decline in recent years of the overnight stays of tourists from traditional markets, especially Europe has been offset, at least in part, due to the demand of growing and distant markets: China, the Gulf States, Russia, India and Brazil (Swiss Hotel Association, 2014).

Image 1: Trend of overnight stays in Switzerland by country of origin of the guests, indexed (2006 = 100).



Source: Federal Statistical Office, 2013.

3.1.2. Supply

Throughout Switzerland, the hotel industry is an important branch of the economy both in urban areas than in the classic holiday regions. Accommodations typical of the small business dominate the Swiss hotel industry: about the 90% of the hotels have a maximum of 50 rooms. The distribution of the beds offer in tourist regions is not homogeneous (Swiss Hotel Association, 2014).

Table 1: Supply of hotels and health establishments in 2012, Switzerland.

Tourist regions	Establishments open	Beds available	Distribution of Establishments (in %)
SWITZERLAND	4742	246 951	100%
Graubünden	648	39190	13.7%
Eastern Switzerland	545	19374	11.5%
Zurich Region	414	29500	8.7%
Lucerne/Lake Lucerne	493	24533	10.4%
Basel Region	170	10202	3.6%

Bern Region	247	10152	5.2%
Bernese Oberland	436	23755	9.2%
Jura & Three-Lakes	258	7767	5.4%
Lake Geneva Region	300	17326	6.3%
Geneva	124	14823	2.6%
Valais	586	29134	12.4%
Ticino	392	16880	8.3%
Fribourg Region	129	4315	2.7%

Source: Federal Statistical Office, 2013.

As shown in the Table 1, the regions with more establishments in Switzerland are Graubünden (13.7%), Valais and Eastern Switzerland with respectively 12.4% and 11.5% of the total distribution. However, it is also important to compare these data with the number of beds in each establishment: Geneva has the highest number (119), followed by the 71 beds of Zurich and the 61 beds per establishment of Graubünden (FSO, 2013). In the year 2013, 11 of 13 tourist regions showed an increase in overnight stays; on a national scale the distribution of total nights is homogeneous (Swiss Hotel Association, 2014).

3.1.3. Seasonality related to Healthcare

Switzerland is a typical example of healthcare conditioned by seasonality due to the temporary growth of the population in winter and summer holidays especially from non-local residents. The areas interested more are those located near the mountains that offer skiing and snowboarding activities in winter (December, January, February, March) and hiking and mountain biking during summer (June, July, August, September). These regions are characterized by a high fluctuation of the population, that is why a provision of a sufficient number of beds in a hospital, for example, during holiday seasons, is an important factor in the resources allocation of the medical services (Matter-Walstra et al., 2006).

A statistical study conducted by the BMC Health Service Research of 2006 (as cited in Matter-Waltra et al., 2006) tried to evaluate in which extent the increase in injuries, especially in winter, can stress the health service of the touristic areas. The research divide Swiss into eighty-five hospital service areas

that provide orthopaedic cures, twenty-four of them can be considered as winter regions and among them the ones that registered an highest increase of patients during the winter season are those characterized by the presence of internationally famous (ski) resorts such as Grindelwald, Gstaad and Mürren in the Bernese Alps, Saint Moritz, Lenzerheide and Davos in Graubünden, Zermatt and Crans-Montana in Valais.

3.2. Wellness & Medical Tourism

The Health Tourism is one of the segments that is growing the most in Switzerland in the last decade. 3 billion of CHF are generated by the Medical and Wellness Tourism: the 70% of the total sum is related to spas and the remaining 30% of medical care. The Health Tourism of the country is the second-largest market in Europe despite of its high prices compared to the East European countries (Euromonitor, 2014).

