



Health

Internationalisation of the health industry

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In these times of search of ways in economy to identify sectors with the highest possibilities of creating business in Catalonia, health and biomedicine are often singled out as industries with such a development potential and a strong capacity for internationalisation. This is thanks to the very essence of the industry as well as the features and the position of Catalan companies and institutions in this area. However, we will need to break this down a bit to find some key actions by both companies and the institutional and public environment that could serve it.



There is a long tradition in the health industry and much action has been taken both recently and in past times. Also, Catalonia's historical leadership in health within Spain is significant, but its identification elsewhere as a centre of medical excellence and research is less common.

What is the health industry?

The recent study *El sector de la salut a Catalunya*¹ done by the Chamber of Commerce of Barcelona describes in much detail the size of the industry and its economic impact, yet it makes no progress beyond what had already been described in the Health Industry Internationalisation Plan 2007-2009² made by the Catalan Department of Health in 2005 regarding the business structure of the industry and its organisation.

The health system in Catalonia is conceived as a National Health System (NHS) with universal coverage, free access to most health care services, a very homogeneous distribution over the territory, funding through taxes and 20% of

the population having a private insurance and thus under double coverage.

Public provision is done through a network of public-private suppliers, following a considerably different pattern from the rest of Spain, where suppliers are basically public centres. Catalonia thus has a much higher degree of business development in service provision than the rest of Spain.

As is shown on chart 1, the health industry amounts to 5.03% of Catalonia's GAV (gross added value), placing it as the sixth biggest sector out of 27. In terms of employment, with its 231,000 employees, 59% of whom with a higher education degree, it ranks fourth out of sixty sectors. All of this provides coverage to 7.3 million people living in Catalonia who are actual or potential NHS users.

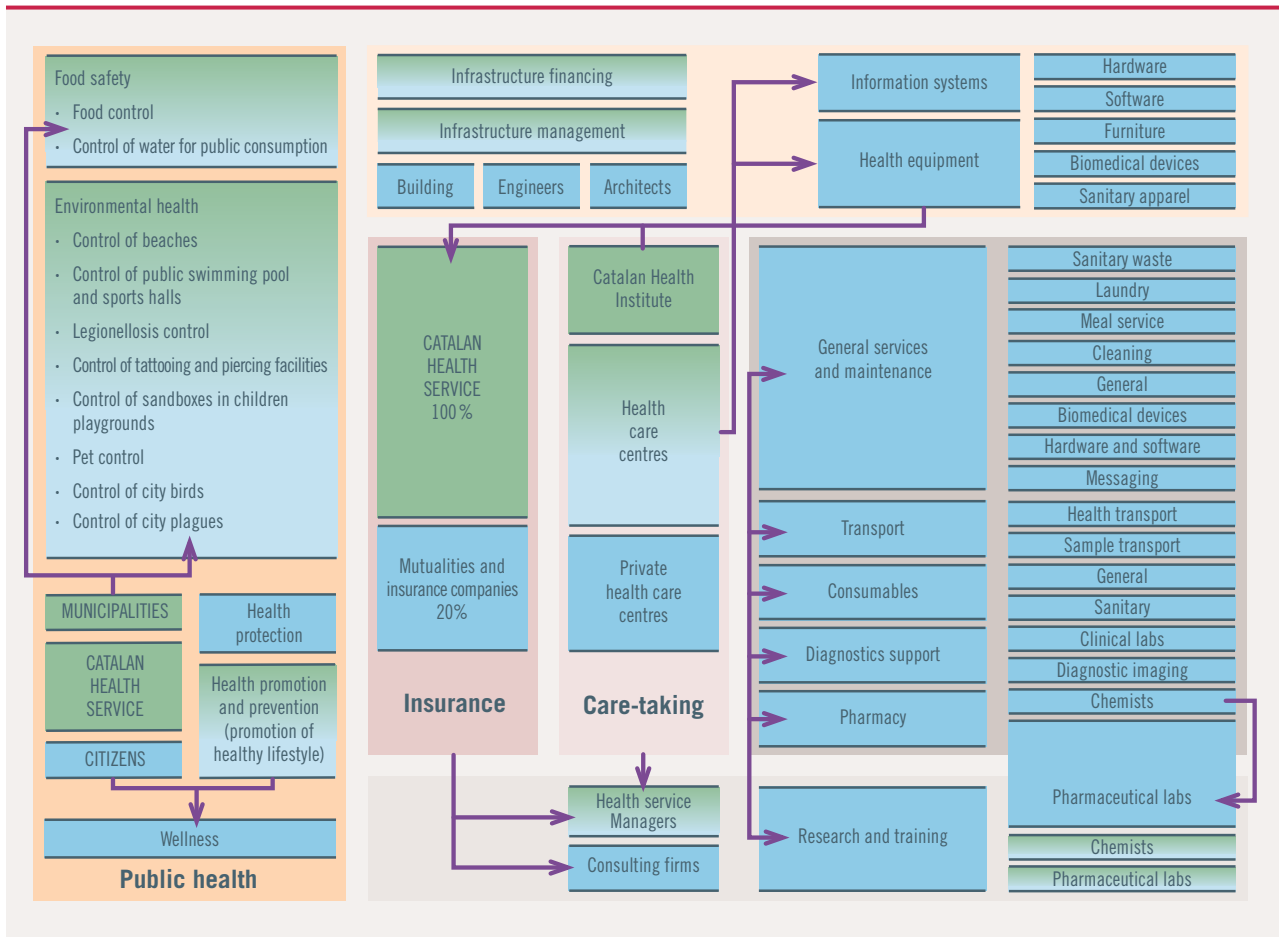
To carry out all this activity, there is a very complex business and institutional conglomerate with strong cross-sectorial relations providing this complexity in describing the industry and analysing its internal relations, going beyond direct service provision the health industry is identified with.

