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# Consumer participation in the health tourism innovation process

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ABSTRACT
The aim of the study is to compare the level of innovation of companies introducing innovations with consumer participation with that of other innovative providers of health tourism services. The following hypothesis was formulated: Companies benefiting from the participation of consumers in the process of innovation represent a higher level of innovativeness than other innovative providers of health tourism services.
The following methods were used: a comparative analysis, a questionnaire (CAWI and PAPI), a standardized interview, and the ranking method. 461 providers of health tourism services participated in the research.
The value and implications of the paper for the economic sciences contribute to the development of innovation theory. The hypothesis has been positively verified. The research shows a much higher level of innovation in companies cooperating with consumers (patients) than that of other respondents.

KEY WORDS
**innovation, process of innovation, consumers, health, tourism**

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## Introduction

Innovativeness is one of the most important management issues. Innovativeness is defined as the ability of organisations, sectors, regions or countries to seek, implement and disseminate innovations, i.e. this means doing something new or introducing significant changes, which can be measured and assessed (Hilami et al., 2010). With respect to an organisation, innovativeness involves its ability to place new products on the market or to open new markets by combining a strategic orientation with innovative behaviour and processes (Danneels & Kleinschmidt, 2000). In the Polish legislation, innovation is defined as an activity related to the preparation and launch of the manufacture of new or improved materials, products, equipment, services, processes or methods

intended to be placed on the market or for another use in practice (Ustawa (Act), 2015).

The research problem addressed in this paper was an innovation process. The research area is companies providing health tourism services in Poland. Health tourism is defined as a type of tourism, the main purpose of which is to improve or maintain health (Boruszczak, 2010). The aim of the study is to compare the level of innovation of companies introducing innovations with consumer participation with that of other providers of health tourism services.

Why health tourism? The issues were chosen based on three main premises. Firstly, the growing demand for the development of health tourism services, which is related to the ageing of society and the increasing leisure budget of certain customer groups. This has been indicated by the research done by Deloitte. Although the research covered the United States market, still it may provide guidance for other areas, including the countries of the European Union. As a result of the research, it was diagnosed that the tourism movement related to health tourism doubled in the USA in barely five years (from 2007 to 2011). The drivers of changes should be considered to include economic growth and the related higher per capita revenues (Rudawska, 2009).

Secondly, the dynamic development of medical sciences and enhanced international linkages. This development is a consequence of globalisation processes and a changed perception of medicine as no longer only services with healing functions (helping those in need) but also services with modelling and aesthetic functions. This change results from a holistic and optimistic understanding of the term "health", i.e. a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (according to the World Health Organization (WHO)), ensuring a socially productive life in social, economic and mental terms, also in the spiritual dimension. Responses to the globalisation processes in medical services include e.g. the signing of multilateral contracts on medical care (Reismann, 2010), the liberalization of medical regulations (Lunt & Carrera, 2010; Morgan, 2010) and, in consequence, the efforts taken by certain countries to specialise in health tourism services (Brazil, India, Hungary, Costa Rica).

The third premise encouraging one to address the issue of innovativeness of health tourism is the emerging possibility of co-financing from the European funds (in the programming perspective of 2014-2020) for projects which are most important from the point of view of the social demand and enhanced innovativeness of the economy.

461 providers of health tourism services participated in the research, and the following methods were used: a comparative analysis, a questionnaire (CAWI and PAPI), a standardized interview, and the ranking method.

The research has an interdisciplinary character and covers two research areas, specifically, medicine and the tourism economy.

## 1. Literature review

### 1.1. Innovativeness of enterprises and innovation processes

Innovation is perceived as the major driver of economic growth. The term "innovation" comes from Latin and means the introduction of something new, a reform – based on *innovatio*, which means "renewal", or *innovare*, which means "to renew" (Kopaliński, 1978, p. 433). Therefore, the innovation issues have been discussed in many publications. The most important publications include those by Schumpeter, considered to be the father of innovation theory, along with his outstanding work *The Theory of Economic Growth* (1932). Drucker (1998) was another eminent researcher on these issues. Many studies emerged as part of the innovation studies carried out by the OECD and Eurostat (*Oslo*, 2005).