The causes behind this fast growth are many: changes in the lifestyles and demographic conformation, a shift towards prevention and alternative practices, the increasing interaction between health and psychology as well as the presence of an active aging population (Laesser C, 2011). The developed Swiss market is trying to satisfy the new needs of the customers, especially the working middle-aged ones, both locals and foreigners. Customers in Switzerland look for the fulfillment of the need of relaxation, beauty, wellness as well as more stimulating and challenging sports propositions (Wild et al., 2015).

Wellness and Medical Tourism can both be considered as sub-segments of Health tourism, where wellness is more related to spas, relaxation and thermal treatment, facials, homeopathy, acupuncture that normally do not require qualified doctors (Lee & Spisto, 2007). Medical tourism instead, is referred more to medical procedures and surgeries (Connell, 2006).

The combination of surgery and tourism is a relatively new type of non-exclusive niche tourism that can provide investments opportunities in the upcoming years. Moreover, there is an absence of a global governing institution that neither regulates nor endorses this market (Caballero-Dannel & Mugomba, 2007).

3.2.1. Wellness Tourism

As previously mentioned, wellness tourism includes a vast variety of different activities that include a large group of not homogeneous customers. According to the official site of Swiss Tourism (Wild et al., 2015), the country offers more than 70 Wellness hotel and 8 Wellness destinations.

Switzerland's Wellness destinations complete with a certificate are:

- Ascona-Locarno (Ticino)
- Bad Zurzach (Aargau)

- Baden (Zurich region)
- Charmey (Fribourg)
- Engadin Scuol (Graubünden)
- Gstaad (Bern)
- Leukerbad (Valais)
- Weggis Vitznau Rigi (Lucerne)

All these destinations have developed an offer designed to reduce in a targeted manner the increasing stress of everyday life. They provide an experience of total relax thanks to unspoiled nature, numerous streams and mountain lakes, forests and green hills typical of the Alpine landscape. Luxury hotels and chalets are equipped with complete wellness infrastructure, sports centres and swimming pools. Each destination offer also a variety of activities for leisure that include mainly skiing, snowboarding and skating in the winter time and hiking, mountain biking and golf during summer season (Juen G. & Hans, C., 2014).

A Wellness Hotel is recommended by the Switzerland tourism if it has five features:

- Three stars as minimum;
- free fitness offer;
- at least four areas of treatment in spa and wellness areas;
- indoor and/or outdoor swimming pool (min 27 °C and 40 m² of surface area);
- qualified staff in the spa (Wild et al., 2015).

We selected three of the most popular and profitable Wellness hotels in order to describe the typical wellness services that the supply of this segment provides.

3.2.2. Medical Tourism

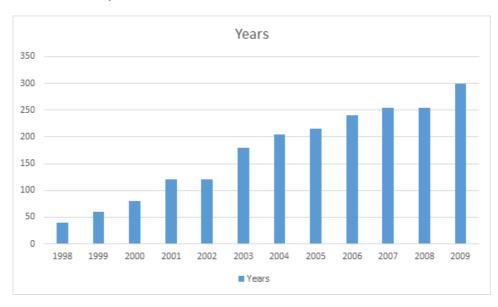
International Medical Tourism involves the resident of one state or country physically experiencing healthcare in another place (Terry, 2007). Swiss has a considerable number of clinics and centres of rehabilitation and can count on a strong international reputation that attract patients from foreign countries. According to the International Medical Travel Journal (2014), Swiss keep increasing foreign clients despite its high prices. Patients coming mainly from Russia, Brazil, China, India and the Middle East go to Switzerland's private hospitals looking for popular procedures that do not include only medical spa treatments, but also neurosurgery, obesity surgery rather than orthopaedic surgery and dentistry. There is an increasing demand for reconstructive and cosmetic surgery that includes breast surgery, face lifting and liposuction that together account for about 10% of the total Medical tourism (Frei G., executive director of Health Swiss as cited in IMTJ, 2014).