Chart 1. Ranking of sectors in terms of gross added value and employment in Catalonia

GAV (2006)	Employment (2008)
1. Real estate and business services	Other business activity ¹
2. Trade and repair	Retailing (except motor vehicles and repairs)
3. Building	Building
4. Hotel business	Health, veterinary and social services
5. Transport and communications	Wholesale trade and intermediaries (except motor vehicles)
6. Health, veterinary and social services	Hotel business
7. Financial brokerage	Public administration
8. Public administration	Education
9. Education	Land transport, transport through pipelines
10. Other services and social activities, personal services	Food and beverage industry

1. Includes legal activities, accounting [...]; technical architecture and engineering services [...]; technical testing and analysis; advertising; staff recruitment; investigation and security services; industrial cleaning services and various business.

Source: Regional Accounting in Spain (INE) and Social Security (Spanish Ministry of Labour and Immigration).

Graph 1. Subsectors of the health industry and related activities

Source: Departament de Salut, 2007-2009 Internationalisation Plan.

▲ The panoply of activities related with the health industry demonstrates their potential as a business driver.

Chart 2. Ranking of main goods and services related with the health industry

1. Medical, surgical, precision, optical and clockwork equipment and tools
2. Pharmaceutical products
3. Wholesale trade services and intermediaries (except motor vehicles)
4. Industrial cleaning services
5. Real estate services
6. Soap, perfume and hygiene products
7. Legal, accounting and business management counselling services
8. Financial brokerage services
9. Restaurant, beverage, refectory and pre-cooked food services
10. Retail trade (except motor vehicles) and repair services

Source: Idescat. Taules input-output de Catalunya. 2001 & 2005.

In graph 1 we can see all subsectors and related activities, which gives an idea of the importance of the health industry as an economic and business driver.

The study shows activities related with health service provision ordered by economic relevance. In some cases, specificities or specialisation make them outright health subsectors even though they are part of other branches like cleaning, meal or maintenance services, being basically associated to and determined by the health industry.

Who is part of the health industry?

It is obvious that most of activity is done by health care services with all their variety and complexity:

- ▶ Primary care. It is the first care level, done at primary health care centres, most of which are part of the **Catalan Health Institute** (ICS), while others belong to network operators and some to association-based organisations related to professional associations.
- ▶ Special health care of acute cases as well as social and mental health care. Over 70% is provided by different organisations, e.g. foundations, consortia, public companies, etc.
- ▶ Public health. It refers to health protection. Service provision by the Government of Catalonia and the municipalities. Many activities are provided through companies.
- ▶ Occupational health. Network of mutual providers related to insurance companies and services on agreement.

Observing the sort of coverage, we will find a distinction between public and private providers. It shall be said that we understand as private market all that is not public as it is mostly covered by insurance companies and mutualities,

which reduces the true private market very much.

There are companies that work for the industry but do not have a feeling of belonging to it. They work for the industry but are not part of it.

As a Catalan specificity, the public provision network is composed of centres of very differing ownership. I insist in this point as it is a key fact when considering the possibilities of the industry regarding internationalisation.

