An Academic Medical Center’s Expansion to the European Union
A Case Study of UPMC’s Joint Projects in Italy and Ireland

Josephine E. Olson, Michael K. Lin, Leslie M. Brady, George A. Huber

Abstract
This case study examines the expansion of the University of Pittsburgh Medical Center (UPMC) to Italy and Ireland in the European Union. The authors use international business theory to help understand why US Academic Medical Centers (AMCs) are beginning to go abroad and, through semistructured interviews with UPMC officials, they examine the market entry issues UPMC faced when expanding to Italy and Ireland. The authors also explain why UPMC’s first successful foreign ventures took place in the European Union. They conclude with comments on several of the strategic issues that AMCs should address if they wish to successfully expand overseas.

Keywords: European Union; Academic Medical Centers; International Service Trade

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Introduction and Objectives

The globalized economy in the early 21st century includes the spread of businesses across borders as some organizations extend their operations, locating in countries with different norms and traditions. Although certain industries (e.g., automobile manufacturing, banking, petroleum) have long had an extensive spread of multinational companies, some service industries are just beginning a similar transformation.¹ The health-care industry has long experienced flows of doctors and nurses across borders. More recently there have been cross-border movements of health insurance, for-profit hospitals, and medical tourism, along with outsourcing of medical records transcriptions, reading of x-rays, and the like.² Now US academic medical centers (AMCs) are also beginning to venture overseas. This study describes one US AMC’s ventures in two European nations, Italy and Ireland, and explains why the European Union was the location of the AMC’s first successful foreign ventures.

The University of Pittsburgh Medical Center (UPMC) is an AMC located in southwestern Pennsylvania that began as a hospital in 1893, adopted its current name in 1990, and has grown to include 16 hospitals.³ Generating revenues in excess of $10 billion in fiscal 2013, UPMC has a portfolio of subsidiary divisions and spin-off companies, including the for-profit International Commercial Services Division (ICSD). Since the mid-1990s, ICSD has entered into agreements with several foreign governmental health-care agencies and foreign health-care organizations, primarily in the European Union, to provide services focused on facilitating access to high quality health care.

Although UPMC had a number of international ventures as of 2013, this study focuses on the first two joint projects of UPMC, both in the European Union, one in Palermo, Italy and the other in Ireland. As UPMC’s first international venture, the relationship between UPMC and the Sicilian government in Palermo began with a 1996 formal agreement to establish a transplant center, known as the Mediterranean Institute for Transplantation and Highly Specialized Therapies


In mid-1999, the first transplant took place, and by 2009, the agreement between UPMC’s ICSD and the Sicilian government expanded to include the Biomedical Research and Biotechnology Center (RIMED).

In the mid-2000s, the top management of UPMC’s Cancer Institute met with Irish government officials to discuss the possibility of developing a comprehensive cancer services network throughout Ireland. By 2006, the Whitfield Cancer Centre had opened its doors to provide cancer services to Irish patients, and by 2007, ICSD had signed a contract to operate a cancer center in Beacon Hospital. In 2008, ICSD signed an agreement to take on management services and enter an equity arrangement for the entire Beacon Hospital.4

To place these operations in perspective, the population of Southwestern Pennsylvania is about four million and UPMC hospitals had 187,326 admissions in 2012. The Sicilian population is about five million and UPMC had 2,795 admissions; the Irish population is over six million and UPMC had 8,909 admissions.5

The primary purpose of this case study is to understand the background that led to UPMC’s expansion to the European Union and the issues it faced during its early expansion. The background and issues that affected UPMC’s expansion were captured primarily through semistructured interviews with top management at UPMC and ICSD who were involved in formulating the strategic changes for UPMC and/or were involved in managing the company’s emergent strategy in Italy and Ireland. The use of semistructured interviews permits researchers to discuss specific topics with informants in a flexible and fluid manner in order to develop and maintain a rapport between interviewer and interviewee.6 Among other advantages, the semistructured approach allows for customization of the order of questions, depending on how the conversation evolves. Using top managers as informants is consistent with practices used in research on organizational strategy and organizational change.7 The interviewees were the members of the top management team at UPMC and ICSD, the group with the most insight into the history of UPMC’s international expansion. These elites are likely to be the best source of information because of their involvement in the growth of these international ventures. We captured not only their perspective about the rationale for these particular international initiatives, but also their perspective about barriers and facilitators of these projects. This protocol, approved by the University of Pittsburgh’s Institutional Review Board (under protocol PRO11060460) and the Office of the General Counsel at UPMC, relied on a snowball sampling technique to obtain referrals for additional interviewees. The list of persons interviewed and the questions that were included in each interview can be found in Appendices I and II.8