3.2.3. Assisted Suicide & Euthanasia

Nowadays, of the nine countries that permit assisted suicide, Switzerland, together with Belgium, Netherlands, Oregon and Mexico, allows this practice only in circumstances defined by the Law (DeMond Miller & Gonzalez, 2013). Assisted suicide means provide the lethal substance to the person wishing to commit suicide, which assumes it without the help of others. In Switzerland, the first organizations of assisted suicide have been created 30 years ago and provides it according to the provisions of Article 115 of the Swiss Penal Code (FSO, 2012).

In 2001, The Swiss National Council confirmed the assisted suicide law, although voluntary euthanasia is still prohibited. However, not expressly provided by the law, there are certain conditions where active indirect euthanasia and the passive one are allowed. These are the cases of pain relief with the side effect of reducing the lifespan, renounces to start or the suspension of therapies for vital support (FSO, 2012).

The Federal Statistical Office presented in 2012, for the first time, the data associated with the assisted suicide. Currently the OFS records slightly less than 300 cases a year of people living in Switzerland who "has benefited" from the help to suicide.



Graph 11: Assisted Suicide, number of cases from 1998 to 2009.

Sources: Federal Statistical Office, 2012.

All people capable of judgment of any age may require assistance to suicide the 90% of those is more than 55 years old. Among diseases that are recorded more often the 44% of cases is tumor, 14% neurodegenerative disease, 9% cardiovascular disease and 6% disease of the musculoskeletal system (FSO, 2012). The highest number of deaths was among the residents of the Canton of Zurich with 700 cases in 12 years. For all cantons, since 1998 was recorded at least one person who made the request

for assisted suicide (FSO, 2012). *Dignitas* is the only institute of the four present in Swiss that provides the procedure of assisted suicide also to foreign citizens.

Despite Switzerland is one of the few country in the world that provide these services that show a significant growth in the recent and upcoming years (Federal Statistical Office, 2012) it is a segment difficult to evaluate. The choice of a possible investment in those areas is a decision that involves the personal policy of the company together with social and ethical issues especially in an international corporation operating in different countries where, in some of them, euthanasia and assisted suicide are still prohibited.

3.3. Intrastate Tourism

One aspect that should be considered is the intra-state migration of patients since the official calculations of the health assistance density of the previous years do not take into account the cantonal borders due to the fact that the law configuration of the Swiss hospital market panorama was limited to the cantonal boundaries (Credit Suisse, 2013). Until the end of 2011 in fact, the canton of residence of a patient helped financially in case of surgeries outside the canton only if the required treatment was not available in the canton of residence (Credit Suisse, 2013). For treatments outside the canton that were not emergency case, it was necessary to request in advance a payment guarantee that was rejected for the 30% of cases (Credit Suisse, 2013A).

The analysis of the inter-cantonal flows of patients shows that in 2011 only the 16% of all (Swiss) patients decided to be cured outside of their canton of residence. The shares of "extra-cantonal" hospitalizations vary significantly from canton to canton: Appenzell Innerrhoden has the highest percentage (54%) while at the bottom end of the scale is placed the canton of Bern with 5% of patients coming from other cantons (OFS, 2012). Based on the total cases generated by the respective cantonal population, cantons with university hospitals and cantons of Appenzell Ausserrhoden and Graubünden appear to be net exporters of hospital services.

With the entry into force of the new hospital financing in 2012, people with basic insurance can choose freely, except for few restrictions, among all the Switzerland hospitals (Partial revision of the LAMal on the hospital financing, 2012). The segmentation of the cantonal legislation concerning hospital markets is going to decline with an expected increase in the flow of inter-cantonal patients (Credit Suisse, 2013A). The exact extent of future migration of patients is difficult to estimate since there are many factors that come into play in the decision to use a treatment inside or outside of the own canton. A report by the Swiss Health Observatory (OBSAN, 2012) provides empirical evidence to demonstrate the fact that the cantonal size, the region and the type of hospital and surgery/treatment play a role in the choice whether to be cured in their canton of residence or outside of it. International studies also indicate that the respective family doctor can have a decisive influence on the choice of the hospital (Credit Suisse, 2013).

