# The management of medical departments in hotels offering seawater-based treatments

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## 1. Methodology

This article combines two different knowledge resources, i.e. scientific articles on the one hand and the experience of the author as consultant on the other hand. The author has accompanied various projects in Europe as a contributing expert on market analyses, business plans, and quality management.

#### 2. Introduction

All therapies connected with seawater are often called Thalassotherapy. This term stems from the Greek word thálassa ( $\theta \acute{a}\lambda \alpha \sigma \sigma \alpha$ ), meaning sea or ocean, to imply various seawater-based treatments. The term seawater treatments relates only to seawater based treatments, whereas Thalassotherapy includes other seaside-related therapeutic approaches, such as climatotherapy or sand baths. The medical properties of Thalassotherapy have been extensively discussed in Illing 2018 whereas this article focuses on management aspects and the opportunities seawater-therapy offers for tourist establishments, such as medical hotels.

The term medical tourism normally describes a market in which people travel to other regions or countries in search of medical treatments in clinical institutions. This understanding of medical tourism does not take into consideration that medical tourism takes place in hotels, too. However, it is not always easy to differentiate between the clinical medical tourism and the hotel based medical tourism because many therapeutic approaches seem to be quite similar, although hotels often tend to offer more sauna and pool facilities, and try to provide relaxation and beauty treatments. Zygourakis et al. (2014) systematically outline the differences between hotels and hospitals, stressing how a hospital can learn from hotels. The specific topic of medical hotels has been discussed by Han (2013), Han et al. (2015), and Illing (2014), too. Nevertheless, the differentiation of hotels and clinics offers room for further discussion since many different company types are changing the market. Illing (2014) attempts to delimit the respective facilities and to describe the different customer groups of this market. Various sources have examined the motives of medical tourists (e.g. Medical Tourism Association, 2010). Kocukusta (2014) emphasizes that price level, therapist qualification, a high level of privacy, a full range of spa facilities and branded spa products are of principal interest to spa-goers. Han et al. (2015) try to identify possible outcomes of staying in a medical hotel and investigate the role of perceived outcomes in forming the intention to stay at a medical hotel. Yu (2012:82) discusses the purchasing motives of relevant customers. Unlike hospital tourism, medical hotels have so far been largely ignored by tourism research and that is why this gap in knowledge needs to be addressed.

This paper aims to differentiate between various types of medical tourism and to identify the differences between clinical tourism and medical tourism, with particular regard to how the latter is practiced in hotels:

Table 1. Different types of tourism and different company types

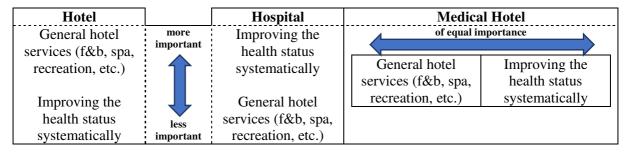
	1	2	3
Type of tourism $\rightarrow$	Wellness tourism	Medical tourism	Clinical tourism
Predominant lodging	Hotel	Hotel, clinic	Clinic
establishment $\rightarrow$			
Predominant type of	Hotel spa and public	Hotel spa or public spa with	Medical
spa →	bath	medical elements	department
Focus on health $\rightarrow$	Health in a broader	Holistic healing and medical	Focusing on
	sense focusing on	treatments under supervision	medical
	relaxation, beauty	of a medical doctor, in hotels	treatments
	care and fitness	normally non-invasive	including surgery

As far as public baths are concerned there are those who focus primarily on fun and adventure. Others use healing water as a resource and an impetus to establish a medical department, offering water-based treatments that can be supplemented by other therapeutic approaches, e.g. physiotherapy.

Column 2 above describes the type of tourism where the two competing company types such as hotels and clinics overlap. Medical services can be offered in hotels as well as in clinics. The therapeutic service design at a hotel will probably be predominantly non-invasive, whereas a clinic will more likely choose an invasive approach and capitalize on its surgical capabilities. Clinics normally have a higher number of medically trained staff.