5 ICSD management, e-mail message to one of the authors, September 23, 2013.
8 In addition to the structured interviews, one of the coauthors later corresponded with the senior management of ICSD regarding questions from one of the reviewers of an earlier version of this study.
In the rest of this paper, we first review what other US AMCs have done in terms of international expansion, focusing on their forms of market penetration. Next we apply the literature of international business and management to provide a theoretical framework for understanding why US AMCs like UPMC are now expanding abroad and the issues they have to address as they expand. We focus on UPMC’s approach to navigating the environmental and logistical barriers in Italy and Ireland through the interviews with individuals who were involved in UPMC’s strategic implementation in Italy and Ireland. The audience for this research includes managers in health services organizations whose portfolios include the delivery of services in transnational settings and educators who are training future health-care managers to work in international settings. It should also be of interest to European Union and international business scholars.

**US AMCs and International Initiatives**

In 2008 Merritt and his colleagues published a study of the international activities of sixteen US AMCs and major hospitals, including UPMC, and developed a framework to distinguish the type and scale of their international activities.\(^9\) In Table 1, we have attempted to update the international activities and locations (as of 2012) for UPMC and ten other AMCs. It is noteworthy that several of the AMCs have expanded their numbers of international partners since the earlier study.

In a manner similar to the Uppsala internationalization theory that firms become more international in stages as they gain experience,\(^10\) Merritt and his colleagues described the expansion of US AMCs and hospitals into international settings as following four stages. The first stage involves providing education and training abroad; the second entails the delivery of short-term advisory and consulting services to a foreign partner. In the third stage there are long-term management service agreements between the US AMC and health-care organizations abroad; and in the fourth stage the AMC actually owns and operates programs and facilities. Only a handful of AMCs, such as UPMC, have expanded their international operations to the fourth stage, where there is a joint project and sometimes an equity stake. Even when there is equity involved, the AMCs typically employ a joint venture strategy rather than a wholly-owned operation.\(^11\)

A review of the literature of international business, particularly the literature on the international expansion of service industries, can shed light on why some AMCs such as UPMC

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\(^11\) Merritt et al., “Involvements Abroad,” 542–543 [CrossRef].
have begun to operate abroad, on why the European Union was often a first destination, and on the forms of their international operations.

Motivations for International Expansion

Although US AMCs are usually hybrid organizations with nonprofit and for-profit divisions, their interest in and motivations for expansion overseas may be similar in some respects to those of for-profit business organizations. Organizations such as AMCs must generate sufficient revenues to cover costs and to create reserves for risks, investments, research, and the like. Increasing fixed costs and economies of scale may create a need for a larger organization and additional revenues to cover all costs. Dunning argued that “technology intensive firms are increasingly having to widen their markets in order to absorb the huge fixed costs and reap the economics of scale associated with the production and marketing of technology.”\(^\text{12}\) As AMCs develop highly specialized technologies such as electronic health records and associated decision support tools and services, such as transplant medicine, this rationale becomes more relevant. In addition, surpluses from private payers and Medicare began to decline in the 1990s, making it more difficult for teaching hospitals, with their higher cost, to generate sufficient revenue.\(^\text{13}\) The search for more diversified sources of revenue may drive expansion abroad; growth and opportunities are slowing in the United States while demand is growing in other countries as their per capita incomes rise. Foreign expansion also allows firms to potentially reduce risk resulting from events in their home markets. Still other reasons for expanding abroad are to find resources that are cheaper or not available at home and to learn from foreign customers and partners.\(^\text{14}\) In a globalized world, having an internationally recognized brand is also important. Studies have shown that global brands are a signal of quality and trust,\(^\text{15}\) and brands are particularly important for intangible services.\(^\text{16}\) An important mission-related reason for going abroad is that an organization may better serve its overseas clients.\(^\text{17}\)

In the case of AMCs that provide care to foreign patients in their US facilities, international expansion may facilitate service delivery to patients in their home nations. In addition, AMCs have other mission-related reasons for expanding abroad. These include supporting research through

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\(^{17}\) Dunning and Lundan, *Multinational Enterprises*, 70.
international collaborations, reaching new students, providing exchanges for US medical students, developing new models of care and administration, and learning from the collaborations.\textsuperscript{18}

