

# Medical tourism, an opportunity for the Centro Hospitalar Trás-os-Montes and Alto Douro, located in a privileged region of natural mineral water

V. Joukes (*corresponding author*)

*Universidade de Trás-os-Montes e Alto Douro (UTAD) and Centro de Estudos Transdisciplinares para o Desenvolvimento (CETRAD), Vila Real, Portugal.*

E. Ribeiro

*Centro Hospitalar de Trás-os-Montes e Alto Douro (CHTMAD), Vila Real, Portugal.*

**Keywords:** Thermal Tourism, Spa Tourism, Health Tourism, Medical Tourism, Portugal, Innovation.

## Abstract

In the current context of great socio-economic difficulty, tourism has a truly strategic importance for the Portuguese economy thanks to its ability to create wealth and employment. After observing the international popularity of medical tourism and also - more recently - a growing interest for this niche market nationwide, Emanuel Ribeiro, employee of the Centro Hospitalar Trás-os-Montes and Alto Douro (CHTMAD) considered it appropriate to carry out an exploratory study in order to understand whether it was possible to implement the "medical tourism" product in his region (North of Portugal). He wondered if his employer would be interested in following this trend, that is, to invest in medical tourism; in this particular case their own medical expertise could be articulated with the know-how of local spas, using both therapeutic and / or well-being treatments, and overnight stays in hotels or in rural tourism units.

He worked on this hypothesis at UTAD during his Master in Applied Foreign Languages, with a specialization in Trade and International Relations during his traineeship, which equalled a total of nine hundred hours of work at the CHTMAD Communication and Image Office of. He conceived a network between CHTMAD – composed by 5 units, each one in another city, local spas and local quality lodging accommodation. With the help of his promoter, Veronika Joukes, he focused on qualitative research methods: after a review of the literature, he proceeded to carry out semi-structured in-depth interviews with reputable health care professionals. He also participated in conferences about his research, where he had the opportunity to get to know the opinion of even more experts in the field, such as Fernando Antelo [1]. whose master's thesis was the starting point for this article, on its turn

inspired by Emanuel Ribeiro master's degree internship report [2].

This article is divided into three paragraphs: the first outlines a brief background of the study object, medical tourism, as well as of CHTMAD and the region where it operates. In the second paragraph the steps taken to deepen this case study are explained, namely the possibility of CHTMAD being the driving force behind the implementation of medical tourism in the region. The third paragraph lines up the conclusions, that is, the answer to the initial question, as well as some critical reflections on this research.

We conclude that the necessary potential, know-how and quality for the implementation of the medical tourism product in Trás-os-Montes and Alto Douro are available at CHTMAD. However, the highest level of the organization lacks, the political will to implement medical tourism at this moment, as a result of the current economic situation that causes budget constraints.

## 1 Medical tourism is an upward trend in Portugal

According to Carrera and Bridges [3] "medical tourism" is equivalent to «a planned journey outside one's local environment intended for the preservation, improvement or renewal of the wellbeing of one's mind and body». The concepts of health and tourism are present in this definition when referring to wellbeing in a broad sense and travels to destinations that appeal to tourists who leave their homes for health reasons.

Medical tourism is becoming globalized not only in the field but also as a study area. Since medical tourism is a subsystem of health and wellness tourism, it operates in combination with other complementing activities such as thermal, aesthetic, spa tourism and thalassotherapy [4].

In the current context of serious socio-economic difficulties, tourism has a truly strategic importance for the Portuguese economy due to its ability to create wealth and employment. To substantiate this statement, we state the Secretary of State for tourism, Adolfo Mesquita Nunes: «[In 2014,] tourism contributed 10% to the creation of employment, it represented 50% of the exports of Portuguese services, 20% of the country's exports and over 10% of the GDP» [5].

To complete what was previously said, in the last decade there has been an increase in the number of travels for medical treatment outside the tourist's country. This type of journeys in which patients travel to another country with the intent of accessing a medical treatment is usually called and referred to as medical tourism. Its catalysers are changes related to globalization, the population ageing, the general population's concern towards its health, the growing purchase power of an important part of the population, technological and surgical progress, the growing offer of cheaper flights and easy communication via internet, which allows people to book services in another country by themselves [4: 126-128].

Nevertheless, medical tourism is barely known in Portugal. To illustrate this lack of knowledge, it's suffice to say it is not even expressed in the original version of the 2007 [Portuguese] National Strategic Plan for Tourism (PENT), although the version shows health and wellness tourism as one of the ten strategic products [6]. In the Plan's update, published in 2013, its potential was recognized: «The country has a public and private hospital offer of quality medical services, which makes it possible to transform the country into a destination of excellence for the treatment of specific pathologies. On the other hand, the country also has unique natural conditions in terms of thermal waters, sea water and wellness services which allow an increase in health tourism offer [5: 68].»