The following picture outlines the core business focus of hotels and clinics with regard to medical tourism:

Fig. 1. The core businesses focus of hotels, medical hotels, and clinics



It is generally accepted that hospitals serve the needs of two different stakeholders, i.e. the patients on the one hand and intermediate health insurances on the other hand. Both have different expectations of the hospital and it is quite difficult to satisfy all parties. Hotel guests are mostly self-determined because they enjoy considerably better health and know exactly what they need to feel better. At a hospital, patients are thankful when medical doctors prescribe treatments and fight for the patient's life.

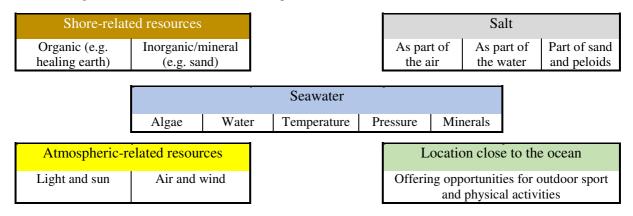
In summary, hotels continuously refine their services in order to satisfy the guest's subjective needs, whereas clinics try to treat a medical condition, usually a significant health problem. Medical hotels offering Thalassotherapy can decide which group they want to belong to since their treatments can be offered to a greater or lesser extent as medical therapy.

#### 3. Medical approaches to seashore-related treatments

# 3.1 Overview of therapeutic approaches

The following chart aims to systematize seawater-related remedies that can be used for therapeutic purposes:

Fig. 2. Seawater-related remedies and specifications



All aspects considered above suggest that Thalassotherapy is a holistic practice comprised of many different elements and aims to support disease prevention and to foster health, with the seawater being at the center of all endeavours. The following paragraphs are to give a short overview of the medical efficiency of certain seashore-based therapies.

#### 3.2 Medical Evidence

An article about the medical effects of Thalassotherapy shows that certain treatments have a positive effect on men's health (Illing 2018). Zijlstra et al. (2005) write about the positive effects of physical exercise and certain Thalasso treatments have on patients suffering from Fibromyalgia. Gomes (2013) writes about minerals that are part of the sand at the beach and its medicinal properties. In his articles from 2009 and 2011, he reminds us of the tradition of sand baths (Psammotherapy) under medical supervision. This tradition has almost died out and survives as thermal therapy in a clinical setting. Rosenfeld (2012) demonstrates that the inhalation of a common salt solution can cause a significant relief to those suffering from certain respiratory diseases. A walk on the beach not far from the breaking wave zone (high salt content in the ambient air) may have similar effects. A high salt content in certain seawaters such as in the Dead Sea is used to cure certain skin diseases, such as Psoriasis. A salt bath can be offered in the natural setting as well as in a clinical context, and both are able to heal certain skin related diseases. Furthermore, the combination of seawater with ultraviolet light promises a positive therapeutic outcome (Schuh 2009:99f.). Furthermore, the sea climate has a positive effect on the reduction of allergens. Especially people suffering from pollen allergies can expect relief when they are exposed to sea climate (Schuh 2009:98). Kazandjieva et al. (2008) report on the combination of Thalassotherapy with natural sunlight to cure Psoriasis vulgaris.

# 3.3 The therapeutic resources of Thalassotherapy

The following table offers an overview of therapeutic tools of coastal establishments:

Table. 2. Medical and non-medical interpretation of sea-related treatments

		1	2	
Resources	Explanation	Medical approach	Leisure and wellness approach	
	Various	Salt bath (medically guided, Thalasso circuit)	Bathing in saltwater (sea or pool)	
Seawater	approaches that make use of seawater or certain elements of it	Drinking cure  Massage (e.g. underwater massage using jets in the bathtub or as a shower with a hard water jets)	Drinking (mineral water)  Massage (wellness massage)	
	1 1 1	Rubbing (medical rubbing)	Rubbing	
		Food and pills containing algae (diet)	Food and pills made of algae	
		Jet shower (stimulation of circulation)	Jet shower	
	More solid resources such	Sand bath (thermal therapy, locomotory system)	Thermal effect, unspecific health benefits	
Shore	as sand and peloids	Peloid packs, wraps and compresses (skin therapy, thermal therapy for the locomotor system)	Unspecific health benefits	
Atmosphere	All relevant weather conditions	Heliotherapy (skin therapy) Climatotherapy (respiratory diseases)	Sunbath Unspecific exposure to climate	
Salt	Occurs in the air, in water, in	Salt water inhalation indoor or outdoor (respiratory diseases)	Inhaling maritime aerosol	
	sand and peloids	Salt bath (skin therapy)	Salt bath Food	
Location	Places exposed to shore and breaking zone	All outdoor activities guided by a trained person	Offering opportunities for outdoor sport and physical activities	

The table shows that seashore-based resorts have the opportunity to shift the offer of services focusing more on medical or pampering services (columns 1 and 2). In other words, once a Thalasso-based resort is built it is not difficult to change from one focus to another since many facilities are similar and can be used by both medical and non-medical guests.