Despite the large number of stakeholders in the Catalan health industry, the relevance of its public part is undeniable. **CATSALUT** is the big insurance organisation enabling service to citizens and hiring health care services from the provider network. They set the conditions, rules and tariffs and are in charge of executing most of the 9 billion plus euro budget.

30% of this budget is managed by the public provider, the Catalan Health Institute, which runs public centres in the network. The rest is managed by non-public providers gathered in the different employers' organisations, which negotiate tariffs, conditions and collective agreements for the different levels and types of health care institutions.

Yet we must not forget that there is a large conglomerate of activities that are often not directly related with health care but are absolutely determined by the situation of the industry, having developed expertise, innovation and specificities and with capital and know-how able to go international.

We are thus confronted with a complex business fabric, or probably more than one, some of which being hardly aware of sharing in the health industry as such or able to operate within that rationale.

I am not saying that companies do not know that they are working for the industry but they do not have a feeling of belonging to it. They work for the industry but are not the industry. This is especially true for those companies we do not relate with the core of health care as such and yet have most direct links.

The employers' organisations **Unió Catalana d'Hospitals** (UCH), **Consorti Hospitalari de Catalunya** (CHC, recently turned **Consorti de Salut i Social de Catalunya**, CSC) and **Associació Catalana d'Entitats de Salut** (ACES) have played a relevant role as an entrepreneurial counterpart of CATSALUT and insurance companies in negotiating collective agreements and tariff arrangements. When participating in internationalisation processes, they have acted as individual companies rather than structures able to drag along other subsectors or businesses or the whole of companies.

The foreign promotion organisations are missing structures on which they can rely for joint promotion of the health industry. It is useful to point out that existing structures, some of which are very powerful and well organised such as **Farmaindustria** and **Fenin**, operate at Spanish level and obviously serve the specific interests of their industry or subsector. Besides, it is difficult to agree on joint or transversal action.

The Catalan system experience, capital able to go international

Based on the experience in reforming and modernising the health system in Spain and Catalonia, it is important to point out the sides of the process able to go international.

The most noticeable is the creation of a National Health Service, the decentralisation of the health system and, regarding Catalonia, the separation of insurance and service functions and participation of non-public providers in service provision.

All these processes were completed within record time and produced successful results and recognition from abroad despite difficulties, placing the Spanish health system among the world's best (WHO ranking).

Based on that, whenever some government thinks of a reform process, it wishes to know the Spanish and often particularly the Catalan experience in detail, the latter often being referred to as a landmark.

Whenever some government thinks of reforming the health system, it wishes to know the Catalan experience in detail.

This is to be considered a great opportunity for Catalonia. When observing the relevant aspects of this experience, some derived features can be singled out:

- ▶ Very quick implementation and deployment of a NHS in Spain.
- ▶ Political decentralisation. Health jurisdiction has been federalised. Coordination mechanisms have been set within a framework by which everybody believes that health has improved in both accessibility and equity.
- ▶ Regarding specifically Catalonia, reform, transformation and expansion of the health system is considered a success. This experience occurs at subnational level with one of the highest degrees of self-rule in the EU and the whole world regarding health.
- ▶ Proven process with more than 29 years experience in decentralised management.
- ▶ Development of planning and management tools, applied chronologically and gradually in a reasonable and successful way (**health map**, **health plan**, management contracts, payment per process, reform of primary care, authorisation and certification system for centres, territorial

governments, payment on a population base, evaluation agency, technologies, etc.).

- ▶ Definition of the so-called public responsibility network. Use of previous structures and organisations, which allowed to convey a picture of a possible, pragmatic and thus cost-efficient process, or at least more cost-efficient than others.
- ▶ In terms of results, health indicators clearly above many countries with much higher expenditure in health.
- ▶ World's lowest children mortality, one of the longest life expectancies, etc.

We have not been aware of the commercial value of what we have been doing in health in the last decades. We have been very reactive to the interest of other governments in our system and hardly proactive in turning this interest into the gateway for Catalan companies to these markets.

- ▶ Very quick evolution of processes, implementation of professional management at health institutions, impact of health policies, evaluation of results.
- ▶ Good appreciation of services by the population. Very high rating of health services by citizens.
- ▶ Capacity of the system to absorb very deep changes like migration without any relevant impact on health, thanks to strong involvement of its stakeholders.
- ▶ Development of innovation projects: shared clinical history, electronic prescription, etc.
- ▶ Strategic promotion of research (Municipal Medical Research Institute, Barcelona Biomedical

Research Park, Barcelona International Health Research Centre, August Pi i Sunyer Biomedical Research Institute, etc.). Turning around current brain drain by keeping and attracting talent based on the interest of research projects.

