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Exporting a Model of Integrated Disease Management

A cross-case study analysis and application to Associação Protectora dos Diabéticos de Portugal

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Abstract

Although literature is lacking in the topic of internationalization of services, we manage to apply both the Uppsala model and the Eclectic Theory to the healthcare service. A cross-case study analysis with three international hospitals is done in order to define an internationalization pattern and conditions for a successful process. This is then applied to Associação Protectora dos Diabéticos de Portugal with the purpose of defining an internationalization strategy to the Association.

Keywords: International Business, Healthcare Service, Uppsala model, Eclectic Theory

I. Introduction

In 2013, more than 382 million people (8.3% of global population) had Diabetes and 46% of them were undiagnosed, continuing to worsen in silence, and becoming more vulnerable to complications derived from the disease. Besides the impact that this medical condition is having in public health, Diabetes Mellitus also plays a crucial role in the Global Health Expenditure. In 2013, approximately 11% of total health spent on adults (from 20 to 79 years old) was allocated to Diabetes.¹

Since 2008, the Portuguese Program for the Prevention and Monitoring of Diabetes has mention the implementation of a model of integrated disease management,² i.e., the provision of health care services in which the patient has access to a multidisciplinary team that work together to ensure coordination and continuity of the treatment, helping the patient to manage the disease in its different stages.³

In Portugal, Associação Protectora dos Diabéticos de Portugal (APDP) is providing this model of treatment. Founded in 1926, APDP is a private nonprofit association with the purpose of fighting diabetes worldwide. This status – nonprofit – obliges the association to reinvest its generated monetary resources in its future. In the last years, APDP has been accumulating resources and the association wants to invest in more facilities, not only in Portugal but in other countries. Moreover, the majority of its patients are financed by the National Health System and the government does not pay on time leaving the association with a lack of resources for months, yearly. Hence, the desire to decrease the dependency on the government and to pursue its mission further to other regions in the world, were the main motivations for APDP to decide to export its model of integrated disease management. These provide the main motivations for this work

¹ “Diabetes Mellitus is a chronic medical condition that occurs when the body cannot produce enough of the hormone insulin or cannot use insulin effectively.” (International Diabetes Federation (2013). p.12)

² Candeias et al (2008). p.8

³ Gröne & Garcia-Barbero (2002).

project that consists in answering the research question: “How can APDP export its model of integrated disease management?”.

To do so, we start in **section II** with a reflection about models of internationalization based on manufacturing firms. Literature is lacking regarding models of internationalization of services. To overpass this difficulty we tried to understand which models can be applied to APDP. In **section III**, there is an explanation of the approach followed when defining the relevant data and the cross-case study analysis using Apollo Hospitals Groups, Bumrungrad International Hospital and the Cleveland Clinic. This was done with the goal of defining a pattern of internationalization – that was then compared to the Uppsala model due to their similarities – and identifying common characteristics shared by the hospitals assumed to be conditions for success, presented in **section IV**. In the same section, we justify that APDP should target African Portuguese Speaking Countries (APSC) and we apply the Eclectic Theory jointly with the conditions for success to decide if APDP is ready to internationalize. In **section V**, we proceed with our results and recommendations that consist, in a first step, in investing in the domestic market and medical tourism. In addition, we say that APDP should continue to offer training services to Angola and try to expand this offer to the remaining APSC. To finish, we conclude that APDP is not ready to invest in the foreign market alone, due to its lack of knowledge, and it should start with exports and foreign direct investment (FDI), in the form of Diabetes Care Units⁴, through strategic alliances.

II.Literature Review

A considerable number of theories about internationalization can be found in the literature, for example: the Product life cycle theory (Vernon 1966, 1979), the Uppsala model (Johanson & Vahlne, 1977), the Eclectic Theory (Dunning, 1980, 1988), the

⁴ Small clinics that offer tracing, diagnostic, education and primary and secondary care services.

network approach (Johanson & Mattsson, 1988), the innovation-related models (Bilkey & Tesar, 1977), among others. Nevertheless, all these theories are based on manufacturing firms. Javalgi and Martin (2007) state that models about internationalization of services are still lacking and mention the need for further research in this field. This brings the consequence of even less models of internationalization based on medical services.

Being these models of internationalization based on products instead of services, it is important to understand the concept of “service” in order to adapt the referred theories.