The main issues of interest to the researchers in the world who deal with the issues of innovativeness in the economy include:

- innovation policy (Furman et al., 2002; Grupp & Mogee, 2004; Balezentis & Balkiene, 2014);
- the innovation drivers in the economy (Hollenstein, 2003; Gault, 2011), including users (Urban, 2013);
- the innovative activity of enterprises (mainly production enterprises), (Tuominen et al., 2004; Perunovic & Christiansen, 2005) with particular consideration given to technological progress and R&D expenditure as well as their roles in the innovation process (Aw et al., 2011; Urban & Czerska, 2016);
- sector-specific research on the innovativeness of the economy (Garcia & Hollanders, 2009); Gallouj (2002), Gallouj & Windrum (2009) and Gault (2011, 2013) should be regarded as the leading researches on the issues of the innovativeness of services at the international level;

- the innovativeness of chosen sectors, e.g. tourism enterprises (Hjalager, 2010; Szymańska, 2009, 2013);
- innovativeness in the context of a knowledge-based economy and in the globalisation process (Rycroft, 2003; Ejdys et al., 2015);
- attempts are also taken to seek innovation in different areas of social activity and to link completely different phenomena (Deshpande & Farley, 2004; Ejdys, 2015) or spatial planning of the city (Hajduk, 2015).

The innovativeness processes proposed as the research theses were designed on the basis of the considerations reported in the literature. As a result of these considerations, eight different models of innovativeness processes were developed. They are presented in Table 1 in the order, in which they appeared in the economic literature regarding the innovation theory, from the 1950s (linear systems) to the last decade (UDI and diffuse systems).

Tab. 1. Innovation processes

| No. | Innovation processes | Characteristics of models |
|---|---|---|
| 1. | Science pushed | A linear model of the innovation process *pushed by science* |
| 2. | Pulled by the market | A linear model of the innovation process *pulled by the market* |
| 3. | Conjugated | Interaction models where the connections among the individual elements result from the couplings between science, market, and enterprise |
| 4. | Integrated and networked systems | Integrated systems based on networked connections – flexible, based on the system of a response related to the consumer, continuous innovation |
| 5. | Parallel | Parallel-internal integration of the company and cooperation with suppliers and consumers, with emphasis placed on linkages and alliances |
| 6. | Open innovation | The concept is based on the conviction that companies may, and even should, seek ideas and ways of creating innovations, not only within their structures but also their environment – among external partners (companies, organisations, and customers) |
| 7. | User-driven innovation (UDI) | Demand-based approach to innovation – based on the conviction that consumers (users) have an increasingly large influence on the available commercial offers, participating in the process of creating products and services which they purchase |
| 8. | Diffuse innovation process | Focus on open innovations inside and outside the organisation. Innovation is created (higher value is generated) by establishing an efficient knowledge flow system (inside and outside) |

Source: own elaboration based on own research and (Szymańska, 2013).

The diffuse innovation process is one of the eight processes (also called systems), which can be distinguished in the literature concerned with innovation theory. Initially, the innovation processes were perceived as a simple consequence of change (the market needs or the results of research) – items 1 and 2 in Table 1. They can be called linear. However, Kline and Rosenberg (1986) noticed that these processes could be more complex and developed the model of a conjugated innovation process. Later, studies were substantially more complex and all of them, starting from the 1990s, have involved advanced computer technologies. The concept of *open innovation* (Chesbrough, 2003) began a new look at the innovation processes. It enabled ideas to go outside of the organisation and for the latter to be open in the process of creating innovations. This turned out to be a factor, which greatly stimulated innovation. The UDI concept was created on this basis. Active participation of customers, even consisting of the co-creation of innovations (new products and services), seems to be the optimum option both for the customers who, in the course of the creation process, notify their needs and ideas, and for entrepreneurs who seek to meet these needs, as this enhances their certainty of sales. In light of the research conducted in Sweden, UDI helps to develop proactive technology that meets the needs and demands of today's senior citizens (Hollenstein, 2003). The researchers show that the concept of the co-creation by customers does not apply only to the creation of innovations, but it can be used, for example, to improve the quality of services (Urban & Czerska, 2016). It should be noted that the present change consists of the transition from technology-driven innovation to innovation driven by customers and other entities outside the enterprise.