- ▶ Pioneering legal initiatives like the Health Agency of Catalonia and the Catalan Health Institute Act.

All these aspects have raised the interest in knowing the Catalan health system experience, especially at international political level.

Visits received and attendance at congresses and conferences have made this experience well-known, and every step made by the system creates more interest, although the experience has found its way into publications only in part, and very seldom in English.

If asked if we have been able to turn this reality into a business opportunity, i.e. the political tool for international presence opening the door for companies from the industry to the world, the answer is: not enough given our capital.

Let us analyse some reasons:

- ▶ We have not been aware enough of the commercial value of what we have been doing in health in the last decades. We have generally been very reactive to the interest of other governments in our system and hardly proactive in turning this interest into the gateway by which Catalan companies enter these markets.
- ▶ The reform processes and tools used have not become vendible or exportable products. No way has been found to turn them into business projects and commercialise them despite the interest shown by many institutions having visited or knowing the Catalan system.
- ▶ The service export policy is too recent. During too many years, big promotion actions were based on industrial products and much less on services, which are the ones the health industry is to be found in.

- ▶ When selling our expertise, it has always been partially, without any overall project. Opportunities were not linked with each other by making training products allowing to bind later experts, politicians and decision-makers, besides doing the different components. We have many assets allowing us to do training and later promote implementation.
- ▶ Export of know-how and expertise in health has not been sufficiently included into the political and even less the diplomatic agenda. We have been hardly capable of linking political and commercial action. The decentralisation process completed in Spain regarding health has led us to a virtually federal scheme in a non-federal state. As to foreign relation, there is disparity between diplomatic strategy, being in the hands of the national government –which has very little jurisdiction over health–, and regions, holding jurisdiction over health but only partly over international relations. Competition between regions, though having some undeniable positive internal effects, creates confusion and fragmentation of potential destination markets as to the evolution of the health system and the service offer. The Spanish foreign office covers everybody but takes often complicated and difficult positions, acting as *primus inter pares* vis-à-vis the regions.

- ▶ Asymmetry in relations. Many emerging countries, being markets with a great potential, have not developed any decentralisation process, by which their national government is the only authority, thus searching relation with its counterpart, the **Spanish Ministry of Health**. This situation makes it very difficult to position the Spanish model in markets where this scheme and reform experience is probably the most interesting example.

We also need to look into some weaknesses of our offer restricting internationalisation and Catalan presence abroad.

- ▶ Language skills. Much has been done for preparing our professionals in foreign languages. However, when talking about this subject in a business setting, the lack of professionals with

enough language skills to participate in the internationalisation process of this industry becomes apparent. In most cases they are technical aid processes in which command of English is indispensable, and it is not easy to find professionals in the industry who besides having specific skills are proficient enough in English to interact and work. Despite all that, we have in theory a low but sufficient number of professionals with such language skills. Regarding work in the Mediterranean and Sub-Saharan Africa, where French is the dominant vehicular language, the situation is even worse. There are no professionals proficient in French right now. If we are to play a major role in the Western Mediterranean, we need professionals in command of the different vehicular languages. Perhaps we will have more professionals with Arab as a second language rather than French in the near future.

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- ▶ Difficulty for expatriation. Availability of our professionals to expatriate is low and even more complicated in the health industry, where domestic demand is very high. There are also difficulties to consulting firms in finding skilled workforce ready to expatriate. The possibilities opened in many cases by the health administration in facilitating permits to their technical staff need to be recognised. If this industry is to be developed, we need to think of having more trained staff with language skills.
- ▶ Professionals. We have very good professionals, but many of those willing to make an international career had to leave (brain drain) and pursued their career away from Catalonia. They often find big difficulties to return, either in their highly productive maturity phase or simply upon completing their degree. This situation is starting to reverse, especially in research, although it is still difficult or at least unstable to make an international career out of Catalonia.