The knowledge that we have is provided by the countries in which this kind of tourism is already in a more advanced phase and these foreign success examples inspire Portuguese entrepreneurs to exploit this market. Since 2010, ever more Master's Thesis have been dedicated to this topic in Portugal, such as: Ferreira [8], Bacalhau [9], Silva [10], Rodrigues [11], Novo [12], Pereira [13], Bento & Almeida [14] and Freitas [15].

The huge economic difficulties still present in Portugal have cross-cutting repercussions and the health sector has been particularly affected by this tough scenario. Moreover, today we are all aware of the sustainability issue, is specifically the health

sector. Thus, health authorities, mainly from the public sector, given the nature of their funding, are redefining their organizational, management and aid model to improve results. It is well-known that these opportunities for adjusting and adapting to new realities are taken in times of crisis. Thus, in this time of structural readjustment, it is fundamental that the Portuguese National Health Service (SNS - which incorporates all the services and public entities that provide health care, namely hospital facilities, regardless of their designation and the local health care units) finds new funding alternatives but also that each private/public health care unit innovates. This context helps us understand why the Ministry of Health has accepted to be part of a solid investment on medical tourism in the PENT revised text: «in partnership with the Ministry of Health [...] medical tourism can be a differentiating factor of the Destiny Portugal, supplemented by thermalism and wellness services and enriched with other tourist services» [5: 68]. With this higher formal support, the agents in the field, particularly public and private hospitals will find it easier to invest on this new business opportunity.

## 2 Presentation of the case study

In this general context, the specific question asked in this article is: Should the *Centro Hospitalar de Trás-os-Montes e Alto Douro* (CHTMAD) invest on the opportunity created by the growth of medical tourism and promote the implementation of this activity?

This Hospital Centre was created under the Decree-Law no. 50-A/2007 of 28<sup>th</sup> February [16]. It emerges from the fusion of *Hospital de S. Pedro* in Vila Real, where the seat is located, *Hospital Luiz I* in Peso da Régua, the hospital unit of Chaves and the hospital unit of Lamego. In 2008, a fifth unit was added: the convalescence and palliative care unit of Vila Pouca de Aguiar. These five units form a Corporate Public Entity [EPE in Portuguese], thus the abbreviation CHTMAD is being followed by "EPE" as it is the case in the logo of the mentioned unit as shown in Figure 1.



Figure 1. CHTMAD logo

As a Public Institution integrated in the National Health Service, it offers a highly differentiated and diversified set of valences and services, resulting

from the need to daily promote and ensure health care to the population.

CHTMAD is located in the heart of the Douro. This region has been greatly promoted as a tourist destination since it was classified as world heritage within the category of cultural landscape by UNESCO in 2001 and as a result the number of visitors has cautiously increased [19: 51]. Looking at Table 1 (at the end), we can observe that the lodging sector's demand mainly results from the national market, which has been representing an average of 74% of the entire demand (overnight stays) between 2001 and 2003. It is the domination of the national market that hinders the results: severely affected by the world economic crisis, the Portuguese chose to travel less from 2008 onwards. On average, between 2001 and 2013, the number of overnight stays and the number of guests in hotels showed an increase of 2.04% and 2.15%, respectively. However, if we look at the average number of overnight stays and guests between 2001 and 2012, there was a decrease during this period of about -1.6% and -1.1%, respectively, which shows the importance of the growth that occurred in the last statistical year with respect to these two indicators. The average stay has remained on the threshold of 1.5 nights, and the net occupancy rate of 28% in 2001 and 27.07% in 2013 reflect the slow economic performance [18].

In the Douro Demarcated Region of wine growing lands, there are some thermal spa resorts (west/east orientation): Caldas de Moledo in Peso da Régua in the bank of the Douro River, Caldas de Carlão in Candedo (Murça) in the left bank of the Tinhela River, 1 km from where this river meets the Tua River, and Caldas de São Lourenço in Carrazeda de Ansiães [19]. Unfortunately, in 2015, the thermal spa resort of Moledo is still closed to the general population; Caldas de São Lourenço and Caldas de Carlão are open, although the first operates in a modest prefab building and the latter in old-fashioned facilities with limited capacity. Away from the Douro River towards the Northeast, stands the only thermal spa (see Figure 2) with some impact in the district of Vila Real, namely in the region of Alto Tâmega, i.e. Chaves, Vidago (parish of Chaves), Pedras Salgadas (parish of Vila Pouca de Aguiar) and Carvalhelhos (parish of Boticas) [23: 3]. In all these places, the natural mineral water is one of the main tourist attractions and, if you want to, all the thermal spas treatment are still applied under medical prescription, i.e. we here deal with a variation of medical tourism.