There are three essential characteristics that need to be mentioned when defining services (Clark et al, 1996): (1) intangibility – services cannot be seen, touched or stored; (2) heterogeneity – each service is unique and therefore standardization is difficult to obtain; and (3) perishability – production and consumption occurs at the same time.

According to Erramilli and Rao (1993) services can be divided into hard and soft services. Hard or separable services are those that can be provided without the consumer’s presence, for example television programs. On the other hand, soft or inseparable services are those in which the customer gets in on the provision of the service. The first type of services can be treated in a very similar way as products, which does not happen with soft services. The healthcare service is included in the latter. This has some implications while applying product based models to services. For example, exports will have a different concept. When dealing with products, the manufacturer firm stays in its local market and the product is delivered and consumed in other countries. On the contrary, with soft services, its provision stays in the same country. In this case, it is the consumer (patient) that goes to the country in which the service is provided.

This being said, there are some theories that cannot be applied to services, such as the Product Life Cycle and the Innovation related models. These models state that the company needs to be always innovating because after the product is launched, other countries, with lower production costs, will do the same product cheaper and thus demand is redirected to those countries. This is not applicable to soft services, especially healthcare services because know-how is almost impossible to copy. According to the Network-based internationalization approach, companies are embedded in an environment or network that will define their internationalization process and activities. This depends on the company and with its network and not if it provides a service or a product. In the case of APDP, it does not belong to a strong network and thus, this model will not be used either. Both the Uppsala model and the Eclectic Theory can be applied to services and APDP, with some adjustments, and thus we are going to explain these two models more deeply.

Based on Swedish manufacturing firms, **The Uppsala model** (Johanson & Vahlne, 1977) is a progressive model presenting the idea of a cumulative knowledge regarding foreign markets and resource commitment through several successive steps: simple exporting; exporting with the help of a representative abroad; selling through subsidiaries in foreign countries and; establishing a manufacturing facility abroad (FDI). The model sets a mechanism characterized by the division of state aspects – market knowledge and market commitment – and change aspects – current activities and commitment decisions.⁵

According to Penrose (2009), knowledge can be objective or experiential. The first one is obtained in books and previous research while the latter is obtained through experience. The big difference between these two types of knowledge is that in spite of

⁵ Appendix I

the fact that it is possible to identify opportunities with objective knowledge, they will only be theoretical; with experiential knowledge opportunities are concrete. Therefore, while dealing with internationalization processes, market experiential knowledge is the key to perceive opportunities. Market commitment depends on the amount of applied resources and the degree of commitment (i.e., the difficulty of transferring the resources to another market).

Current Business Activities consist in what is done by the firm. They are the way to get market experiential knowledge. Commitment decisions are the result of perceived opportunities resulting from market experiential knowledge. These decisions will have impact on the hospital's market commitment. Hence, Current Business activities enable the firm to get market experiential knowledge in order to make commitment decisions and in this way increase market commitment through the increase of current business operations, restarting the mechanism. In the model, this is done using small steps.

The first version of the **Eclectic Theory** (Dunning, 1980) addresses the internationalization of a production firm in the form of foreign direct investment. The main point of this model is that there are three necessary conditions for FDI to happen: Ownership, Location and Internalization advantages.

Ownership advantages (O) are company's attributes that differentiate the firm's product from its competitors'. Location advantages (L) are characteristics of the host country, measured through the price and quality of inputs, the efficiency and cost of producing the output and the country institutional and structural conditions. Internalization advantages (I) are the benefits of going abroad with the whole control of the international new firm.

A reformulation of the model (Dunning, 1988) arises also considering other modes of entry: FDI, Trade (Exports) and Contractual Transfers. Assuming that O advantages are

always necessary, Dunning concludes that the firm should set its decision based on the I and L advantages it presents.⁶

III. Research Approach and Methodology

Data collection was made through news, academic literature related to the topics of international business and models of internationalization, hospitals annual reports and several semi-structured interviews to doctors and financial specialists in APDP.⁷

Regarding the used methodology, we started by studying APDP and summarizing the general behaviour that healthcare Portuguese institutions present on the topic of internationalization, as well as the Portuguese Government. Then we used a cross-case study analysis based on three other hospitals in order to define a pattern of internationalization and conditions for a successful process. The conclusions obtained from here, were then applied to APDP. We did this by adopting a qualitative approach.