This development has continued until today, starting from the first stage, covering the 1950s and

the first half of the 1960s, when the innovation processes unfolded linearly, through more complicated systems, until the contemporary process, which began after 2000, and is characterized by a large focus on knowledge management, for example, a diffuse one. Three of the processes described in the table emphasise the important role of consumers in the innovation process: open, UDI, and diffuse.

### 1.2. Health tourism as a research area

The health tourism market based on health resort-based, spa & wellness, aesthetic medicine, and medical services (Szymańska, 2015; Panfiluk, 2016) develops dynamically as a result of the continuously increasing availability of the services listed above as well as cheap and fast means of transport (Garcia-Altes, 2005). On the one hand, this relates to changing social needs and lifestyles. The change in lifestyles from passive to active rest is based on the enhanced awareness of the significance of health in human life and, at the same time, the launch of actions to improve health and to regenerate the physical, mental, and spiritual strength stressed by the technicised civilisational development (Zuzda et al., 2013). Active rest often entails preventive rehabilitation delivered by visits to health resorts or relaxing activities during visits at spa and wellness clinics, as well as in recent years even medical services. As a result, health improvement is the purpose of tourist travels and, at the same time, the basis for the development of the health tourism market. The demand for health services has become a global phenomenon related to economic growth, increasingly good education, and enhanced revenues (Rudawska, 2009). On the other hand, significant changes can be seen in medicine. A wide offer of high-quality medical services is a response to the globalisation of health services (Lunt & Carrera, 2010; Morgan, 2010). Moreover, the causes of travels for health purposes are considered to include the availability of cheaper, alternative procedures conducted outside of the country of residence (Hazarika, 2010), and the unavailability of services in the country of residence, caused, among others, by procedural barriers to availability and long waiting lists (Burkett, 2007), (in particular, medical services). An important driver of the development of this market is also the incorrect health policy of countries, e.g. 47 million Americans live without health insurance (Amodeo, 2010), and it also results from the signing of multilateral intergovernmental agreements on medical care (Reismann, 2010). Moreover, medical services have gone beyond the traditional perception of medicine based on its healing functions, understood to mean helping those in need, to include modelling or aesthetic functions. Its broader meaning derives from a holistic and optimistic understanding of the term "health", according to the World Health Organization (WHO, 2016) "a state of complete physical, mental and social well-being, ensuring a socially productive life in social, economic and mental terms, also in the spiritual dimension". The actors on the health tourism market include not only persons suffering from specific disease symptoms, but also physically healthy persons who wish to change the everyday rhythm of their lives, to experience new challenges or to improve their current health condition. Because of the factors listed above, health tourism already develops in more than 35 countries in the world (Amodeo, 2010). The main destination markets are the countries which can ensure the care of foreign patients, easy and relatively cheap access to medical procedures, including cardiological, orthopaedic, dental and plastic surgery procedures (Untii, 2009), as well as health resort-based or aesthetic medicine procedures.

In conclusion, it can, therefore, be said that the health tourism market develops as it goes beyond the institutional boundaries in the cooperation between tourism and medicine.

### 1.3. Innovativeness of health tourism

The innovativeness of the tourism sector services has been explored only slightly (Szymańska, 2009; Hjalager, 2010; Camison & Monfort-Mir, 2012). Detailed research on the innovativeness of the tourism services indicates that this is a sector with a low innovativeness level (Hjalager, 2002). No research has been carried out, either, to analyse the factors that drive this negative result (Hjalager, 2009; Szymańska 2009). Therefore, innovations in medicine (Jończyk, 2014) contribute to the growth of tourism and new preferences in the field of tourism affect the search for medical products and their commercialisation. Thus, the development of medicine can be one of the drivers of tourism, while, medical innovativeness can be an indicator for the activities of enterprises operating in the tourism market (Hjalager, 2002).

The research on the innovativeness of health tourism has been carried by few researchers since only recently (Boruszczak, 2010, 2011; Panasiuk et al., 2016), including studies on the innovativeness of the market of health tourism and its forms (Hjalager,

2009; Szymańska, 2015; Panfiluk, 2016). In contrast, the innovativeness of the medical sector has been widely described, mainly in specialist medical journals and also in economic publications. A review of these issues was carried out, among other publications, in the *Report on Innovativeness of the Health Sector in Poland in 2012* (Baczko, 2012). The American, Hungarian and French experiences can turn out to be particularly useful in this respect.