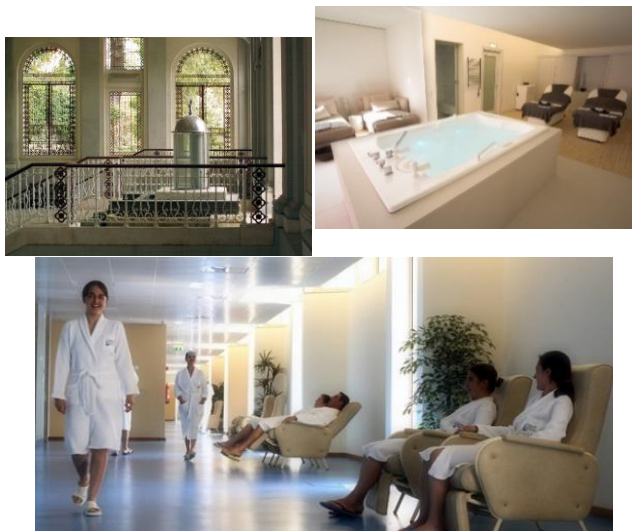


Figure 2. Thermal Spa Resorts under the area of influence of CHTMAD (Vidago, Pedras Salgadas and Chaves)

Source: [www.termasdeportugal.pt](http://www.termasdeportugal.pt)

Emanuel Ribeiro believes that if the administration of CHTMAD is in favour of the implementation of the concept of medical tourism, it is possible to create partnerships, on the one hand with hotel units and rural tourism entities and on the other hand with thermal spas. Figure 3 (at the end) shows that there are thermal spas near the CHTMAD units.

What Emanuel Ribeiro tries to do is apply the general PENT guidelines to a specific case study in the region where he lives because PENT clearly states which is the line of action of medical tourism in the North of Portugal (NUTS level II): «In the scope medical tourism there is the need to make a global diagnosis of the coordination between medical and tourism services, as well as analyse the national competitive position and define the business model that best favours tourism services [5: 32]».

### 3 Formulation of the working hypothesis and methodology

The main purpose of this research is to validate the hypothesis, the possibility to implement the "medical tourism" product in the Douro region, being CHTMAD the starting point. In these terms and considering the nature of the information to be collected and analysed, we chose qualitative technics and methods.

In the study's first phase we reviewed printed and online literature in order to outline the study. Simultaneously, it was possible to be present in three

conferences about the theme; Managers' meeting - Health in Portugal: Strategy for a Sustainable Development on October 21st, 2013 in Cova da Beira; Cycle of Conferences - Health and Wellness Tourism. Can we put Portugal on the world map of Health and Wellness Tourism on November 18th, 2013 in Oporto; Conference - Health as the Motor for Economic and Social Development: National Strategy for Health Tourism on April 3rd, 2014 in Leça da Palmeira. At these conferences Emanuel Ribeiro took the opportunity to take note of the testimonies of several nationally and internationally recognized personalities from the education, marketing, tourism and health sectors. One of them was Fernando Romero Antelo. He presented his master's dissertation at the Hotel Infante Sagres (Oporto) [1]. The methods and techniques that he used served as inspiration for the present case study.

Three senior managers of different institutions were interviewed: representing the private sector - Dr. João Martins, CEO of the *Lusíadas Saúde* group; representing the public sector - the Chairman of the Board, Dr. José Martins Nunes, from the *Centro Hospitalar e Universitário de Coimbra*; a second representative of the public sector - the Chairman of the Board of the CHTMAD, Dr. Carlos Cadavez. (See their *curricula vitae* in Ribeiro, 2015: 79-81.) With regard to these three semi-structured interviews, the taping method was preferred, always with the consent of the person interviewed. The data were collected through a face-to-face interview, then were fully transcribed in order to preserve all the details but also to ensure the existence of a record for further analysis and/or underlying studies [1: 57]. Some freedom was given to the person interviewed so that they were able to speak spontaneously with their wordings and to respond to the questions in the order they chose. Nevertheless, in some situations, due to error or intentionally, no answer was given.