According to Leonard-Barton (1990, cited in Meyer, 2001), case studies are a preferred tool while trying to answer “how” questions, which is the case of our research question: “How can APDP export its model of integrated disease management?”. Moreover, using more than one case study is advisable to avoid generalization (assuming that one case study represents the reality would be a very strong assumption) and to enable comparison.⁸

Nevertheless, the desire for depth implies a few number of cases. This being considered, we chose to use three case studies in order to have a deep and less generalized analysis. After this, we defined our sample using the following criteria: (1) to belong to the healthcare service provision sector, (2) to have a vertically integrated and patient-centered model, and, to finish, (3) to be a nonprofit institution. However, private hospitals have been the first movers in internationalization and hence, for lack of choice regarding internationalization of nonprofit hospitals, this last criteria was ruled out. With this in

⁶ Appendix II

⁷ Appendix III

⁸ Meyer (2001). p.5.

mind, we selected the Cleveland Clinic, Apollo Hospitals Group and Bumrungrad International Hospital as our case studies. The first was chosen as a representative of criteria (3). The others were chosen for their recognition and easy access to information.

IV. Case study Analysis

IV.1 APDP and The Internationalization of the Healthcare Service in Portugal

As mentioned before, APDP is a private nonprofit association that strives to fight Diabetes worldwide by providing medical treatment, prevention and rehabilitation to all its patients. To do so they offer a model of integrated disease management with all the necessary specialties to treat the patient with the best possible care.

In addition, due to its knowledge and experience regarding this medical condition, APDP also invests in Research and Development and promotes training courses for its patients and physicians that want to specialize their knowledge in Diabetes. Although Research and Development have existed since the beginning, training has been offered since 2009 with the creation of the Diabetes School: an innovative initiative founded with the purpose of teaching patients how to deal with diabetes, i.e., in order to give patients the necessary knowledge to manage the disease daily.

Also since 2009, APDP has received international Patients from Angola, starting in this way their path in the foreign market and increasing their wish of investing in other regions rather than Lisbon.

This wish is shared with a lot of other hospitals and organizations in Portugal that also started to make some efforts to become international. On the one hand there are organizations like Health Cluster Portugal (APDP's partner) that were created with the purpose of helping the healthcare sector in Portugal to become more competitive in order to export more (people, products and services), or, like MedicalPort, with the purpose of facilitating Medical Tourism. On the other hand there are Hospitals such as

Lusíadas Hospitals which website is already being modified holding a new feature devoted to international patients. Besides, Medical Tourism is nowadays one of the topics presented in the Government's National Strategic Plan for Tourism. In conclusion, a lot of evidence exists regarding the country's interest in Medical Tourism.

IV.2 Cross-Case Analysis

Apollo Hospitals Group

Apollo Hospitals Group was founded in 1983 with one hospital in Chennai, India. The hospital opened with the proposition of delivering tertiary care in a lot of specialties. To do so, it also offers facilitating services such as health insurance, research and telemedicine.⁹ It was only in 1991 that the hospital started to consider replicating the model in other regions. With this decision, new Apollo Hospitals opened in the most important cities of India. By 2005, Apollo Hospitals had already 32 hospitals in India and the franchise of Apollo Clinics.

Also in 1991, the Apollo Group started receiving international patients. By seeing Medical Tourism as an opportunity, the Apollo Group decided to invest in this sector in order to achieve a higher number of bed occupancy by foreign people. To do so, the group set two major goals: get global accreditation and increase marketing efforts in specific regions. Africa, the Middle East and South East Asia were chosen because the majority of already received international patients were from these regions.

To increase the value of the service, other supporting services were offered to international patients, such as, airport pick-ups, transportation and accommodation, among others.¹⁰ This strategy was so successful that, since 2013, international patients have had their own division in Apollo Hospitals.

⁹ Facilitating services are used to facilitate the consumption of the core service.

¹⁰ Supporting services are used to increase the value of the service and/ or to differentiate it from competitors.

Also important for this success was the government support that introduced a special visa category for medical tourists (Chinai & Goswami, 2007).

Besides the healthcare delivery service, the Apollo Hospitals group also offers management services to other hospitals and by doing so they have increased their network considerably over the years as well as their knowledge about medical culture and procedures in other countries. With the provision of this service, the Group was able to establish strategic alliances and participate in some joint ventures, building two hospitals outside of India: one in Dhaka, Bangladesh (2000) and the other in Moka, Republic of Mauritius (2005).

Bumrungrad International Hospital

The Bumrungrad Hospital opened in 1980 with 200 beds, in Bangkok, Thailand. Today, the same hospital has 580 beds. Bumrungrad is a multispecialty hospital that provides diagnostic, therapeutic and intensive care services.