Our interviews with current and former UPMC officials, as well as our reading of Brignano\textsuperscript{19} indicated that all of the above-mentioned motivations were important factors in UPMC’s expansion to Ireland and Italy. UPMC’s founder, Dr. Thomas Detre, was quoted as saying: “If you really want to make it, you have to be, ultimately, internationally known.”\textsuperscript{20} When discussing UPMC’s Irish operations in our interview, Charles Bogosta, Executive Vice President of UPMC and President of UPMC’s ICSD, said: “The initiation of our activity in Ireland...provide[d] us with an opportunity to expand our reputation as a global brand and to seek out sources of revenue.” Joel Yuhas, Senior Vice President of International Operations for UPMC and President and CEO of Beacon Hospital, also referred to UPMC’s activities in Ireland as an additional revenue-generating opportunity and a new business venture that would use “UPMC’s expertise and investment in technology” and “expand UPMC’s visibility and brand abroad.” Discussing ISMETT in Italy, Michael Costelloe, formerly Senior Vice President, UPMC International, talked about the many foreign patients who came to Pittsburgh for liver transplants, and stated that “it’s better for all kinds of reasons that care be delivered closer to patients’ homes.” In addition, he mentioned that ISMETT represented “the very beginning of a possible diversification strategy for UPMC.” He went on to say that it is very difficult for an AMC to expand to another region of the United States, but “the rest of the world [is] an open field.”

Dr. Bruno Gridelli, Medical and Scientific Director of both UPMC’s ICSD and ISMETT, also discussed the fact that people in Sicily who needed liver transplants had to go to other parts of Italy or out of Italy for treatment. Bogosta said that AMCs exist “to provide clinical care to patients. Another reason for international expansion is to provide access to our specialized services to patients that currently do not [have them].” With respect to the need for foreign expansion, Gridelli observed that the “US health care market is saturated and for many large healthcare systems, their only option for expansion is to go abroad.” Finally, Costelloe and Bogosta talked about the enrichment to UPMC that can come from expanding abroad. “[B]y extending our network and having these clinical experiences and research and teaching experiences in other places...we would definitely be richer as an institution by creating these ties and relationships in various parts of the world.” Bogosta stated “It’s about a mutually beneficial exchange (expertise, capabilities, outcomes, economics, operating systems, etc.).”

The one traditional goal for foreign expansion that was not specifically mentioned in the interviews was the search for cheaper or unavailable resources; however, it is likely that this issue was relevant as well. For example, Brignano noted that foreigners coming to the United States for transplants were limited to 10 percent of donated organs, and in 1992 there was discussion of


\textsuperscript{19} Brignano, A History of UPMC.

\textsuperscript{20} Ibid., 149.
reducing that to 5 percent; thus, the availability in Pittsburgh of donated organs for foreigners was a potential issue.21

The issue of UPMC’s brand recognition abroad is complicated. The initial brand recognition in the expansion to Palermo was the reputation of Dr. Thomas E. Starlz, a pioneer in organ transplantation, and the Thomas E. Starlz Transplantation Institute at UPMC. In Ireland, it was the reputation of UPMC’s Cancer Center, established by Charles Bogosta, and its partnership with the University of Pittsburgh Cancer Institute, a National Cancer Institute-designated comprehensive cancer center. The UPMC Cancer Center has a worldwide reputation for “offering high-quality cancer care through an extensive network of sites, providing easy access to patients.” 22 UPMC’s reputation in trauma centers was a factor in its contract in Qatar to provide education, training, and services in Qatar’s emergency medical system.23 UPMC’s 2008 partnership with Newcastle upon Tyne Hospitals in England to implement an electronic records system was based on UPMC’s reputation in application of information technology innovations.24 According to George Huber, former General Counsel and Senior Vice President for UPMC, these separate reputations of UPMC are gradually merging into a global brand for UPMC. As the ICSD’s website states: “UPMC is building a global health care brand that will continue to attract the best and brightest physicians, nurses, researchers and staff for the benefit of all of its patients and business ventures.”25

Requirements for Successful International Expansion

Although a necessary condition, a desire to expand abroad is not a sufficient condition for successful expansion. In 1960, the economist Hymer extended industrial organization theory to explain why multinational corporations existed. In order to overcome the disadvantage of being foreign, a firm had to have some distinct advantage such as lower costs, a better product, a better distribution system, or a better brand.26 Dunning and Rugman later referred to this advantage as “ownership-specific intangible assets.” 27 A somewhat similar argument comes out of the management discipline. According to Barney, to have the potential for sustained competitive advantage:

A firm resource must have four attributes: (a) it must be valuable, in the sense that it exploits opportunities and/or neutralizes threats in a firm’s environment, (b) it must be rare among a firm’s current and potential competition, (c) it must be imperfectly imitable, and (d) there cannot be strategically equivalent substitutes for this resource that are valuable but neither rare or imperfectly imitable.28

This resource-based view (RVB) of the firm is also used in international business theory to explain how foreign firms can successfully compete against domestic firms.29 The resources may include tangible assets, such as financial capital and skilled labor, and intangible assets, such as technology and organizational skills.

American AMCs appear to have some sustainable competitive advantages. Ackerly and his colleagues argued that American AMCs can offer special care and health-care administration. They have been “innovators and have been particularly successful in integrating activities across missions and across the spectrum of discovery and care delivery.”30 Whitman and Raad presented evidence that the United States has led the world in medical innovations, including medical sciences, diagnostics, and therapeutics.31 A recent study showed that the United States has experienced greater improvement in cancer survival rates than Europe.32 An earlier study argued that US AMCs have been leaders in technological development, clinical research, and clinical education.33 Therefore, it is likely that some US AMCs have ownership-specific advantages they can leverage abroad.

From our interviews and our reading of Brignano, we believe the assets of UPMC include tangible ones like financial capital and skilled labor (e.g., transplant doctors) and intangible ones like transplant medicine, management of cancer centers, information technology, a service orientation, and an integrated model of the health care delivery system. In discussing Ireland, Bogosta spoke of UPMC’s “management expertise and financial capital.” Referring to Italy, Costelloe talked about UPMC’s skill in liver transplants. Although there were other liver transplant centers in Italy, he said: “it is one thing to be able to run your own show but it is completely another to have the depth of capability…and go transplant yourself into a second or third location…we had

30 Ackerly et al., *Global Medicine*, 4.
the depth, the bench strength to pull off this kind of thing.” In sum, the competitive advantage that UPMC can offer potential partners includes the tangible assets of an experienced healthcare provider comfortable with employing innovative technologies already tested in Pittsburgh and the intangible assets associated with the know-how and competencies required to deliver high quality services.

Role of the Host Country

In addition to having ownership-specific advantages, an organization that wishes to operate abroad must be accepted by the host country. Some services, such as health care, are considered very sensitive by domestic governments because they serve strategic goals or provide social assistance to citizens; in these cases, domestic organizations are likely to be highly regulated and protected. Cattaneo argued that, due to “the structure of many health systems, the role of the public sector in health, and the difficulty to articulate public and private interests in the provision of health services, foreign direct investment (FDI) in the health sector has remained underdeveloped in many countries.” Javalgi and Martin reviewed some other problems in trading services. Many services require the service provider and customer to come together; this proximity increases “the importance of interpersonal skills which may be challenging in international settings where sharp differences may exist between service providers and customers in terms of language, cultural background, experience with the service, and so on.” An additional barrier for a service like medicine is that professional qualifications are rarely recognized by other countries.

In the introduction to an edited book on transnational service corporations, Sauvant and Mallampally argued that until the 1980s, foreign firms providing services did not have sufficiently better intangible assets to offset the advantages of local service firms. By the end of the 1980s, however, “technological and qualitative revolutions [had] redefined the parameters determining the competitive advantages of firms seeking to establish affiliates abroad” and had “forced governments to revise their protectionist policies with regard to many service industries.”


countries have not only reduced their protective measures but have taken steps to actively attract foreign services.\footnote{Dunning, “Multinational Enterprises,” 49.}