#### 4 Main results obtained

Since CHTMAD was already presented in the introduction, we shall only briefly present the other two entities of which the managers were interviewed: *Lusíadas Saúde* and the *Centro Hospitalar e Universitário de Coimbra*.

Founded in 1998, *Lusíadas Saúde* (at the time called *Hospitais Privados de Portugal*) integrates five hospitals (*Hospital Lusíadas Porto*, *Hospital Lusíadas Lisboa*, *Hospital Lusíadas Albufeira*, *Hospital Lusíadas Faro* and *Hospital de Cascais*) and four clinics (*Clínica Lusíadas Gaia*, *Clínica Lusíadas Almada*, *Clínica Lusíadas Fórum Algarve* and *Clínica Lusíadas Parque das Nações*). In 2013,

new blood was pumped into the group as it was purchased by the Amil Group (that integrates the United Health Group) and from then on it was able to implement a well tested business model [21].

The *Centro Hospitalar e Universitário de Coimbra* (CHUC) was created under the Decree-Law no. 30/2011 of March 2nd [22], and is the result of the fusion and simultaneous extinction of *Hospitais da Universidade de Coimbra, E.P.E.* of the *Centro Hospitalar de Coimbra, E.P.E.* and of the *Centro Hospitalar Psiquiátrico de Coimbra*. The mission of CHUC is to provide high quality and diversified health care in a context of training, education, research, scientific knowledge and innovation, being a national and international benchmark in areas seen as centres of excellence. In the Portuguese hospital structure, the CHUC occupies a top level and is a good practise example in terms of specialties such as transplants, cardiothoracic surgery, burns unit, bones bank, ophthalmology, reproduction medicine and medical genetics among others. The CHUC also provides aid to patients from Portuguese Speaking African Countries, within the scope of protocols and agreements signed for that purpose, and from other countries, namely European countries [25: 7-9].

Both managers were approached because they lead groups that already operate within medical tourism and could thus inspire the executive director of CHTMAD. Hereinafter is the essence of their answers as well as of those of the Chairman of the CHTMAD Board.

The first differences in the answers show up as soon as the concept of "medical tourism" is approached: the private sector's vision frames medical tourism in a broader area, the public sector diminishes the spectrum and only delimits it via the opportunity created by health internationalization, mentioning that the tourism component does not apply to that institution.

With regard to its main customers, they are individuals with health insurances and who seek these services for two reasons: the first one is the price of the interventions and the second one is the accessibility to the treatments, namely when the countries of residence have long waiting lists for specific pathologies. With regard to the need to work as a network, there is a consensus. Even the CHTMAD, which does not operate in this sector has been analysing a probable collaboration with the thermal spa resorts of Chaves, hence strengthening the idea of added value in partnerships.

Through a SWOT analysis of medical tourism, we identified as strengths the installed capacity and the international accreditation of several health institutions. With regard to the weaknesses, the fact

that the promotion is not been done in specific countries that already operate in the sector as well as the tight legislation and the mistrust from the Portuguese people were mentioned. With regard to the opportunities, the money that the sector already operates, the ageing of the population, the Portuguese Speaking Countries (PALOP) and the possibility of the involvement of additional sectors as lodging and thermal spa resorts must be considered. The threats considered were the competition risk and bureaucracy, among others. The person in charge of CHTMAD raises serious doubts with regard to the sector's internationalization and mentioned the specific example of the Eurocity of Chaves-Verin. The plan is for the people of the city of Chaves to have access not only to the hospital of Vila Real but in the first place to the one of the neighbouring city Verin, located in Spain. So far this project is still in its early stages.

Lastly, all of them believe that medical tourism is a promising niche that evolves slowly and requires perseverance and belief in the quality of health in Portugal.

## **5 Debate of the results and conclusions of the study**

The Program of the current XIX Constitutional Government promotes tourism as a «priority sector for the country's development strategy» and is investing, among other things, on asserting Portugal as an international benchmark destination within the health and wellness tourism niche. In the most recent version of the National Strategic Plan for Tourism, special attention is given to the potential of medical tourism and particularly to the Northern region. This aim meets the sustainable growth of the international market of medical tourism and potentiates the recognized installed capacity in the area of health and the area of tourism in Portugal which together allow having a diversified offer of high quality that will make the country highly competitive within this tourism product.