One factor that can affect the likelihood of extra-cantons treatments is the proximity of the place of residence of the patient to its respective hospital. Given the geographically reduced size of most cantons and the high density of hospitals, for many patients the hospitals located beyond the cantonal borders can be closer rather than hospitals within their canton. It is still too early to predict the effect that the "new LAMal" will have on patient flows induced by the distance. However, it can be approximately estimated the potential of the extra-canton demand induced by the distance. It is possible to calculate how many people within a canton can reach faster, with their transport, any hospital outside their canton instead of the closer hospital inside the canton (Credit Suisse, 2013A). Based on these assumptions, the potential of the extra-cantonal demand represents the 8% of the Swiss total one (FSO, 2012).

4. Development of future demand and supply

4.1. Future trends

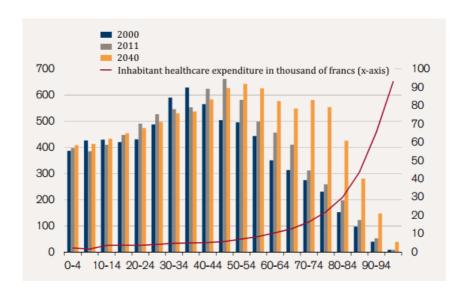
4.1.1. **Demand**

In agreement with several reports of the Federal Office of Statistics of Switzerland, the changes in demographic factors, the progression of technology and the changes in the health-care habits and the 'solidarity' financing will lead to an increase in the incidence of chronic and non-communicable diseases and hence, to an increase in people demanding healthcare services.

In particular, elderly people cover a large part of the demand: in 2010, the generation over 60 represented 41% of the total demand and, as long as only inpatient treatments are considered, it reached 56%, even if they only represent 22% of the total population. Moreover, the proportion of people over 65 years has doubled and the 80 plus population has increased more than five times since 1950 (OECD, 2011). Between 2000 and 2010, they produced an increase in the total healthcare costs of 62% (FSO, 2011).

As graph 12 illustrates, future forecasts (until 2040) show an increase in individual costs for healthcare needs, in accordance with the increase in the number of the elderly population.

Graph 12: Demographic development for age groups until 2040 and healthcare expenditure



However, it is not easy to forecast an exact amount of the total costs: the sum depends not only on demographic changes and aging but also, for example, on the development of technology in the medical science or, again, on the development of the financing law, which is difficult to foresee in the future. On the same time, it is important to assume the future in order to understand in which direction the whole healthcare system will proceed. In the next step, future trends based on almost 'certain' variables as population growth and its related future structure will be analysed (Credit Suisse, 2013).

In this context, graph 13, developed by Credit Suisse with data of the Federal Office of Statistics of Switzerland, is useful.

 Constant trend of pro capita expenditure Flattened trend of pro capita expenditure Only demographic factors

Graph 13: Future scenarios of healthcare expenditure until 2040

It illustrates three scenarios:

- 1. The constant trend is based on the hypothesis that the healthcare expenditure will increase as occurred between 1997 and 2010. It is assumed that the financial reform will not lead to any effects on future costs evolution, while the principal aim of the reform is to lower them (on this assumption the expenditure costs will increase yearly by 4.1%);
- 2. The second one is based on future success of the financial reform: the will succeed due to a lower growth of the costs rate. As it takes into consideration the fact that the reforms will have a decreasing effect on the costs, demand will increase.
- 3. The third scenario considers only demographic factors and supposes that the pro capita expenditures will remain constant. In this situation, expenditures will increase yearly by 1.4%.

Starting from the assumption that the healthcare individual level is more or less equal all over Switzerland and that greater hospital densities in certain cantons will not necessarily lead to a higher demand, we can also draw a geographical forecast of the future demand.