Due to a decrease in the domestic demand as a result of the crisis in 1997, Bumrungrad Hospitals started to consider the option of investing in foreign markets.

The first step in this decision was the investment in Medical Tourism. A combination of effort to get international accreditation and strategic alliances: with other hospitals and with the Tourism Authority of Thailand Department. To provide a good quality service, the Bumrungrad offers interpreters, international insurance and medical coordination, visa extension counter, embassy assistance, airport reception, travel assistance and a total of 123 serviced apartments connected to the hospital. In 2006, the Hospital built a unit dedicated to international patients that take care of all the necessary assistance.

Since 2003, the Bumrungrad Hospital has been managing a lot of foreign hospitals (another service provided by the group) which enabled the Hospital to increase its knowledge about the foreign market, and later, in 2005, invest in Asian Hospital Inc – a

private hospital in Manila, Philippines, – corresponding to a 43,25% investment. In 2006, it entered into 49% joint venture with Istithmar PJSC (an investment arm of the United Arab Emirates Government) to build Bumrungrad Hospital Dubai, in which the first provided management know-how and the medical team, and the second provided financial resources.

These cities were chosen because of a majority of international patients from there, their high revenue residents, and also because of high costs in the country's healthcare service, which leaves Bumrungrad with a great competitive advantage. Besides, the Philippines also benefited from their proximity to Thailand.

Cleveland Clinic Foundation

The Cleveland Clinic is a nonprofit hospital and was founded in Ohio, USA in 1921. It was created as a multispecialty hospital with the purpose of treating sick people investigating each specific case. Nowadays it also has facilities in Florida, Nevada, Canada and the United Arab Emirates.

Due to international recognition, the Cleveland Clinic was already receiving 4100 foreign patients in 2000. However, after the September 11, this number decreased substantially and thus, the hospital decided to go further in its internationalization process starting to analyse possible countries to Foreign Direct Investment.

In 2006, the Cleveland Clinic opened another facility in Canada. This was due to three reasons: the first was the fact that Canadian patients (the majority of international patients) wanted to get the post-op at home so it would be good for them to have a clinic in Canada. In addition, there was no high quality health care service offered in Canada and waiting lines were very long. However, the private sector was beginning to worry about this gap in the health care service so if the Cleveland Clinic wanted to take advantage of this opportunity, they needed to act soon. Moreover, Canada was a close

country, both culturally and geographically and they already had a considerable amount of market knowledge from this country.

While the Cleveland Clinic in Canada was beginning its operations, the idea of investing in the United Arab Emirates started to arise. Some important facts contributed for the decision to go forward with the idea: on the one hand, 35% of Cleveland Clinic's international patients were from the Middle East region (Western Asia and Egypt) and on the other hand, the government from the UAE was investing a lot in the health sector because it wanted Abu Dhabi to be known by its high quality healthcare. Due to the country's lack of knowledge regarding medical treatment, there was the need for the major hospitals in the world to help the UAE. However, the Cleveland Clinic had no knowledge about their culture. So, in this case, another approach was taken: the Cleveland Clinic started helping to manage the Sheikh Khalifa Medical City in Abu Dhabi in order to gain experience in the field and then go forward with a direct investment of a multispecialty Hospital with the name and brand of Cleveland Clinic (that will open in 2015). Because of not being familiar with the level of medical education in the United Arab Emirates, the Cleveland Clinic will start with a team with 70% of doctors from North America, being able to avoid part of the risk concerning human resources.

IV. Results

IV.1 Pattern Definition

Based on this cross-case study analysis, this section is intended to identify patterns of internationalization that can be extracted.

To a better understanding, Table 1 is used as a synthesis.

Table I: Patterns of Internationalization

	Apollo Hospital	Bumrungrad I. H.	The Cleveland Clinic
First phase	Medical Tourism	Medical Tourism	Medical Tourism
Second phase	Target Countries and offer management services in order to establish strategic alliances.	Target Countries and offer management services in order to establish strategic alliances.	Target Countries and invest if possible. If not, offer other services in order to establish strategic alliances.
Third phase	FDI - Joint Ventures	FDI - Joint Ventures	FDI - totally owned and Joint Ventures

As we can see from the table above, all hospitals start their internationalization strategy by receiving international patients, i.e., Medical Tourism. At first, this movement is demand driven, meaning, the hospital, because of its strengths (quality, price, state of the art diagnoses) and/ or because of opportunities (huge waiting lists in other countries to specific surgeries provided by the hospital), starts attracting patients from other countries. It is only later when the hospital realizes the market's potential that it implements targeted strategies to attract more international patients. These strategies consist in providing supporting services (such as travel and accommodation assistance services) through strategic partnerships and getting International Accreditation.