## 3.4 Particularities of medical hotels focusing on seawater-treatments

The following overview lists characteristics of medical hotels with specific attention to seashore-based medical treatments: 1. Seawater therapies are often considered an amendment to therapy concepts. A medical hotel treating cardiovascular conditions would probably not primarily advertize its seawater therapies. 2. The technical water treatment in pools and other water areas needs to allow for special corrosion protection since salt water is considered extremely aggressive. 3. A successful seawater resort depends to a large extent on the quality of the seawater and other related natural resources, such as air and the sand of the beach. 4. Conventional treatments with sea water are normally not very profitable since baths are predominant and treatments do without medical devices that would justify higher treatments prices. 5. Seawater activities and the term Thalassotherapy are well-known in many countries and enjoy a great popularity regarding aspects such as authenticity and natural healing. 6. The delimitation of specialized Thalasso-centers and the various non-medical seashore resorts is quite difficult since all offer more or less the same treatments, considering that Thalassotherapy can be

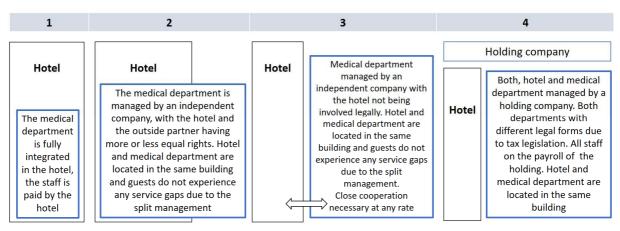
performed without medical devices, too. So why should a guest book a more expensive Thalasso-center if a cheaper one offers the same at least to a certain degree? 7. The last point applies to all medical hotels: They merge two different worlds, i.e. medical and sometimes clinical approaches of management on the one hand and hotel-like approaches on the other hand, while the latter is normally not familiar with therapeutic processes, medical procedures and doctrines.

## 4 Management

## 4.1 Who runs the medical department?

In case a hotel does not have the necessary capabilities to run a medical spa successfully it may outsource this business to another company. The international markets show that wellness and beauty departments are normally run by the hotel itself but when it comes to the management of a medical unit hotels are often reluctant to assume the responsibility preferring somebody else to do it. The following figure presents the alternatives:

Fig. 3. Different legal forms regarding the management of a medical spa in a hotel



Columns 2 and 3: The hotel operator may prefer a solution that splits the spa into two different departments, with the beauty and relaxation spa managed by the hotel itself and the medical department run by an external partner. Column 3: If the operator of the hotel is a traditional hotel operator that does not know about health management it may agree to assume the responsibility for the hotel, if the medical spa is management by another enterprise. The outside partner that might possibly manage the medical department may be a health insurance, a clinic or any company that works in the field of fitness, sport or health.

#### 4.2 Distribution of treatments offered

If both the hotel and the medical partner offer treatments, it is of utmost importance for all parties to cooperate well and to have clarity with regard to which treatments are offered by whom:

Table. 3. Distribution of treatments in comparison of hotel and medical operator

			Medical operator		
			Hotel		
	1	Most treatments	Beauty treatments and wellness	Hardly any treatment offered by	
nt of ion		offered by the hotel	massages offered by the hotel	the medical operator	
Different ersions o service istributio	2	Hardly any treatment	Only beauty treatments offered	Most of the treatments offered	
Differ versior servi distribu		offered by the hotel	by the hotel	by the medical operator	
D Ve. ve.	3	No treatment offered		All treatments offered by the	
		by the hotel		medical operator	
		1	2	3	

If both partners offer treatments, there should be a clear agreement on which partner offers which treatment. This is sometimes quite difficult since many treatments can be carried out more or less medically. The figure above shows the distribution of treatments between the hotel on the one hand and the medical operator on the other hand. Column 1 indicates the number of treatments offered by the hotel whereas column 3 shows the treatments performed by the medical operator. Column 2 discusses a possible apportionment if both, hotel and medical operator, offer treatments. Apart from the aforementioned difficulties, it is recommended to have all treatments supervised by the head physician. Row 1 and 2 indicate that there is a task sharing that has to be organized.