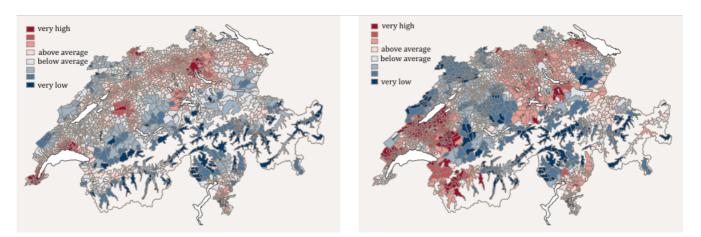


Figure 2: Regional Distribution of the demand in 2011 Figure 3: Demand growth until 2040

As it is shown, the demand will increase principally in three regions:

- In the cantons around the canton Zurich, due to the good economic situation of its capital city and its surrounded areas.
- In the cantons around the Léman region with the exception of the big cities of Geneva and Lausanne;
- In Thurgau canton, in the south-west part of the Lake Boden.

1.1.4. Supply of hospital services: overview and evolution

In 2011, 300 active hospitals in Switzerland existed, and 120 among them operated in the general area and offered about 112 000 jobs. Hospitals, therefore, represent not only the largest group of healthcare providers but they are also one of the largest employers in Switzerland.

For this reason, private hospitals focus more on premium offers and try to differentiate themselves through quality, especially at the level of comfort in the hospitalization and catering service. This is confirmed by a higher percentage of patients with private and semiprivate insurance: 63% in 2011 compared to 18% in public hospitals (FSO, 2014). The new regulatory system ensures better equalization between public and private hospitals; this will lead to, at least theoretically, an equalization of the performance remuneration. Specific distortions of competition in favour of public hospital will remain unchanged (Credit Suisse, 2013). The transition from financing systems dependent on costs to systems dependent on performances, combined with the medical progress of recent years, significantly reduced the average hospital stay and resulted in a shift from the inpatient sector to the outpatient one (Credit Suisse, 2013).

Despite a decrease in the average stay in central hospitals, especially in hospitals for the basic care: - respectively minus 15 and minus 36% between 1998 and 2011 (FSO, 2014) - Switzerland continues to

have a very high average hospital-stay compared to international standards. It is expected that the new hospital financing will further intensify the shift from inpatient to outpatient treatments, thereby reducing the average hospitalization (Credit Suisse, 2013). In the area of general hospitals a clear process of concentration fostered by the reduction of hospital stay has taken place in recent times whereas in specialized clinics this concentration process was less evident. The number of general hospitals decreased by 35% between 2000 and 2011 from 184 to 120 (FSO, 2014), while the one of clinics has remained more or less constant. This contraction is not only due to the closure of hospitals, but also to legal bundling of different locations (Credit Suisse, 2013).

In an international comparison, Switzerland has not only a high average stay, but also a high density of hospitals, despite the fact that over the last 15 years about a third of hospitals disappeared, mostly in the form of legally independent companies (Credit Suisse, 2013). In terms of the density of hospitals per capita, Switzerland ranks the eighth place among OECD countries (approximately 40 hospitals for a million of inhabitants in 2009). Considering the geographical density of hospitals, Switzerland goes up to the fourth place, only in Germany, Japan and South Korea are more hospitals per square kilometre (OECD, 2013). In the light of the evolution of spending in the healthcare system and the high density of hospitals, the request to reduce the number of general hospitals in the country is being repeated constantly. Especially smaller hospitals will be put under pressure in order to reduce their range of offers and to specialize more in single performance (FSO, 2014). Specialization and division of labour between cooperative hospitals could result in greater efficiency and quality (Credit Suisse, 2013).

1.1.5. Competition

Given the previous analysis of the future demand and supply in Switzerland, a brief research about the future competition will be proposed.

In general, it can be affirmed that a high healthcare assistance in term of hospitals' density means a good assistance from the patient point of view. On the other hand, from a company's perspective, this also means a harder struggle in winning the patients and hence a higher competition.