With respect to health-care services, Merritt and his colleagues noted that some Middle Eastern and East Asian countries have created “favorable development environments characterized by progressive and well-funded government programs with increased resources to develop world-class health care services for their citizens.” \footnote{Merritt et al., “Involvements Abroad,” 544 [CrossRef].} Several studies have referred to the expansion of private hospitals in Asia. Cattaneo described a joint venture between Hindustan Latex Ltd and the Acumen Fund (an American NGO) to establish a chain of high-quality, affordable maternity hospitals in India.\footnote{Cattaneo, Trade in Health Services, 6-7.} The World Trade Organization reported the growth of small-scale hospitals with Chinese participation in Asia, the Middle East, and countries of the former Soviet Union.\footnote{World Trade Organization, Council for Trade in Services, Health and Social Services: Background Note by the Secretariat, document no. S/C/W50(97-3558), September 18, 1998, accessed May 8, 2014, http://www.wto.org/English/tratop_e/serv_e/w50.doc.} Pachanee and Wibulpolprasert discussed the expansion of Thai hospitals and Thai hospital management contracts into Cambodia, Myanmar, Bangladesh, and other South and Southeast Asian countries as well as into the Middle East and China.\footnote{Cha-Aim Pachanee and Suwit Wibulpolprasert, “Trade in Health Services in the ASEAN Context,” in Trade and Health: Seeking Common Ground, eds. Chantal Blouin, Jody Heymann, and Nick Draper (Montreal: McGill-Queen’s University Press, 2007), 150–166.}

International and regional agreements may also affect the willingness of host countries to accept foreign medical services. The Uruguay Round of trade talks, completed in 1994, not only led to the creation of the World Trade Organization, but had at least two other outcomes that have facilitated a foreign presence in traditional public services in some countries, including members of the European Union. The Government Procurement Agreement went into effect in 1996 for participating countries, including European Union members, and opened public contracts to international competition.\footnote{Declan Gaffney, Allyson M. Pollock, David Price, and Jean Shaoul, “The Politics of the Private Finance Initiative and the New NHS,” British Medical Journal 319 (1999): 249–253 [CrossRef].}

The General Agreement for Trade in Services (GATS) was another outcome of the Uruguay Round of trade talks. Its purpose is to increase international trade in services, including health-care services.\footnote{Leah Belsky, Leah Reidar Lie, Aaditya Mattoo, Ezekiel J. Emanuel, and Gopal Sreenivasan, “The General Agreement on Trade in Services: Implications for Health Policy Makers,” Health Affairs 23, no. 3 (2004): 137–145 [CrossRef]; Richard Smith Chantal Blouin, and Nick Drager, “Trade in Health Services and the GATS: Introduction and Summary,” in International Trade in Health Services and the GATS: Current Issues and Debates, eds. Chantal Blouin, Nick Drager, and Richard Smith (Herndon, VA: World Bank Publications, 2006), 1–15.} By including “commercial presence” in its definitions of service trade, GATS essentially permits foreign direct investment and other forms of physical presence in a country in order to provide a service.\footnote{Mashayekhi et al., “Strategic Considerations,” 24.} Few countries have made full commitment to free trade in the health service sector, but some countries have provided access to foreign insurance providers and permit a
commercial presence of foreign health-care providers. Developed countries have been more willing to open trade in health care than developing countries. The European Union and the United States both have special commitments on hospital service, and the European Union also has commitments on medical, dental, and nursing services. The application of GATS to health-care service is quite controversial, with some arguing that it will force privatization and make it more difficult for member states to protect their public health services, and others arguing that “GATS allows enough flexibility for countries to maintain regulations that are essential to the pursuit of important policy objectives, such as the protection of public health.”

Within the European Union, the establishment of the EU Single Market in 1993 may also have facilitated the likelihood that UPMC could establish a presence in member countries such as Italy and Ireland. The 1957 Treaty of Rome, which is the basic law governing the European Union, does not mention health-care systems and each EU country has its own health system, the principles of which go back many years. However, the EU Single Market has made many aspects of health-care regulation more uniform. According to Sbragia, the final shape of a single market in health care is still unclear, but some form of cross-border health care will evolve. She argued that the European Commission wants more pooling of medical expertise across Europe, more cooperation between health systems, and more uniformity of standards. Gridelli said that doctors and other medical professionals can now practice in other EU countries because of the EU Single Market, but language and cultural differences mean that few actually do, at least in Sicily.

Even more important than the EU Single Market for foreign medical care providers may be the European Union’s promotion of public-private partnerships (PPPs). Although some PPPs existed in the 1980s and earlier, their growth in the European Union expanded after the Maastricht Treaty of 1992 placed limits on the size of government deficits and debts. Subsequently, the European Commission has encouraged PPPs in services such as transport, hospitals, and education, as they supposedly shift borrowing costs to the private sector. PPPs in Europe have grown rapidly.