# 4.3 The patient flow and dissociation from other departments

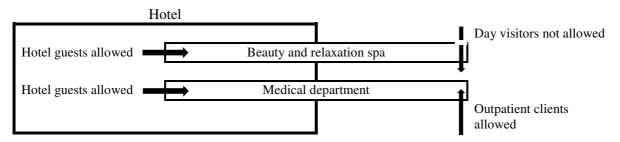
Many hotels that call themselves medical hotel do not only have medical guests, but they also attract just normal wellness guests who look for beauty care and relaxation treatments. Medical hotels sometimes run two different spas, a mere wellness spa consisting of pools and cosmetic services, and another one offering medical services. These companies are of the opinion that two different spas help to better separate those target groups that should be separated. It is generally accepted that medical guests are in need of more discretion and care than normal spa goers:

Table. 4. Distribution of treatments comparing hotel and medical operator

	Hotel					
Beauty Spa			Beauty Sp	Medical Spa		
Sauna	Fitness	Pool	Relaxation	Treatments	Treatments	
				(only beauty treatments	(with a medical focus)	
				and relaxation massages)		
	Service delimitation: beauty services are offered by the beauty spa. Skin-					
				related treatments with a dermatological impact are performed in the medical		
				spa. Relaxation massages are offered in the beauty spa, but massages that		
				focus on a clear health-related problem are performed by the medically trained		
				therapists in the medical department.		
All a	All areas can be open to day-guests if it is in keeping with the		Can be open to day-guests if it is in			
	overall strategy of the hotel		keeping with the overall strategy of the			
		hotel				

It is a matter of strategy to determine if the beauty spa and/or the medical spa should be open to day-visitors. The advantage may be a higher revenue, whereas the disadvantage is potentially more disturbances as the day-visitors may not know the spa etiquette. There are hotels that only accept their own guests in the medical department. Other hotels with a medical department perform a large part of their treatments on day visitors who do not book a bed in the hotel at all. The relationship between exclusively wellness guests on the one hand and medical guests on the other hand, may be explained best with aid of the following chart:

Fig. 3. Example of guest acceptance rules for spa and medical department



A spa at a hotel may try to attract hotel guests as well as day patients. It is of utmost importance to decide if the medical department should try to serve the needs of the hotel guests or if it should try to meet the needs of the day patients as well, because each group has different expectations. The figure above indicates that such a hotel would allow both groups to use the services of the medical department. This can be explained by the economic pressure transforming the medical department into a profitable unit. If the ambulant patients disturb the privacy of the hotel guests because the medical department is located within the hotel or even within the beauty spa, the admission of ambulant patients will probably need to be withdrawn.

There is some evidence that a medical department of a hotel should also open its doors for day-guests. But this approach implies that the balance of the needs of hotel guests and outside guests are being considered. This approach requires a careful management of the needs of both hotel guests and day guests. To find a balance between these two source groups (target groups), the management should consider the following approaches: 1. Reservation of appointments for hotel guests because many of them book their treatment once they arrive at the hotel and want to get their treatments during their relatively short stay at the hotel. Example: No appointments are given to day patients for example on Mondays so that hotel guests can get their appointments at short notice. 2. Hotel guests can be given price advantages that may incentivize day visitors to book a room next time. This could increase the occupancy rate of the hotel. 3. The medical department knows what kind of treatments and which staff hotel guests normally prefer, so the more popular therapists could keep some appointments free to be assigned to hotel guests over day visitors.