Considering a more or less equal user base for all the cantons, an analysis of the relation between demand and supply (assistance density) can be shown as follow:

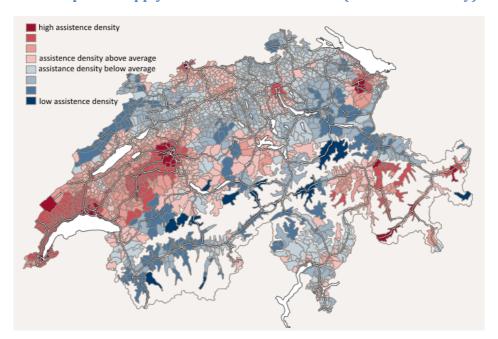


Figure 4: General Hospitals: Supply in relation to the Demand (assistance density)

The figure shows that the assistance density is higher in bigger cities: they offer 'general assistance' that provide a wider offer of services (e.g.: Geneva, Lausanne and Bern). Moreover, a substantial difference between the oriental and occidental part of Switzerland can be seen, which is explained by a greater presence of university hospitals in the western part and due to its geographical location, they are faster and easier accessible.

Another important factor that has to be taken into consideration is the future development of the new financing system. If the outcomes will be completely successful and hence, private and public hospitals will be treated equally, the competition will become tenser.

Following figure 5 shows the future development of demand of health care services, which is important to know in order to predict future competition.

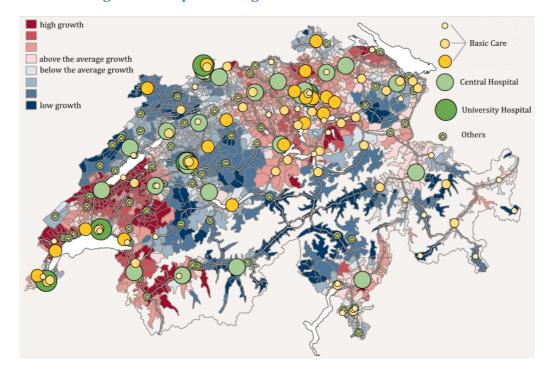


Figure 5: Locations of general hospitals and growth in demand until 2040

To simplify the model, it is possible to divide the future competition into four different areas:

- 1) The first area is represented by those regions that have a low assistance density and therefore will experience an increase in demand (represented by red regions that turn from blue to red). Examples are the regions surrounding the city and the lake of Zurich, the south-west of the Baden lake and the southern part of canton Wallies.
- 2) The second one is characterized by a high assistance density and will experience a low growth on the demand side (regions that turn from light red to dark red). Examples are the canton Freiburg, some areas in the south-surroundings of Zurich and the city of Luzern.
- 3) The third one presents a high assistance density combined with a low expected demand growth (from red to blue). Examples are some of the metropolitan cities in Switzerland like Zurich, Lausanne and Geneva.
- 4) The fourth point represents a low assistance density as well as a low expected demand growth (from blue to blue). Examples are regions outside of big urban areas and canton Schaffhausen plus Toggenburg.

In conclusion, the lower the actual assistance density and the higher the expected growth, the less intense competition will become. However, this does not necessarily lead to success if potential investors decide to enter into areas with low assistance density and a highly expected growth in demand. In practical terms, the two variables analysed above are not the only ones that determine success or failure of future investors: high efficiency plus quality can have a more significant influence

than saturation of the regional market. Moreover, it is important to envisage the new juridical context of the market that rules hospitals' 'free choice' of patients: hospitals can consider a wider consumer base, not only regional patients will be expected.

5. Conclusion

The analysis made in this paper showed the general structure of the Swiss healthcare system, its costs and financing, the different providers and how they can collaborate with each other. Moreover, outsourcing, the international and inter-cantons healthcare tourism and finally a general description of the future trends are discussed.