First of all, it is important to mention that the three persons interviewed are in complete agreement on the fact that medical tourism can be a good opportunity for the institutions. With regard to competition law, there is a dichotomy as the private sector states that this law is not met by the public sector, thus creating an inequality between the institutions when they approach the market. In the public sector, they invest in differentiation, and certainly in specialties in which they excel, as is the case of CHUC that identified seven specialisation areas that allow transforming its services in "tourism

products". Within the international context, this hospital is in direct competition with the best university hospitals such as Kings College in London, Charité in Berlin and Johns Hopkins in Baltimore. The Chairman of the Board, Dr. José Martins Nunes, believes that this kind of hospitals, being highly differentiated, are the backbone of the private sector, namely for transplants, heart surgery or interventional cardiology, among others. These past years, the private sector has been decreasing the difference with regard to hospital equipment when compared to the public sector. Still, there are not many private hospitals that possess a trauma centre capable of prompt answer, so there are two different realities with regard to medical tourism. On the one hand, the private sector faces tourism in its essence. I.e. in a market perspective: they see the opportunity to bet on a tourism niche that is growing fast and has a potential market of 14 million visitors. On the other hand, the public sector sees this sector as an internationalization opportunity and bets on its differentiation capacity, aiming to be a benchmark in specific specialties or pathologies, which can be very useful in a rapidly growing international market. Budget constraints and the Portuguese health system dynamics restrain the institutions that wish to bet on this promising niche.

Although *PENT horizonte 2013-2015* states which are the minimum bases of a concerted national strategy for medical tourism, for now the sector is mainly characterized by individual efforts from some organizations that do not wish to miss the opportunity to gain additional income. There is a slowly growing movement to boost medical tourism: the aim of several stakeholders (Health Cluster Portugal, Associação Empresarial de Portugal, Health and Leisure Portugal, etc.) is the development of this area after the implementation of the European standard for cross-border health care [24].

To convince medical tourists to come, the use of international quality seals recognized by the sector - as for example the ones granted by the Joint Commission International (JCI) are indispensable [25]. Even being a fundamental a pull factor [26], from the point of view of a manager, it is hard to justify investing in that quality seal instead of investing in other items that are indispensable to health care provision when we are facing serious budget constraints, as is the case of Portugal at the moment.

The issue of the cross-border health care community directive has raised doubts on the issue of equity, since the expenses are paid by the user and only later are they refunded, which limits the access of users who do not have the needed purchasing

power. Other issues, namely technical and clinical obstacles are also present: if a Portuguese wishes to be treated abroad, he needs a previous authorization: within the period of 15 days since the reception of the clinical assessment report, all requests about surgical procedures that require hospitalization of at least one night and health care that requires the use of highly expensive and specialized medical infrastructures or equipment, must be granted. So what is really happening is an adulteration of the spirit of the community directive on the part of the Portuguese State, limiting the choice of the users [27].

The starting point of the exploratory study developed was the analysis of the potential of medical tourism in the North of Portugal, more specifically in the CHTMAD's area of influence. The literature review, along with a qualitative analysis of lectures and interviews, allowed us to find an answer for the initial problem, even if an empirical one.

As a result of this study, we were able to distinguish two visions on the issue in Portugal: the vision of the public sector and the vision of the private sector. While the private sector wants to be in the spotlight in terms of medical tourism, taking advantage of the competition laws, the public sector believes that investing in medical tourism must be done jointly, in a spirit of complementarity between all stakeholders. Table 2 (at the end) shows the main differences.

In the case of the *Centro Hospitalar de Trás-os-Montes e Alto Douro*, in accordance to guidelines from the managers there are no plans to develop this market niche. Nevertheless it was said that there is a possibility within the kidney dialysis field, since the Hospital is well reputed within this area and as many tourists with this kind of pathology do not go on holidays because they do not know of any institution that can ensure this type of treatment during their stay. In this case, renal patients who need dialysis can choose the Douro as their tourist destination, because the *Centro Hospitalar de Trás-os-Montes e Alto Douro* ensures all the necessary treatments for this type of pathology.

The issues that complicate the implementation of medical tourism in the CHTMAD are of financial and political nature: low autonomy given to the management and little cooperation between the public/private spheres in the region. As an example, the renewal of the accreditation of the CHTMAD by the JCI was suspended for financial reasons, which represents as much as a death sentence, as the medical sector lives of its notoriety, reputation and accreditation.

Despite the immediately negative answers given by the Chairman of the Board of CHTMAD, Dr. Carlos Cadavez, it is important to insist on the added value that can be created by studying and developing medical tourism products in a medium/long term perspective, collaborating with other stakeholders - including thermal spa resorts. Thus the region, where the CHTMAD (Douro and Alto Tâmega) is located, with rich and diverse tourist attractions, might welcome medical tourism as a multivariable product of excellence.