51 Cattaneo, Trade in Health Services, 28.
55 Gaffney et al., “The Politics of the Private Finance Initiative”.

Pittsburgh Papers on the European Union
since 1995.\textsuperscript{56} They are most common in the United Kingdom, but their numbers have increased in the rest of Europe in recent years.\textsuperscript{57} In an article written about ten years ago, Thompson and McKee reported that Italy and Spain were using PPPs in hospital building and that Ireland, Greece, and Portugal were considering them. They reported that in Italy, regional governments funded hospitals and planned the hospitals in consultation with local governments, while in Ireland hospital planning was a centralized activity. They also noted that PPPs, along with GATS, were opening the European hospital sector to the possibility of foreign direct investment.\textsuperscript{58}

The importance of being accepted by national and local governments is very clear in the interviews with UPMC officials and in the history of some past international failures. Brignano reviewed some of the efforts that UPMC made in the Middle East and South America in the 1980s and 1990s, but said these efforts did not last. As Detre reportedly said, the efforts in Egypt were not “timely,”\textsuperscript{59} possibly due to cultural, political, and economic barriers. The European Union in the 1990s and 2000s was a different matter; in both Italy and Ireland, government agencies sought the help of UPMC. Bogosta reported that in Italy the Sicilian government recognized the need for a transplant center in Sicily and wanted to save money by providing high-level transplant services in the region. Yuhas mentioned that public-private partnerships could be easily negotiated within an EU environment. Gridelli also mentioned that “in 1992 a law was passed [in Italy] promoting the creation of a public/private partnership in which a public hospital could be managed privately.” In Ireland, Bogosta said, “they were seeking both [UPMC’s] management expertise and our financial capital.” Additional issues UPMC faced in Italy and Ireland are discussed in a later section of this paper, after we discuss forms in which international services can take place.

\textit{Forms of International Expansion}

Beyond the Uppsala internationalization theory that argues that firms expand internationally in stages as they gain experience, there is an extensive literature on the choice of entry modes,\textsuperscript{60} but none that we could find (other than the study by Merritt and his colleagues) focuses directly on AMC entry modes. Early literature focused primarily on manufacturing and

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\textsuperscript{57} Hall, \textit{PPPs in the EU}, 4.


\textsuperscript{59} Brignano, \textit{A History of UPMC}, 172.

tended to distinguish between exporting and wholly-owned foreign subsidiaries.\(^\text{61}\) The traditional view was that firms began with exporting and then might move to wholly-owned foreign production. This research later widened to include other modes, such as turnkey operations, management contracts, licensing, franchising, and joint ventures.

Brothers and Hennart provided a critical review of four major approaches to entry mode: transaction cost analysis (TCA), the resource-based view (RBV), institutional theory, and Dunning’s eclectic framework. The issue of protecting specific assets and intellectual property is the key to TCA; if contracts are difficult to write or enforce, wholly-owned subsidiaries are preferred over licensing, franchising, or joint ventures. The RBV, which we discussed earlier, argues that firms with valuable intangible assets or organizational capabilities will generally choose modes with high levels of control, usually wholly-owned subsidiaries. Institutional theory considers the effect of the host countries’ institutional environments on choice of mode; earlier we discussed some aspects of host countries. Finally, they argued that Dunning’s eclectic framework, which includes ownership (similar to RBV), location (similar to institutional theory), and internalization (similar to TCA), can be thought of as a way of combining the insights of the three other theories.\(^\text{62}\) The study also mentioned that Hennart believes the primary distinction between contracts and equity is their effect on the remunerations of suppliers.

A number of studies have considered whether the entry mode theories developed for manufactured goods can be applied to services;\(^\text{63}\) however, health-care services are not specifically discussed. One interesting approach of some papers was to distinguish between “exportable and nonexportable”\(^\text{64}\) services, or “separable or inseparable” services.\(^\text{65}\) (Other writers referred to these as “hard and soft” services.\(^\text{66}\)) In general, the idea is whether or not the service must be produced in contact with the customer; clearly, many forms of medical care, such as surgery and chemotherapy, are inseparable services. Another distinction regards the amount of high-level human capital required.\(^\text{67}\) Many of these studies concluded that firms with inseparable services and high human capital requirements should use high control methods of entry, usually implying wholly-owned


\(^{64}\) Erramilli, “The Experience Factor.” [CrossRef]

\(^{65}\) Bouquet et al., “Foreign Expansion in Service Industries.” [CrossRef]

\(^{66}\) Blomstermo et al., “Choice of Foreign Market Entry Mode.” [CrossRef]

\(^{67}\) Bouquet et al., “Foreign Expansion in Service Industries.” [CrossRef]
Although much of medical care is inseparable and with high human capital requirements, no US academic medical center has yet adopted a strategy of wholly-owned subsidiaries, and few have any equity investment such as a joint venture.