In a second stage of the process, we have Apollo and Bumrungrad Hospitals offering management services, i.e., they are contracted to manage other hospitals in other targeted countries. The goal in this stage is to gain market experiential knowledge. By going to another country, they can understand the business culture better, see how medical treatment is provided, search for concrete opportunities and establish strategic relationships. After this experience in the field, both hospitals decided to invest in the selected country through joint ventures (third and last step of the pattern).

Regarding the Cleveland Clinic, its path was a little different. In a second step, they decided to invest in Canada. This was justified by the already acquired knowledge about the country and its proximity to the US, both geographically and culturally. In a third step, they decided to invest in the UAE and in this case the hospital chose to use the

same strategy as the other two analysed hospitals: first offer management services and then invest through joint ventures.

In conclusion, hospitals always start with Medical Tourism. Then, if they have enough knowledge about the foreign market, they invest; if they do not, they first offer management services to gain experiential knowledge and establish strategic relationships and then proceed with FDI. Therefore, assuming that the hospital does not have knowledge about the foreign market (as the case of APDP), the internationalization pattern can be described by three steps: (1) Medical Tourism, (2) Offer other services to gain market experiential knowledge and (3) FDI.

Regarding the time between each stage, it is not equal among the analysed hospitals. Nevertheless, an important similarity can be found in Apollo and Bumrungrad. Both took approximately 10 years from step 1 (Medical Tourism) to step 3 (FDI).

Balancing this with the literature, one can identify similarities with the Uppsala model: both start with exports and end with FDI and the intuition behind the pattern and the model are the same: internationalize through small steps in order to gain market experiential knowledge, identify concrete opportunities and make commitment decisions increasing market commitment in a prudent way.

IV.2 Conditions for success

Not all hospitals hold the necessary conditions to become international hospitals. By studying and comparing the characteristics of the analysed hospitals, we tried to identify conditions for success. Assuming that there were the similarities among these hospitals that made the internationalization process possible and successful until now, we will focus on them. Therefore, all hospitals have: (1) explored domestic markets; (2) great component of research; (3) supporting services for international patients: travel and accommodation assistance provided through partnerships with airports, travel agencies,

hotels, and interpreters (if dealing with different languages); (4) International Accreditation, and (5) the provision of other services (management services) in order to gain market experiential knowledge and establish a strategic network to future (6) strategic alliances; being these the assumed conditions for success.

V. Discussion

In this section, we will apply the defined Pattern to APDP. Then, we will try to identify the best country or countries to target and apply the Eclectic Theory and the defined conditions for success to see if APDP is ready to internationalize.

V.1 The defined Pattern – application to APDP

As mentioned before, since 2009, APDP has provided healthcare services to international patients from Angola. This demand was the result of a smaller psychological distance between these two countries due to their history together and same language.¹¹ There are two types of patients: those that have dual citizenship having part of the treatment covered by the NHS and those that have only Angolan citizenship paying the treatment with money from their own pockets. The first type is introduced in the system as Portuguese patients and, because of this, we do not have access to the number that they represent. However, we know that the majority of international patients from Angola have dual citizenship and, those that do not, have shown numbers between 20 and 25 since 2009.

Although these patients are still very few, the sign was already given by the demand about their need of APDP's model of integrated disease management and therefore, in accordance with our defined pattern, this is the sign to start investing in the **first step: Medical Tourism**.

¹¹ Psychological distance refers to “factors which impact the information flow between the firm and the host market”. (Johanson & Wiedersheim (1975). p.308)

Regarding the **second step**, the importance of which is associated with the increase of experiential market knowledge and the potential of establishing essential business relationships for the next step, some actions were already taken. In the analysed case studies, because of their dimension, hospitals started offering management services. In a small hospital like APDP, its focus should be to provide knowledge of what it knows best, which means, knowledge about their model of integrated disease management and about Diabetes. Applying this model to other hospitals will give APDP the knowledge it needs to adapt the model to other cultures and to consider foreign direct investment. Some things have been done already for the effect: APDP has been establishing its network through the provision of training services in Angola and presence in international conferences. This should continue as the strategy to follow.