The measurement of the innovativeness of health tourism processes is particularly important given the fact that this is a new tourism segment whose services develop based on two separate sectors, i.e. tourism and medicine. In this combination, the health tourism segment represents an innovative, specialised form of tourism, which counteracts the effect of seasonality and contributes to the growth of the tourism movement. In consequence, it can significantly help stabilise the tourist demand out of season.

In conclusion, a distinct shortage of scientific publications on the innovativeness of health tourism should be noted. Therefore, the exploration of these issues is a pioneering challenge facing researchers.

The following research hypotheses were verified: **H1** – Companies benefiting from the participation of consumers in the process of innovation represent a higher level of innovativeness than other innovative providers of health tourism.

Fig. 1 shows the elements covered by the research. Health tourism services were divided into four basic segments: the health resort-based segment, the spa & wellness segment, the aesthetic medicine segment, and the medical segment – conservative treatments and procedures. Consideration was also given to innovation types, distinguishing product, process, organisational, marketing and social innovations.

## 2. Research method

Market research was carried out on providers of health services since it seems that this group of providers should be most interested in comments and suggestions of customers (patients, persons using health resort-specific services). The entities to be examined were selected on the basis of the Polish Classification of Activity (Section Q, Parts 86 and 87; Section Q, Part 86; Section I, Part 55; Section N, Part 79). The whole size of the examined population was determined based on the local data bank (BDL, 2014) as consisting of 241 393 entities. The size of the representative sample was calculated using the calculator and the research sample. The following parameters were adopted for the calculation of the size of the examined sample: the confidence level of 0.95, the expected fraction size of 0.5 and the maximum error