We can conclude that there is potential and quality, but there is a lack of political will, conditioned by the current conjuncture that causes budget constraints with implications at management level.

## **6 Study limitations and recommendations for future research**

Financial limitations prompted Eduardo Ribeiro to focus on the Region of Douro and Alto Tâmega in the North of Portugal. Using the research method of Fernando Antelo, he focused his study on the perspective of a person in charge from the private health sector and two hospital managers from the public sector among whom an executive of the institution working in the chosen geographic micro-region.

The lack of experience of the interviewer when leading the semi-structured interviews occasionally led to the fact that the person interviewed was able to avoid answering all the questions, i.e., the

Since the investment on medical tourism is relatively recent, this sector easily motivates researchers to address the topic. For future researchers it would be important to deepen the political and legal issue in order to find out what exactly within the Portuguese National Health Service embroils potential initiatives in the area of medical tourism, especially in the entrepreneurial public sector.

It is also important to obtain information on potential stakeholders that would supplement the health area within the geographic area of influence of the CHTMAD, namely hotels, spas, thermal spa resorts and local governments so that we can better understand the point of view of these entities on a possible institutional collaboration. More in particular, the kind of cooperation that is possible between the CHTMAD and the different thermal spa resorts of the regions of Douro and Alto Tâmega should be analysed in order to find out how medical treatments and spa cures can supplement and/or complement one another, maximizing the



potentialities of all the parties involved, all in the best interest of the patient.

We advise you to read the master's dissertation "Medical tourism: an opportunity for the Centro Hospitalar de Trás-os-Montes e Alto Douro" by Emanuel José Gomes Ribeiro [2] that is at the root of this article for those who wish to deepen the study that he undertook within the scope of his Master's curricular training in UTAD's Master in Applied Foreign Languages.

This work is supported by national funds provided by the FCT – the Portuguese Foundation for Science and Technology, through its project UID/SOC/04011/2013.

## References

- [1] F. R. Antelo. Turismo médico: uma oportunidade para o Norte de Portugal, 2013. Master thesis.
- [2] E. J. G. Ribeiro. Turismo médico: uma oportunidade para o centro hospitalar de Trás-os-Montes e Alto Douro, UTAD, 2015. Master thesis.
- [3] P. M. Carrera and J. F. P. Bridges. Globalization and healthcare: understanding health and medical tourism, vol. 6, no. 4, pp. 447–454, 2006.
- [4] S.n.. APTSBE – Reunião de direção. S.l., 2013.
- [5] S.n.. O turismo dá 28 milhões por dia a Portugal, Visitar o futuro, 2014. Available: <http://www.visitarofuturo.pt/2014/12/12/o-turismo-da-28-milhoes-por-dia-a-portugal/>. [Accessed: 08-Jun-2015].
- [6] Turismo de Portugal. Plano Estratégico Nacional do Turismo para o Desenvolvimento do Turismo em Portugal. Lisboa, 2007.
- [7] MEE. Plano Estratégico Nacional do Turismo. PENT. Horizonte 2013-2015. Lisboa: Gabinete do Ministro da Economia e do Emprego, 2013.
- [8] R. Ferreira. Turismo de saúde em Portugal: turismo médico e turismo de bem-estar, ISCTE, 2011. Master thesis.
- [9] J. M. L. Bacalhau. Promoção do Turismo Médico no Algarve, Universidade do Algarve, 2014. Master thesis.
- [10] D. R. da Silva. Contributos para a avaliação e desenvolvimento do turismo medicalizado, uma análise exploratória á região do Algarve, Universidade de Coimbra, 2013. Master thesis.
- [11] M. A. O. Rodrigues. Turismo de Saúde na Região de Fátima: Contributos à Clusterização, enquanto Modelo de Desenvolvimento, Instituto Politécnico de Tomar, 2013. Master thesis.
- [12] A. C. F. Novo. Internacionalização na Saúde – O cluster do Turismo Médico em Portugal, Universidade do Minho, 2014. Master thesis.
- [13] J. S. B. Pereira. Análise de viabilidade do desenvolvimento de um operador turístico especializado em turismo médico em Portugal, Universidade Lusíada de Lisboa, 2014. Master thesis.
- [14] L. Bento and P. Almeida. Turismo médico em Portugal: Oportunidade vs desafio, *Tour. Hosp. Int. J.*, vol. 4, no. 1, pp. 126–149, 2015.
- [15] H. M. T. de Freitas. Turismo Médico: A Globalização da Saúde, Universidade do Porto, 2010. Master thesis.
- [16] S.n.. Decreto-Lei n.º 50-A/2007, de 28 de fevereiro, *Diário da República*, vol. 1.ª série, no. n.º 42, pp. 1414–(26–29), 2007.
- [17] C. A. F. de Sousa. Impacto no Turismo da Região Demarcada do Alto Douro Vinhateiro, após a classificação de Património Mundial da Humanidade pela UNESCO, Instituto Politécnico de Bragança, 2013.
- [18] A. Guedes and V. Joukes. Hotel Ships on the Douro River and their Relationship with the Terroir. In *Wine and Tourism. A Strategic Segment for Sustainable Economic Development*, M. Peris-Ortiz, M. de la C. del Río Rama, and C. Rueda-Armengot, Eds. S.l.: Springer International Publishing, 2015.
- [19] V. Joukes. Turismo de saúde e bem-estar combinado com enoturismo na região demarcada do Douro Vinhateiro, um elixir poderoso. In *I congresso internacional. Vinhas e vinhos*. Actas. A. B. Cardoso and S. Trilho, Eds. Viana do Castelo: Câmara Municipal de Viana do Castelo, 2012, pp. 625–632.
- [20] V. Joukes (before Lapa). Águas, elites e desenvolvimento. A exploração das águas minerais naturais do concelho de Chaves pela Câmara Municipal (1892-1948), UTAD, 2009.
- [21] Lusíadas. Lusíadas, 2015. Available: <https://www.lusíadas.pt/pt/sobrelusíadas/Paginas/quemsomos.aspx>. [Accessed: 02-Jul-2015].
- [22] S.n.. Decreto-Lei n.º 30/2011, de 2 de março, *Diário da República*, vol. 1.ª série, no. n.º 43, pp. 1274–1277, 2011.
- [23] CHUC. Centro Hospitalar e Universitário de Coimbra. Ano 2013. Relatório e contas. Coimbra: CHUC, 2014.
- [24] J. Armindo, R. Coelho, R. P. Freitas, S. Neves, and S. Ribeiro. O potencial português no mercado do turismo médico. S.l.: AEP and HCP, 2014.