About the **third step**, based in the cross-case analysis hospitals invested in the country that presented the biggest number of international patients. Right now, APDP is receiving patients only from Angola but this can change with the application of a strategy directed to the increase of the number of international patients. Hence, the first step should be explored and only after this APDP can decide where to invest.

V.2 Which countries should APDP target?

As mentioned, the analysed hospitals in the cross-case analysis invested in the countries that presented the highest number of international patients. Following this approach, we could say that APDP should invest in Angola. However, the analysed hospitals had already some years of experience receiving international patients whereas APDP started only in 2009. Thus, first APDP should invest in medical tourism and study the patients that visit it the most in order to decide where to go. Nevertheless, concluded from the analysis of Apollo Hospitals Group, medical tourism can be targeted to some countries or regions in specific and, in the case of APDP this should be done because it will face

competitors (other hospitals offering medical tourism services) with a bigger dimension, more monetary resources and more knowledge about the foreign market so it is better to APDP – a small hospital – to target specific countries.

Thus, instead of investing only in Angola, we suggest that APDP should target the African Portuguese Speaking Countries (APSC) – Angola, Cabo Verde, Guinea-Bissau, Mozambique and Sao Tome and Principe. This decision is justified from the fact that psychological distance between Portugal and these countries is smaller as they share the same language and have some part of their history in common, as mentioned above.

Moreover, Sub-Saharan Africa is the region with the highest Diabetes’ growth rate until 2035, scoring an increase of 109%.¹² This is the consequence of a low level of disease control, prevention and diagnosis – most of the times Diabetes is diagnosed because of its complications. The challenge to treat this disease in Africa is that Diabetes must share resources with communicable diseases.¹³ This also results in healthcare workers with lack of knowledge. All of these, among others, can be seen as opportunities to APDP. None the less, there are also some threats that can be harmful. To summarize these ideas, we have below a SWOT analysis:

Table II: SWOT Analysis

Strengths	Weaknesses
Model of Integrated Disease Management	Lack of Financial Resources
Focus in Patient Education	Great financial dependence on the Government
International Reputation	
More than 80 years of experience and disease knowledge	Lack of knowledge regarding foreign markets
Opportunities	Threats
Emerging Economies	Economic Uncertainty
Same language	International Competition
Increasing interest on Diabetes	Different Health Regulation
Increasing number of people with diabetes	Need to share resources with communicable diseases
Need for knowledge of the disease, prevention and tracing	
	Lack of insulin and medicines

¹² International Diabetes Federation (2013). p.15

¹³ Beran & Yudkin (2006). p.1689

V.3 The Eclectic Theory – application to APDP

In order to understand if APDP is ready to become international, the Eclectic Theory is used.

As mentioned in the literature review, this model is based on a producing firm and states that it will only invest in FDI, i.e., built a producing facility, if O, L and I advantages are perceived. But, in fact, I advantages are not necessary for FDI if the company invests through strategic alliances. Hence, we assume that Dunning refers to FDI as a totally owned investment. Moreover, as he does not mention explicitly what the firm should do if L advantages are verified but not I advantages, we assume that this would also mean FDI but through strategic alliances (because I advantages are not verified so the company has no incentive to invest alone). Now, regarding “Contractual Transfers” and “Trade”: if only O advantages are verified (Contractual Transfer), the firm has no incentive to invest in another country, meaning, it will only export (simple exports); if the company also has I advantages, this means that despite the fact that L advantages are not verified and thus it has no incentive to build a production facility in that country, it can still have some benefits in going to the same country not as a producing facility but as a sales subsidiary. This reasoning is summarized in the table below resulting in an easier understanding of Dunning’s model.

Table III: Adjusted Eclectic Theory

	O advantages	L advantages	I advantages
FDI	Yes	Yes	Yes
FDI through strategic alliances	Yes	Yes	No
Sales subsidiary	Yes	No	Yes
Simple Exports	Yes	No	No

Applying this to APDP, Ownership advantages – also known as competitive advantages – correspond to its model of integrated disease management and its knowledge about the disease. Location advantages are related to the country to which APDP decides to

invest in. In this case they correspond to all the opportunities mentioned in the SWOT analysis. In Dunning's model, L advantages would be related to lower production costs, better quality of inputs and/or more efficient production. This is due to the fact that Dunning was based on a producing firm and it did not need to have sales there, just production. In our case, as the provision of the soft service depends on the presence of the patient, L advantages are different. We are looking for a country not only to produce but also to provide so demand in that country is crucial.