- ▶ Lack of long-term projects. Those working in international projects seek immediate success allowing them to quickly justify the effort done, which has led to a lack of long-term projects and ongoing action in markets potentially and politically interesting for Catalonia. Consulting, process reform and training of some stakeholders has been made, while others went to build a hospital or install hardware, or we have trained the staff and others manage it. Big projects are the exception.
 - ▶ Synergy between political and commercial action. As is commonly described and repeated once again in the study by the Chamber of Commerce, the important role of national policies and governments in designing health services makes political and institutional relations especially relevant in premarketing and marketing mechanisms instead of the common market mechanisms, which in any case should be left for a second phase. It is obvious that political priorities set by governments to identify the interesting models for their reality is the starting point to position a given experience as a preferred option and subsequently place products, processes, technical aid, etc. We have already explained the interest raised by the Spanish and particularly the Catalan experience, especially thanks to private participation and its pragmatism. In spite of placing us at the forefront, this has not been used enough to be present and cooperate politically and turn it into a commercial opportunity for our economy, neither at Spanish nor at Catalan level.
 - ▶ We have been reactive, not proactive. We are great hosts for all those visiting us, but this has not been used as an advantage to place our products and the whole reform process brought about in terms of consulting, technical aid, training and building.
 - ▶ Definition of markets. We have not been proactive in defining where we want to go to and where we want to be present and bring in companies able to provide support for changing and reforming health systems. Linguistic proximity would have allowed us to act especially in Latin America.
 - ▶ Internet. Today we all believe that the net is the face of things, that who is not in the internet simply does not exist and cannot be found. We can assert that we are what we show in the internet and that this presence is the expression of our orientation. Upon entering the websites of a set of Catalan companies and institutions to look at their presentation and language functionalities, the results at the time of observation (March 2010) were those shown on chart 3.
- Presence in the internet involves quite a locally-minded orientation. It is difficult to express the will of being present in the world, of playing a role in a given market or region if

Chart 3. Presence of the Catalan health industry in the internet

Hospitals with high complexity (6)	Only three have their website in English, none in French, all in Catalan and Spanish. One in five languages (English, Arab, Russian, Catalan and Spanish).
Departments of the Government of Catalonia	All in English, Catalan and Spanish.
Private clinics and hospitals (7)	Only three have their website in English. None in French (one said they had but it was not operative). One in Russian.
International consulting firms (3)	All in Spanish and English. None in Catalan.
Catalan health consulting firms (5)	One has its website in English. One in Portuguese and English. One in French.
Equipment companies (8)	All in Catalan, Spanish and English. None in French.
Pharmaceutical labs (6)	All in Spanish and English. Some in Catalan.

Font: Elaboració pròpia.

we do not set the basis to show an interest towards that market.

Internationalisation has an impact on the health industry in the country of origin

Internationalisation clearly has an impact on the situation of the industry in its own country, although the meaning of this assertion may differ considerably according to the country, the time and the degree of development of the industry in each country or area, or whether it is a partial or total internationalisation process.

Starting analysing the internationalisation strategies regarding so-called medical tourism, we will find two basic strategies:

- ▶ Internationalisation of reputed, top-class institutions or destinations, commonly built upon consolidated and renowned health systems that were already attractive, being structured to be more present in the marketplace. They thus consolidate and expand their model, and this activity provides big turnover. Examples for this are **Mayo Clinic** (with centres in Minnesota, Arizona and Florida) and destinations such as Boston and Munich.
- ▶ Internationalisation within health systems in the course of reform with scarce consolidation, to have a dragging force to show through foreign recognition that success is possible. This sort of action can be done individually by a centre or group of centres (**Bumrungrad Hospital** in Bangkok, **Apollo Group Hospitals** in India) or strategically with governmental support (Philippines, Turkey, Korea).

Strategic planning of cities and territories focuses on the health industry based on the existing situation or regional opportunities, leading to identifying the biomedicine and health sectors as core business areas or to develop new business and allow development and seizing investment for that area.

This global vision with all possible components of the industry either exists, demanding a formulation of common strategies, or what is already developed needs to be used and strategies set forth to complete the offer and make it competitive.

Boston and Munich are public initiatives with private partnership.

In these cases, once the strategy to create the biomedical industry with an internationalisation component has been set, staff training, medical care, research and innovation, the biomedical industry and investment are brought together.

Based on this we find two models resulting from strategic planning and the political involvement of governments:

- ▶ Private initiative/leadership with public support: Singapore, Turkey.
- ▶ Public initiative with private partnership/involvement: Boston, Munich, South Korea, Philippines.