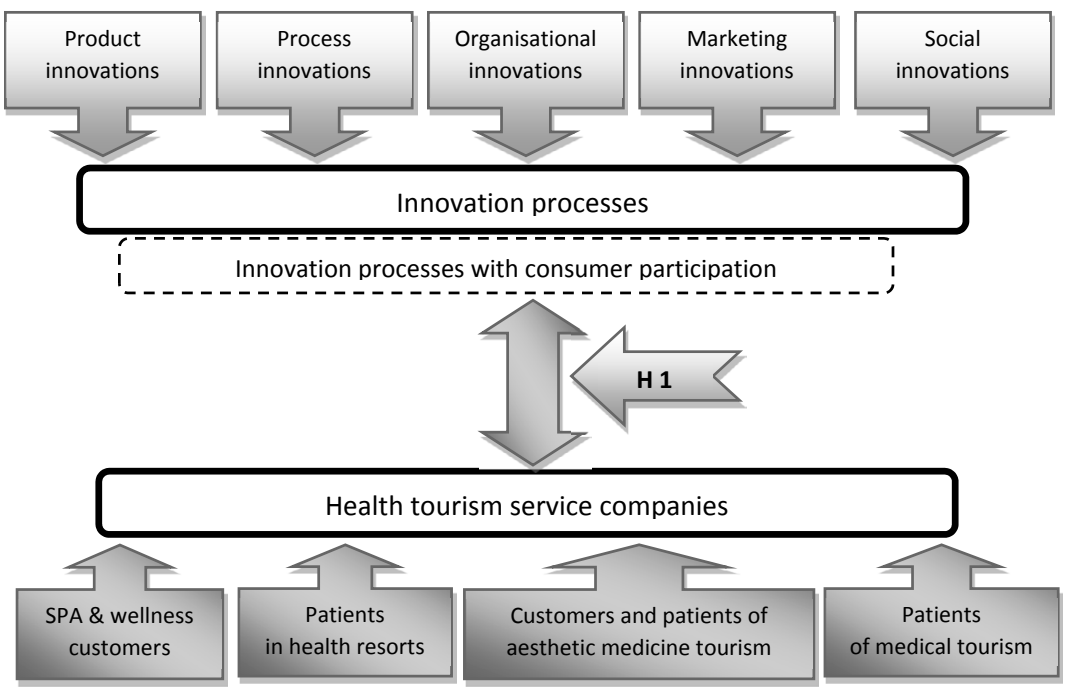


Fig. 1. Theoretical framework

of 0.05. As a result of the calculations, the minimum sample size was determined as 384 entities. The research material was collected using a survey questionnaire as a tool. The research was carried out from November 2015 to March 2016. Three techniques were applied to collect data: CAWI, PAPI, and a telephone interview. The CAWI technique, consisting in the Internet-based mailing of electronic survey questionnaires, proved to be hardly effective, despite the purchase of 35 000 e-mail addresses and the sending out of the link to the questionnaire (placed at the address: ankietka.pl). Ultimately, as a result of the research (with a simple random selection, taking into account the number of entities in particular provinces) carried out from November 2015 to 2016, questionnaires were collected from 461 entities. The interviewers used both tools: a questionnaire in the form of a paper and pencil interview (PAPI), which they filled in during the interview and the CAWI questionnaire, which they filled in after the conversation.

The respondents' task was to indicate the innovations which they had implemented over three years, in the period from 2013 to 2015. To assess the importance of innovations, they were divided into four groups: with a worldwide range (innovations with an absolute character), with a national or regional range or innovation for the firm. The providers of health tourism services could choose one or two out of eight options representing examples of innovation process models (Table 1).

## 3. Research results

The participation in the particular health tourism segment was varied: the health resort-based segment was represented by 79.44% of the investigated entities, the spa & wellness segment by 54.16% of the investigated entities, the aesthetic medicine segment by 41.67% of the investigated entities and the medical segment by 45.83% of the investigated entities. Certain respondents implemented more than one form of health tourism, therefore, the results did not sum up to 100. Over three years, 361 out of 461 respondents implemented at least one innovation, representing 81.87% of the research sample. The successive Figures (Figs. 2–6) show the research results (in absolute numbers) for the innovation processes applied, considering the ranges of the innovations introduced (worldwide, national and regional, and innovation for the firm).

A comparison of the Figures indicates that the largest number of innovations implemented are product-related. An analysis of the results in terms of the range of the implemented innovation demonstrates that in general, the largest number of implemented innovations has a national range. However, a detailed analysis shows that new solutions for the organisation dominate among process innovations, whereas the largest number of social innovations has a regional range.

In the case of product innovations, the largest number of entities implemented innovations having a national range (30.70% of the entities investigated). Innovations of a regional range were implemented by 27.53% of the investigated entities, whereas 24.68% of the investigated entities implemented innovations at the level of the organisation. The largest number of marketing innovations also had a national range (25.63% of the entities investigated).

Innovations for the organisation were implemented by 20.89% of the entities, whereas innovations of a regional range were implemented by 18.53% of the investigated entities. The smallest number of entities (6.96%) implemented innovations that had a worldwide range. An analysis of process innovations shows that most often, they had a national range (6.03% of the investigated entities). Almost twice as few entities implemented innovations having a regional range (3.82%), whereas 1.86% of the entities investigated implemented innovations of a worldwide range.

Summary results are presented in Figs. 7 and 8.

One model of the implementation of innovations clearly dominates: it is the innovation pulled by the market. A certain pattern can be discerned in innovation process models; specifically, as innovation processes open the number of service providers, their use diminishes. Therefore, the more open is a model, the fewer enterprises use it; perhaps apart from the user-driven innovation process. Innovation processes, which require cooperation are not popular and diffuse innovation was the least often indicated (Fig. 7). In turn, a comparison of innovativeness levels indicates that exactly this process is much more effective than the others, since, in the investigated period, the entities that used it implemented 4.55 innovations on average; whereas 3.36 innovations on average were implemented due to a more frequently applied pulled-by-market approach.