Internalization advantages exist when it is better for the firm to invest in a country alone rather than through strategic alliances. At this point, APDP does not have enough knowledge to invest alone and thus we conclude that internalization advantages are not verified. Therefore, only two ways of internationalization can be chosen in accordance to the adjusted Eclectic Theory: simple exports and FDI through strategic alliances.

Note that FDI can be in the form of a Specialized Hospital, a School or a Primary and Secondary Care Unit. Hence, these three forms should be considered.

Although these countries are among those that will face the highest increase in Diabetes until 2035,¹⁴ they did not face in 2014, such a high National Prevalence rate compared to communicable diseases,¹⁵ with whom they need to share available resources. Because of this, the construction of a hospital exclusively devoted to treat Diabetes is not a credible suggestion. However, there is the possibility to APDP to open a Diabetes department in an already built hospital – through a partnership with that same hospital.

The other options are the construction of smaller Care Units. A business model could be created with Schools and Care Units built together: a Diabetes care Unit that would provide tracing, diagnostic, primary and secondary care and education services. This should also be done with the help of a major national hospital as they have more

¹⁴ According to the IDF (2013), people with Diabetes in Africa will increase 109% until 2035.

¹⁵ According to the IDF (2014), Diabetes National Prevalence rates in APSC are between 2% and 5%.

knowledge about the culture. Moreover, this could also be considered as a way of attracting international patients to APDP-Portugal, establishing the connection between the patient and APDP-Portugal, and giving him all the necessary information regarding exams, doctors, procedure, and accommodation in Portugal. All of this would be paid totally by the patient. However, these countries verify great inequalities and thus, APDP should try to establish partnerships with local insurance companies.

In a first stage, APDP should go for the second strategy as this would require less monetary resources (less medical equipment) and less human resources. The consideration of human resources comes from the fact that, at a first stage, APDP should send doctors from Portugal to avoid risks resulting from low level of medical education in these countries and, Primary and Secondary Care Units need fewer doctors than Hospitals. In addition, in this type of units, doctors are more easily replaced by nurses (that exist in a higher number) so the need to export human resources from Portugal decreases while dealing with Primary and Secondary Care Units.¹⁶

V.4 Conditions for Success – Application to APDP

Although OLI advantages are necessary conditions for becoming international, they are not sufficient. Hence, we managed to identify conditions for success derived from the defined pattern in the cross-case analysis. A table is used for a better understanding about what has been done already (✓) and what needs to be done (✗) by APDP.

Table IV: Verification of the Conditions for Success

	Verified	Not verified
Exploitation of the Domestic Market		✗
Research & Development	✓	
International Accreditation		✗
Supporting Services provided by strategic partnerships	Travel and Accommodation Assistance	✗
	Interpreters	NA
Provision of other services	✓	
Strategic Alliances for Foreign Direct Investment		✗

¹⁶ The World Bank – Comparison between 2 indicators: “Nurses and midwives (per 1,000 people)” and “Physicians (per 1,000 people)”

Now, let us study these conditions one by one.

Regarding the Domestic Market, APDP-Hospital is only present in Lisbon. APDP-School is already present in Lisbon and Oporto. After the region of Lisbon and Tejo Valley, the North of the country is the region with the highest number of hospitalizations due to Diabetes.¹⁷ This can be due to a higher number of people with diabetes in this region or because treatment and monitoring of the disease is not enough. Either way, this can be seen as an opportunity to APDP. With the implementation of APDP-School in Oporto, APDP could already understand the market's needs and if those needs can be solved by its model of integrated disease management. If they can, the same strategy can be applied to Oporto: establish a partnership with the North Regional Health Administration to re-route patients from the National Health System to APDP-Hospital in Oporto.

The next two conditions for success concern Medical Tourism.

International accreditation is a way of signalling advanced technology and high quality care. It consists in External Quality Assessment, meaning, a trusted third party assesses the hospital's quality and control. This gives foreign patients a credible measure about their safety in the hospital which is essential to minimize the risk that they perceive.

The most famous accreditation organization is the American Joint Commission International. Accreditation here is divided in programs. In a total of 711 organizations accredited by JCI within 25 different programs, the "Diabetes Mellitus Program", in which APDP could be inserted, presents only 5 organizations worldwide: three from Thailand, one from Brazil and another from Taiwan.¹⁸ Brazil can be seen as a threat in our case because it is also a Portuguese speaking country. This amplifies APDP's need to invest in FDI as its physical presence can decrease this threat.