- [25] JCI. Quem é a JCI, Joint Commission International, 2015. Available: <http://pt.jointcommissioninternational.org/about-jci/who-is-jci/>. [Accessed: 02-Jul-2015].
- [26] C. H. C. Hsu and S. (Sam) Huang. Travel motivation: A critical review of the concept's development. In *Tourism management: Analysis, behaviour and strategy*. A. G. Woodside and D. Martin, Eds. CABI Publishing Series, 2008, pp. 14–27.
- [27] C. Gomes. Directiva de acesso a cuidados de saúde transfronteiriços poderá beneficiar apenas os mais favorecidos, Público, 2014. Available: <http://www.publico.pt/sociedade/noticia/directiva-de-acesso-a-cuidados-de-saude-transfronteiricos-podera-beneficiar-apenas-os-mais-favorecidos-1668333>. [Accessed: 24-Oct-2015].
- [28] INE – Instituto Nacional de Estatística, Anuário Estatístico da Região Norte. 2001 – 2013. Lisboa: INE, 2014.

## Interviews

- João Martins,. [CEO of the group *Lusíadas Saúde*]. Interview. 03-04-2014. Transcript in: <http://www.youblisher.com/p/945618-Entrevista-Dr-Joao-Martins>.
- José Martins Nunes.[President of the Board of Administration of *Centro Hospitalar e Universitário de Coimbra*]. 15-05-2014. Transcript in: Interview. <http://www.youblisher.com/p/945614-Entrevista-Dr-Jose-Martins-Nunes>
- Carlos Cadavez. [President of the Board of Administration of *Centro Hospitalar de Trás-os-Montes e Alto Douro*]. Interview. 07-06-2014. Transcript in: <http://www.youblisher.com/p/945619-Entrevista-Dr-Carlos-Jose-Cadavez>