There is, however, some interesting discussion in research on hotels as to whether control can be achieved without ownership. The hotel industry is characterized by separation of ownership and management; 65 percent of multinational hotel properties were franchises or had management service contracts as of 2002. Although the Quer article focused on the reasons for equity ownership, the other papers discussed issues such as whether management contracts provided more control than franchises or could be a substitute for ownership. For example, Dunning and McQueen noted that ownership-specific advantages can be achieved through contracts, because the “ownership advantages take the form of human capital rather than superior technology embodied in physical capital.” Contractor and Kundu concluded that “contractual relationships can effectively substitute for equity ownership when the fear of partner opportunism is reduced by the global company’s ongoing control over key strategic assets”; they suggested that the hotel business might be a guide for other service industries considering alternative nonequity modes of doing business.

Recent literature distinguishes many forms of international business in the space between exporting and equity investments abroad. For example, the theme of the World Investment Report 2011 was nonequity modes of international production. In his introduction to the volume, Secretary General of the United Nations, Ban Ki-moon, wrote: “Increasingly transnational corporations are engaging with economies through a broadening array of production and investment models, such as contract manufacturing and farming, service outsourcing, franchising and

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69 Merritt et al., “Involvements Abroad.” [CrossRef]


72 Dunning and McQueen, “Eclectic Theory of International Production,” 264.

73 Contractor and Kundu, “Modal Choice in a World of Alliances,” 353 [CrossRef].

74 Nonequity modes of international business plus joint ventures are often referred to as “international collaborative ventures” or “strategic alliances” in the international business literature.
licensing.” These nonequity modes (NEMs) or “strategic alliances” are growing more rapidly than the industries in which they operate.

Ban’s introduction defined NEMs as follows: “NEMs are in essence a transfer of intellectual property to a host-country firm under the protection of a contract.” Training often is associated with NEMs. There are three advantages of NEMs that may be relevant to the health-care industry: (1) low upfront capital and working capital requirements; (2) reduced exposure to risk; and (3) flexibility in adapting to change. Benito and Welch discussed the growth of strategic alliances since the mid-1980s and weaknesses in the entry mode literature; they argued that modes are often used in combination and also that not enough attention was being paid to the dynamics of foreign market servicing. They emphasized the importance of developing networks in the process of internationalization; they also recommended case studies to understand the process of internationalization over time. Contractor and Lorange discussed the rapid growth of alliances and offered some explanations for this change. They argued that fear of losing intellectual property has been reduced by the system of protection under the World Trade Organization (the Agreement on Trade Related Aspects of Intellectual Property Rights, or TRIPS) and by greater codification of knowledge, reducing the cost of transferring, due to the adaption of information technology.

From our limited review of the entry mode literature, it appears that the Uppsala theory of gradual internationalization, along with the theories of strategic alliances or NEMs, have the most relevance for understanding the international expansion of AMCs, and we consider this study to be one of the case studies recommended by Benito and Welch. However, more studies of AMCs as they expand overseas are needed to determine what modes will be the norm as internationalization of AMCs becomes more common.

Although this paper focuses on two ventures of UPMC in the European Union, it should be noted that UPMC has had other international projects inside and outside the European Union that fall into NEMs, and Merritt and his colleagues suggested that most AMC activities abroad are in the NEM category. UPMC ran an emergency medicine training program with the Hamad Medical Corporation in Qatar and provided information technology solutions in England to help Newcastle upon Tyne hospitals develop a medical records system. UPMC is now providing clinical teaching in family medicine for a teaching hospital in Japan, and it is partnering with a medical diagnostic laboratory in China to provide second opinion pathology consultations from Pittsburgh. In December 2011, UPMC announced a collaboration with the Asian Centre for Liver Diseases and

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76 Ibid., xx.
77 Ibid., 125.
80 Merritt et al., “Involvements Abroad,” 545 [CrossRef].
Transplantation to establish a liver and kidney transplant program in Singapore.\textsuperscript{82} And, in July 2012, UPMC announced that it would conduct a feasibility study for a national research cancer center in Kazakhstan.\textsuperscript{83}