¹⁷ Observatório Nacional da Diabetes (2014). p.46

¹⁸ <http://www.jointcommissioninternational.org/about-jci/jci-accredited-organizations/>

It is equally important to provide supporting services. As APDP cannot offer them, the Association should consider the establishment of partnerships with other businesses, such as MedicalPort. The government can also be seen as a Medical Tourism facilitator as it may have a very important role in promoting the service in the country, not only through law (facilitating visas for international patients) but also through networks established with other countries that can help finding Strategic Alliances for Foreign Direct Investment.

VI. Conclusion and Final Recommendations

Regarding the purpose of this research, one aim was to define an internationalization strategy to Associação Protectora dos Diabéticos de Portugal. To do so, some research was done regarding internationalization models and a cross-case analysis was used. The goal was to define a pattern of internationalization within the analysed hospitals and identify potential conditions for success. Then, a comparison made between the identified pattern and the literature review showed similarities with the Uppsala model. Meanwhile, the Eclectic Theory was used jointly with the potential conditions for success in order to understand if APDP was ready to internationalize. We concluded that first APDP should invest in the domestic market (Oporto) and Medical Tourism targeted to African Portuguese Speaking Countries. In addition, the association will continue to provide training services to Angola and try to expand these services to the remaining APSC in order to gain more experiential knowledge in this market and to establish potential strategic alliances to the next step: FDI through joint ventures in the form of a Diabetes Care Unit.

All this strategy was conceived to meet APDP's motivations. The main goal of Medical Tourism and additional training services is to generate additional revenues, as this is totally paid by the "client" (patient and hospitals) and, in this way, reduce the

dependency on the Portuguese government. However, we cannot forget that investing in other regions (Portugal and APSC) will correspond to a lot of financial assistance and additional costs with personal and training (in APSC). This financial assistance can be decreased through joint ventures and the remaining can be done through debt (as APDP's debt to equity ratio is very low).¹⁹

Regarding limitations of the model, we can identify the sample selection as a sensitive question because dimension may be a condition for success. We proceeded the work project assuming that this would not interfere. Despite being a very strong assumption, it needed to be done as we did not find information about the internationalization of small hospitals. Also due to a lack of available information, the third topic of the selection criteria (nonprofit hospital) was excluded. This could affect the analysis and its validity as APDP is a nonprofit hospital. Still, we added Cleveland Clinic as the representative of nonprofit institutions and we concluded that the pattern was very similar to the other hospitals. Hence, this should not be considered a handicap of the research.

This work made us notice the lack of literature regarding the internationalization of services and thus, we suggest future research in this field. Moreover, it could also be interesting to do the same study with more hospitals in order to see if they still follow the defined pattern.

¹⁹ APDP's Annual Reports

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Netgraphy

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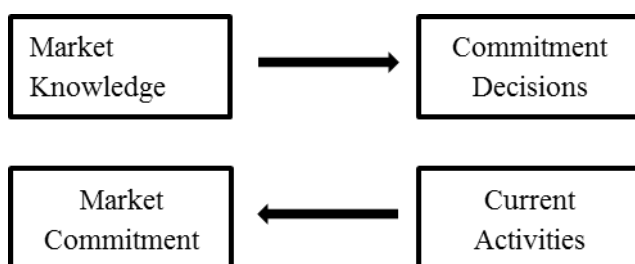
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APDP Annual Reports: 2009, 2010, 2011, 2012, 2013

Appendix

Appendix I:²⁰ Uppsala Model Mechanism



Appendix II:²¹ The Eclectic Theory – The firm’s decision based on O, L and I advantages

	O advantages?	L advantages?	I advantages?
FDI	Yes	Yes	Yes
Trade (Export)	Yes	No	Yes
Contractual Transfer	Yes	No	No

Appendix III: Data collection - Interviews

To have access to information not available in APDP’s Annual Reports, we interviewed some doctors and financial specialists from APDP. These interviews were semi-structured, i.e., questions were previously prepared by the interviewer but there was the possibility for these questions to change during the discussion. This type of interview was chosen because in this way we could ask crucial questions for our research but also understand if there was some other potentially important information.²²

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²⁰ Johanson & Vahlne (1977) p.26

²¹ Dunning (1988) p.28

²² Wengraf (2001)