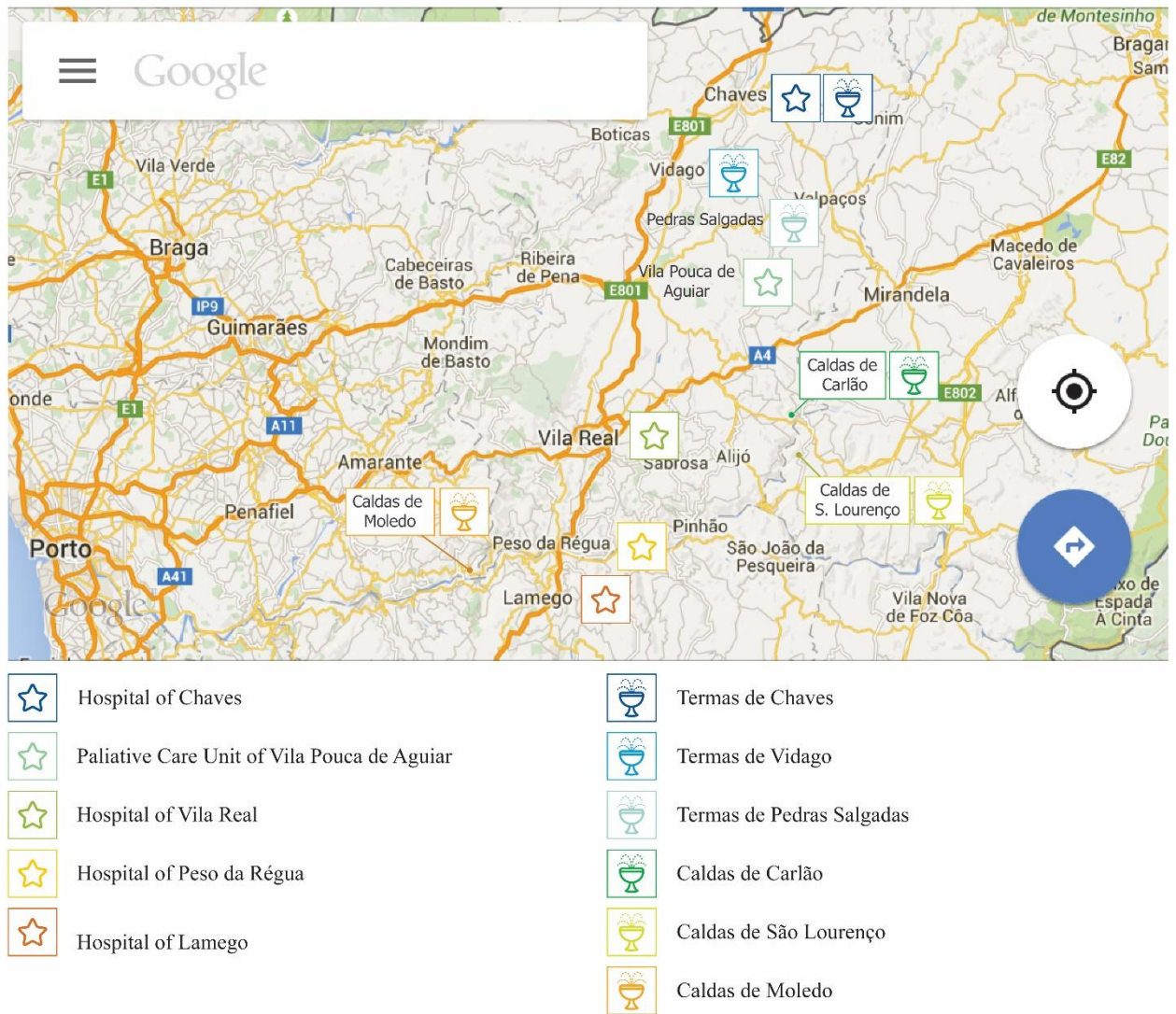


Figure 3. Map with the CHTMAD units and the main thermal spas of the region.

Table 1. Tourism demand – hotel establishments in the Douro region: 2001-2013

Demand	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Mean var. 2001/2013
Overnights at hotels	233,464	234,877	221,220	233,255	224,428	221,081	227,181	217,074	215,248	223,416	220,116	192,463	273,910	2,04%
Number of guests in hotels	145,402	154,874	146,851	153,721	151,607	151,181	157,655	140,879	129,787	136,567	142,488	125,414	173,178	2,15%
Nights spent	1,61	1,52	1,51	1,50	1,50	1,50	1,40	1,54	1,66	1,60	1,50	1,50	1,58	1,53
Net occupancy rate	28,00%	27,80%	25,60%	27,50%	26,50%	26,10%	26,60%	25,00%	25,60%	26,70%	25,40%	23,70%	27,07%	26,27%

Source: (INE, 2002-2014)

Table 2. Vision on medical tourism from the private and public hospital sector

<b>Vision on medical tourism</b>		
	<b>Private sector</b>	<b>Public sector</b>
<b>Preferred expression</b>	Medical tourism	Health internationalization
<b>Products and services offered</b>	Standardized	Very differentiated
<b>The health sector is seen as</b>	Homogenous	Heterogeneous