Mass Life Sciences Initiative, Boston

There is no need to expand much on the potential of the state of Massachusetts with Boston at the forefront. Big names like **Harvard** and the **Massachusetts Institute of Technology** (MIT) stand for excellence in biomedicine. Therefore, with the experience of biotechnological development councils created many years ago, the Government of Massachusetts promoted the **Mass Life Sciences Initiative** with a one billion dollar budget for a ten-year plan to foster growth of the **Mass Life Sciences Super-cluster** with four big goals:

- ▶ Support programme for small companies.
- ▶ Tax incentive programme.
- ▶ Programme to accelerate projects in life sciences.
- ▶ Cooperative research.

Following a resolution by the Massachusetts House of Representatives, a quasi-agency under the Governor's Office and the Secretary of Economic Promotion was created, with managing capacity of its own and intended to provide support to both private and public initiatives fostering business growth, job creation in this industry and very importantly projects creating bridges and synergies between related areas of bioscience.

Internationalisation is a growth and specialisation tool.

It is a strategy aimed at companies, hospitals with research programmes and the academia, both public and private, in order to coordinate efforts, promote joint research and new therapies and create jobs. There are five main action lines:

- ▶ Funding (US\$500 million for training, 250m for research, 250m for tax benefits).
- ▶ Planning.
- ▶ Research.
- ▶ Development.
- ▶ Commercialisation.

Leadership of this initiative is taken by the secretaries of Finance and Economic Promotion of the **Government of Massachusetts** and five board members: the president of the **Massachusetts Hospital** and the **University of Massachusetts** and the presidents of the area's three big companies in the industry: **Via Cell**, **Vertex-Pharma** and **Cytonome**.

This is a clear example of creating conditions to attract business and foster and grow a successful industry with a strong footprint in the area. Internationalisation is a consequence rather than an explicit intention. It is a tool for growth and specialisation of the area, aware of its capacity and quality.

Korean Health Industries Development Institute (KHIDI)³

The **KHIDI** is an institute created and funded by the South Korean government to provide support to the health industry and promote the health system according to three points of excellence and development – human genomics, genomic therapies and health services – aimed at creating a strong link between the industry and the government.

Its mission is to create a professional institution that is to turn Korea into a leading country in the world's biomedical industry by 2015. The starting point shall be of advantage: 7th largest country in the pharmaceutical industry, 5th manufacturer of biomedical equipment, 8th in the food industry and 7th in the cosmetics branch. The government structure integrates and coordinates all its bodies dealing with this field and defines development areas in business growth, nutrition, public health (medical care), elderly people, technologies and research.

The Institute sets agreements with the main non-public operators and universities. Public initiative coordinates and drives government action and takes advantage of biomedicine as a development and internationalisation factor. In this case, internationalisation is a priority line to consolidate the own business.

Turkish Health Tourism Development Council⁴

This council was created by private initiative of tour operators, hospitals and clinics, which identified an opportunity in health tourism, fostered the creation of a cluster and adapted private offer to fulfil requirements demanded by its biggest target market, the United States. They have more than thirty centres certified by the **Joint Commission International** (JCI).

The cluster involves tourism and health authorities, health and service companies and has

become a success case especially thanks to the quick results achieved, far beyond a certainly positive but lower development of the country's health system. It is thus a case in which internationalisation turns out to have a strong domestic impact, becoming a decisive factor to consolidate and give value to national business.

Bavaria⁵

An initiative of the Bavarian government within a federal policy led by the Bavarian Ministry of Environment and Public Health, which identified the economic importance of the biomedical industry in creating jobs out of the region's strengths:

- ▶ Basic biomedical research institutions.
- ▶ An important industrial sector: 60% of German production in health equipment and material.

- ▶ Highly competent health service offer (with 390 hospitals, acknowledged excellence centres and a high level of investment in new facilities).
- ▶ Very active innovation policy.
- ▶ Highly developed wellness sector.

They have been able to attract most patients from the UAE who used to go to the United States by means of a very competitive price policy, a partnership policy with other excellence areas (**BaCaTec**, Bavaria Californian Technology Center), an offer in services to attract international patients, language support, customised services, quality, certification, etc.

Regarding education, they created an MBA in international health, medical tourism and cross-border health. It is a further example by which internationalisation is used to consolidate and promote business out of local skills.

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Notes

1. *El Sector de la Salut a Catalunya*. Gabinet d'Estudis Econòmics. Cambra de Comerç de Barcelona. December 2009.
2. Pla d'Internacionalització 2007-2009 del sector Salut de Catalunya. Departament de Salut. September 2005.
3. Cf. <http://eng.khidi.or.kr/index.jsp>
4. Cf. www.thtdc.com
5. Cf. www.state-of-health.eu