It is possible to affirm that the Swiss healthcare system ranks in one of the best position in comparison with other countries. This is also demonstrated by some important index as the life expectancy at birth and the consumer satisfaction. At the same time, from the section "Costs and Financing", it is characterized by very high costs, making its healthcare system one of the most costly in the world.

Moreover, for potential investors, the policy regulation and the recent reforms of the LAMla, that are not yet totally implemented, makes the situation more difficult than in the past.

So there are challenges but also opportunities: even if the 'legal' context is very complex because of the involvement of the cantons, the healthcare market is Switzerland has a good consumer base, with high-income people that are willing to pay a lot for their health.

In the future, demand will not regard the quantity of provided services but, instead, the quality, by whom and how they will be financed. The cooperation not only between different hospitals but also with the cantons could represent the key to overcome different problems.

A good solution presented by Credit Suisse is the example of "hybrid hospital", where base care services will be provided by the canton through private companies, while the latter could focus on its core competences that are principally specialized medicine than rehabilitation and comfort services.

As the proportion of elderly people will increase tremendously, also the demand for specialised nursery homes will raise, which shows a potential area for investments.

Generally could be observed, that investments should be undertaken "alone", in terms as a sole private company, as the concept of Private-Public-Partnership is not developed yet and rather unlikely to be changed in the close future, as the financial situation of the country and its cantons is seen as stable and wealthy, compared to countries being members of the European Union. Experts suggest the area of middle-class hospitals as a potential investment area, as competition in the sector of high-class hospitals is very tough and developed. Therefore, private companies should try to get listed in the hospital register with their offered services and try to differ in terms of great infrastructure and equipment from other private hospitals and public ones.

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II) Appendix

a. Wellness Tourism

We selected three of the most popular and profitable Wellness hotels (according to MySwitzerland.com) in order to describe the typical wellness services that the supply of this segment provides.

Hotel Hof Weissbad**** (four stars premium). Location: Weissbad Alpstein countryside,

- Appenzell.

 Infrastructure & Treatment: full and part body massage, acupuncture, Thai massage, anti-aging treatment therapy, electrotherapy, health check-up by a doctor, aqua balancing, facial treatments, treatments for couples, depilation, hair removal, oxygen therapy, power plate, breathing therapy, treatment with Swiss herbs, manicure, dietary advice, pedicure, relaxation
 - therapy, peeling, ultrasonic treatment, foot reflex zone massage, hot stone massage, fango, inhalation treatment, stretching, osteopathy, finnish sauna, lymph drainage, steam bath,
 - thalassotherapy, sport massage, Pregnancy specials (MySwitzerland, 2015).
- Ermitage, Wellness- & Spa-Hotel***** (five stars). Location: Gstaat. Treatment & Infrastructure: Indoor and outdoor salt water bath 35°C, massage and neck nozzles (155 m2), outdoor sports swimming pool (winter 31°C and summer 28°C, 170 m2), resting room with wellness beds, sauna park with ten heat cycles, relaxation room in the sauna area with water beds and wellness beds, nude terrace, gymnastics programme, fitness room with endurance training and strength-building equipment, guided hikes, trips and supervised sports programme (Ermitage, 2015).
- La Val bergspa hotel**** (four stars). Location: Brigels, Canton of Graubunden.

 Infrastructure & Treatments: full/part body massage, anti-aging treatments, massage with essential oils, facial treatments, sauna, fitness room, depilation, hair removal, Ayurveda, massage anti-cellulite, treatment with Swiss herbs, manicure, pedicure, peeling, foot reflex zone massage, hot stone massage, jacuzzi bed indoor and outdoor, Finnish sauna, bio sauna, lymph drainage, lawn for sunbathing, steam bath, thalassotherapy, sport massage, body scrubs, pregnancy specials (MySwitzerland, 2015).

b. Medical Tourism

The updated report made by Swixmed, an independent company leading in organizing medical treatment for foreign patients in Switzerland, provides a selection of hospitals and rehabilitation clinics of the country classified as first-class service providers.