## 4.4 Separation of parts of buildings

A hotel that tries to attract medical guests must decide how many of them it wants to accommodate. The more medical guests the hotel can attract the more the entire strategy of the hotel should cater to their needs. This is especially true if some of the hotel's clients are lapsed or handicapped patients which might cause unease among the various guest groups. That is why an intelligent target group separation concept should be implemented. Such a guest flow concept should acknowledge that medical guests have different expectations than regular guests. The following points may help to understand the different needs and expectation of medical patients: 1. They might be physically and/or mentally handicapped and in need of more help and respect. 2. The accessibility of the hotel and the medical department should be given all possible attention. 3. The need for rest and calm is higher. 4. The average age of this target group is higher. 5. Especially after treatments medical patients are often exhausted or handicapped and in need of special care as for example their visual ability might be temporally restricted after an eyelid lift.

Depending on their health status medical patients require a different pace. The following table shows how to apply these insights:

Table. 5. Separation of the medical department from the hotel

No separation	Separation light	Clear separation	
	Beauty spa and medical spa have	Separate entrance, parking ground, staff,	
	separate receptions and staff	building, etc.	

## 5. Economic implications of a medical hotel

# 5.1 Turnover potential – A comparison

The following table shows the potential/projected revenues of health-related tourism companies:

Table. 6. Revenue by hotel-type

	Public bath	Wellness hotel		Medical Hotel
	↓	$\downarrow$ $\downarrow$		<b>↓</b>
Comparing figures	is considered big at	is considered big at 100,000		
	1m visits per year	overnights per year		
Hotel category		4*	5*	
Revenue of room & board		€170	€230	€210
per night including half-				
board				
Revenue including		€210	€270	€420
treatments				

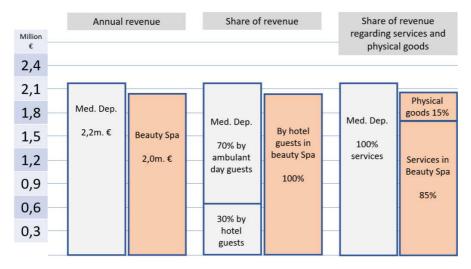
It is foremost the number and price of treatments sold that brings an advantage for medical hotels compared to wellness hotels.

# 5.2 Case study – A medical hotel in Europe

Revenues: The entire hotel generates an annual revenue of about €23m. The daily revenue of the beauty spa is about €6,000 (average), outstanding days generate about €8,000. The medical department shows an even stronger performance since it generates about €6,900 per day on average, €10,000 on peak days. Other key figures: The number of rooms: 150 (300 beds). The number of employees in the medical department: 10 (three of which are medical doctors). The number of employees in the beauty spa: 19 (full-time equivalent). Annual opening days: 320. The average occupation rate of the hotel: 90% (which is, admittedly, an outstanding value). The annual turnover of the medical department: €2.2m. The annual turnover of the beauty spa: €2.0m. The average revenue of one treatment: €75 in the beauty spa and about €170 in the medical department.

The following chart compares the total annual revenue (left) with its share (middle) and the sales distribution of services and physical goods:

Fig. 5. Economic facts and figures



The comparison shows that the hotel accepts day-visitors (outpatients) in the medical department but not in the beauty spa. The medical department would probably not be economically successful without outpatient clients.

It is quite common for the revenue in a beauty spa regarding physical goods such as cosmetics is between 8% and 16%. The medical department does not sell any goods because products such as walking frames or insoles have to be bought in pharmacies and other healthcare supply stores.

Treatments per day: The hotel has a brilliant performance as far as the number of sold beds is concerned: It has an average of 91,200 overnights per year (285 overnights per day). About 60 treatments are delivered in the beauty spa every day (average), up to 80 on peak days. A part of the beauty spa's revenue is due to the sales of tangible (physical) goods, e.g. cosmetics, which account for 15% of the beauty spa's revenue. About 0,25 treatments are performed in the beauty spa per day. Another €2,2m annual revenue is created by the medical department, with about 40 treatments performed every day, 35% of which are booked by hotel guests (about 14 treatments). To sum up, almost 0.3 treatments per overnight are executed in both spas of the hotel (including day-guests coming to the medical spa). 0.3 treatments per overnight is a relatively good average compared to the European wellness hotel market.

## 6. Conclusion

Room rates represent a minor source of revenue for medical hotels. The main revenue consists of the higher number of treatments sold and the higher price of medical services. Furthermore, guests in medical hotels stay longer than in other hotel types. This helps to decrease costs since guest changes are relatively expensive.

#### 7. Literature

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