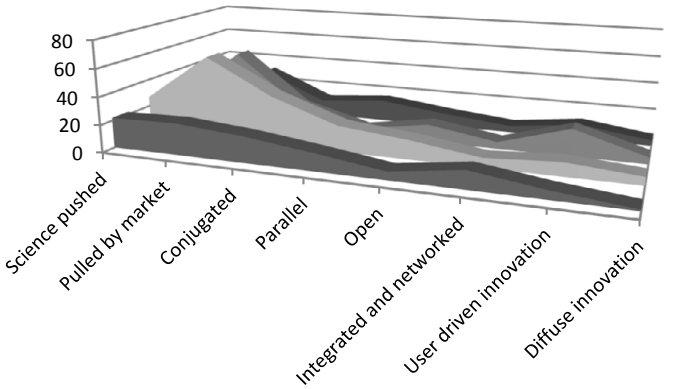


Fig. 2. Product innovations

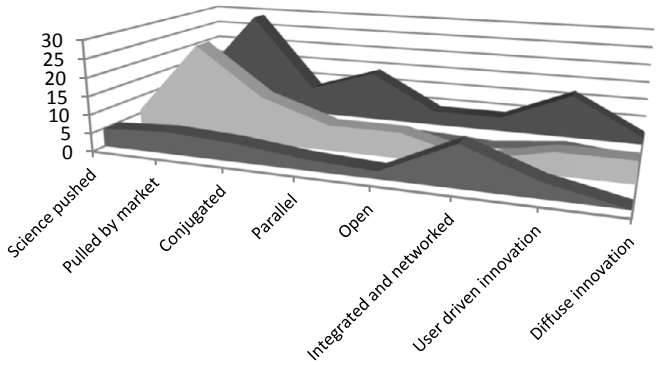


Fig. 3. Process innovations

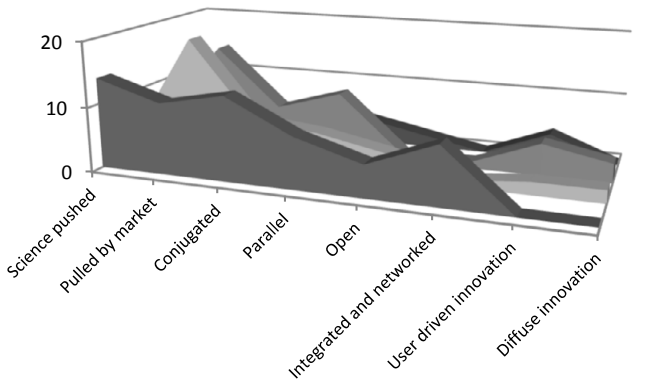


Fig. 4. Organisational innovations

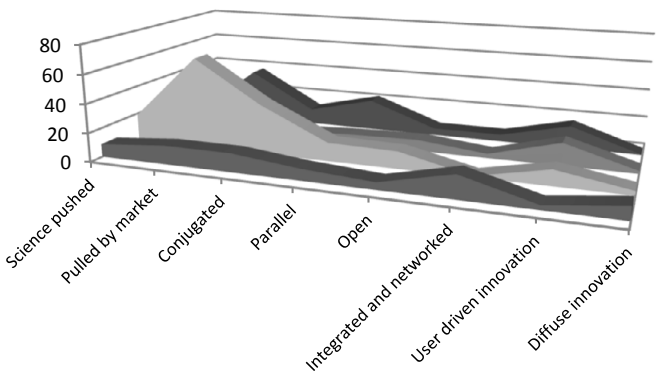


Fig. 5. Marketing innovations

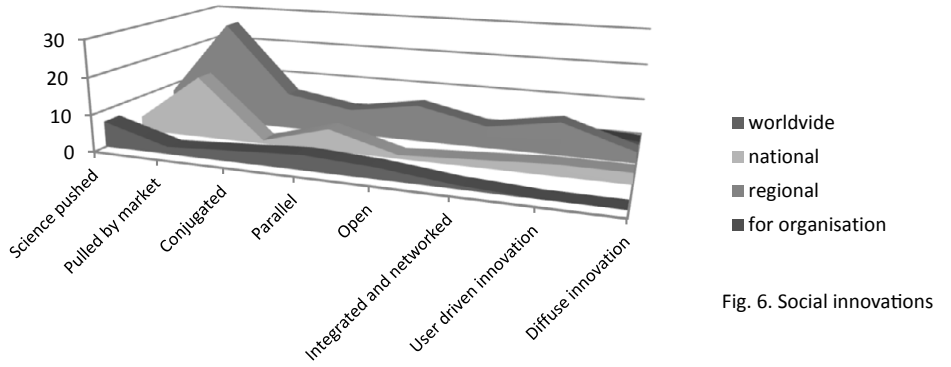


Fig. 6. Social innovations

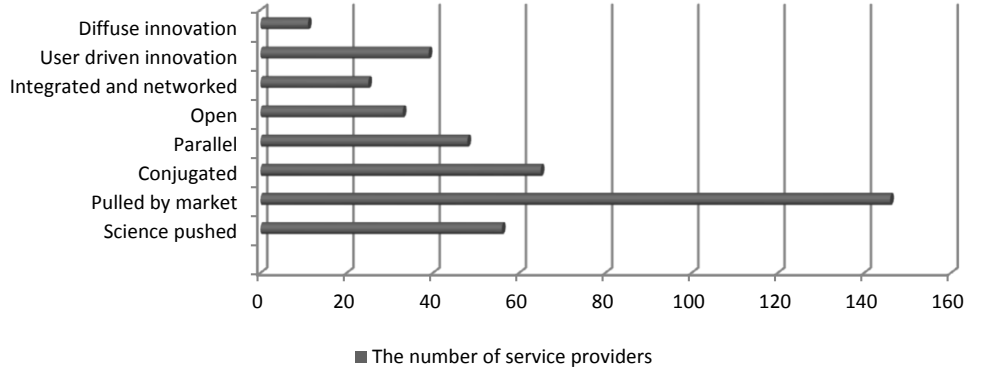


Fig. 7. Innovation processes conducted by health tourism providers

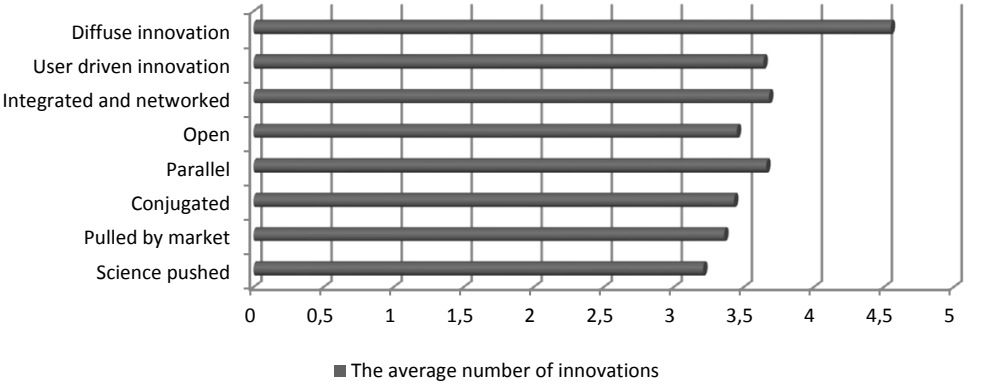


Fig. 8. Average number of innovations by innovation processes

## 4. Discussion

The results of this research should be subjected to a deep discussion. It was indicated in publications by Panasiuk et al. (2016), and Jończyk (2014). It should be considered why enterprises providing services that are so important for society, do not follow their customer opinions in the innovation process. Knowing that there is a large demand for health services, the employees and entrepreneurs do not see the need to engage patients in the process of creating their offer, organisational processes or interactive forms of marketing. The research by Szymańska (2009) indicated that each type of innovation (product, organizational innovation, process including technology innovations) in tourist companies is stimulated by management or owner most of all.

To answer the questions which arose in the course of the research, its scope would have to be expanded. And, perhaps, an extensive study of the needs of customers (patients) would pave the way for their broader cooperation.

## Conclusions

Based on the research, it can be stated that the objective laid down in the Introduction has been achieved. This research enables the formulation of the following conclusions of a theoretical nature, which may make a certain contribution to innovation management theory. First of all, providers of health tourism, working with consumers while creating innovations, perform significantly better in terms of their number and the importance attributed to innovations. This allowed for the positive verification of the hypothesis.

Based on the research results, the following conclusions of an implementing nature can be drawn:

- Innovation processes that require cooperation are popular, but the most popular is the linear process "pulled by market";
- The diffuse innovation process was the most innovative but the least frequently indicated;
- This is particularly important when introducing product innovations, where the voice of users in the process of developing the concept of innovation is extremely important;
- The study of innovation processes should be deepened to enable the implementation of the model by the entities using other, less advanced models in practice.

Summing up, this study was conducted to create a new way of looking at health tourism innovativeness. The researchers hope that this study will build foundations for both innovation theory and practice for entrepreneurs operating at the interface between tourism and medicine for the results of the research to be applied in their economic activities.

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