• Hirslanden, the largest private healthcare group in Switzerland, controls 14 private clinics in the country that all together register 3,000 patients per year coming from abroad and it is

currently seeking to reach in the next years an annual growth of 10% in the number of foreign customers. Oncology, cardiology and orthopedics are the surgeries more requested (Vogel Musicka, 2011). Hirslanden group's patients come mainly from Saudi Arabia and United Arab Emirates (IMTJ, 2010).

- University Hospital Zurich is one of the teaching hospitals most known in Europe particularly for its division of cardiology, dermatology, gynaecology, reconstructive surgery and neurosurgery (www.en.usz.ch).
- The University Children's Hospital Kinderspital Zürich) has a worldwide reputation as paediatric institution that takes care of children until the adolescence offering both therapy and long-term rehabilitation (www.kispi.uzh.ch).
- The St. Gallen Cantonal Hospital is one of the largest clinics in Switzerland, with 160 surgical beds it is dedicated to the cure of obesity and endocrine and oncological surgery (www.kssg.ch).
- Kantonsspital Graubünden is mainly dedicated to hand surgery, pediatric medicine, orthopedics and ophthalmology (<u>www.ksgr.ch</u>).
- Bellikon Rehabilitation Clinic is one of the leading clinics for rehabilitation after accident or illness. Member of the Swiss Hospital Association is specialized in sports medicine and rehabilitation, work rehabilitation, neurological, orthopaedic and hand rehabilitation (www.rehabellikon.ch/short-profile).
- Privatklinik Meiringen, located in tourist region of the Hasli Valley, is dedicated to the cure of
 addiction to drugs or alcohol, affective and personality disorder, depressive illness and
 exhaustion syndrome (www.privatklinik-meiringen.ch).
- The Pyramid Clinic includes three clinics located near Zurich, they are specialized in plastic surgery, maxillo-facial surgery, reconstructive and aesthetic surgery, breast cancer surgery, vein, eye, foot and hand surgery (www.pyramide.ch/en/).
- University Hospital of Basel has a specific service for international patients, among the treatments offered the vascular, cardiology surgery and orthopedic surgery and retinal, macular and cataract surgery have an international reputation (www.unispital-basel.ch).
- University Hospital Balgrist, situated in Zurich, is dedicated to the musculoskeletal care including physical medicine and rheumatism and orthopedics surgery (www.balgrist.ch).
- The Schulthess Clinic of Zurich, is a musculoskeletal centre dedicated to the cure of back, foot, joint and ankle disorders. The Swiss Olympic Medical Center and the FIFA Medical Center are situated in this clinic (www.schulthess-clinic.ch).
- Clinic Bad Ragaz, is a rehabilitation clinic that includes services of weight management, psychological coaching, laser treatment and plastic surgery (www.reha-badragaz.ch).

- Valens Clinic, a rehabilitation centre specialised in neurorehabilitation and rheumatic disorders (www.kliniken-valens.ch).
- KSM KLINIK FÜR SCHLAFMEDIZIN (Clinics For Sleep Medicine), located in Lucerne and Bad Zurzach, is specialized in the treatment of sleep disorders through a team of different doctors from neurology, internal medicine, psychology, psychiatry and endocrinology (www.ksm.ch).
- Sanatorium Kilchberg, situated close to Zurich, is a clinic dedicated to the psychopharmacological treatment of depression, anxiety, obsessive-compulsive and eating disorders (www.sanatorium-kilchberg.ch).
- AKD Alpine Kinderklinik Davos (The Alpine Children's Hospital of Davos) is specialized in children and adolescents for the treatment of obesity and pulmonary diseases through a combination of pediatric and sports medicine (www.kinderklinik-davos.ch).