As noted earlier, Merritt and his colleagues mentioned that only a few AMCs, of which UPMC is one, have taken equity positions abroad; most hospitals and AMCs have not committed large amounts of their own funds. “Instead, funds are generally provided by the sponsoring organization in the host country…. Joint ventures have been limited, with some exceptions such as Johns Hopkins’ involvement in Singapore; M.D. Anderson’s in Spain; and UPMC’s in Italy\textsuperscript{84} and Ireland.\textsuperscript{85} Given the sensitive nature and complex regulation of the health-care industries in most countries, NEMs and joint projects (strategic alliances) in a public-private partnership appear to be the better equity approach. This view is supported by Ackerly and his colleagues at the Duke Medical Center, who wrote:

\begin{quote}
[P]artnerships are critical in global medicine. The problems are too large and the solutions too complicated to be addressed alone…. Given the complexities of health care and medicine, the socio-legal and political issues in different countries and the significant resources and support needed, an emerging model of effective implementation is through public-private partnerships (PPP).\textsuperscript{86}
\end{quote}

Comments from UPMC officials support the idea that a joint project or joint venture is the way to go. Costelloe said that a “critical part of UPMC’s strategy is that you never go alone; you really want to partner, not just have local consultants or local employees, but an institutional partner of some kind that is local and is bringing you into the system and you are not trying to drop out of the sky.” In the case of ISMETT, the partners are two public hospitals, Civico and Cervello, run by the regional Sicilian government. In Ireland, the joint venture partners are private, but they are local, and there is also some government involvement.

**UPMC’s Relatively Early Internationalization**

Although the international business literature reviewed can help explain the international expansion of academic medical centers like UPMC, it does not explain why UPMC was one of the first AMCs to move into the European Union, particularly with long-term contracts and equity investments. However, some insights are provided by research on management and international entrepreneurship. Hambrick and Mason offered an “upper echelons perspective” that


\textsuperscript{84} Although they refer to the project in Italy as a joint venture, it actually is not one, as UPMC does not have an equity investment there. It is a very extensive management contract and could be called a strategic alliance. The project in Ireland is a joint venture, as UPMC has an equity position in Beacon Hospital.

\textsuperscript{85} Merritt et al., “Involvements Abroad,” 545 [CrossRef].

\textsuperscript{86} Ackerly et al., *Global Medicine*, 7.
argued that organizational outcomes were at least partially the result of the background of top managers. \(^{87}\) Studies of entrepreneurial firms that have internationalized at an early stage found that these entrepreneurs tended to have prior international experience. \(^{88}\)

UPMC’s early expansion abroad is likely explained by the background of Dr. Detre, UPMC’s founding director. Detre was born in Hungary and moved to Italy in 1947 to escape the Communists. Later he worked at Yale University in the United States and then was hired by the University of Pittsburgh. He loved to travel abroad to lecture and teach, and he was especially fond of Italy. As Brignano described in her book, there were invitations from Turkey, Egypt and Saudi Arabia to set up programs, which did not come to fruition. Efforts were also made in Latin America in the 1980s and 1990s. Jeffrey Romoff, Detre’s right-hand man and later successor, shared Detre’s passion for international expansion and for making bold moves. The opportunity finally arose in Italy in the mid-1990s, with the invitation to create an organ transplant center. \(^{89}\)

**UPMC’s Expansion to Italy and Ireland**

Many of the issues UPMC faced in creating ISMETT are described in detail in Brignano’s book. The personnel issues at ISMETT and in Ireland will be described in another paper; here we provide a brief summary of the issues UPMC faced in creating ISMETT in Palermo and the cancer centers in Ireland.

As noted earlier, the Italian government had passed a law that allowed for PPPs and also allowed the national government to help fund new enterprises in various regions of the country. \(^{90}\) In the 1990s there were no transplant centers in Sicily, and patients had to go to other parts of Italy or outside of Italy to get transplants. Gridelli explained that a group of Sicilian doctors wanted to create a liver transplant center in Palermo. At the same time, UPMC had the idea of creating a transplant center in Italy to be near many of its foreign transplant patients. An Italian transplant surgeon, Dr. Ignacio Marino, who had worked at UPMC but also traveled back to Italy and was part Sicilian, was influential in the early stages. The Sicilian government and the mayor of Palermo were also interested in having a transplant center in Palermo.

In 1996, just as a letter of intent was about to be signed by the local and national governments with UPMC, a new national government raised issues and wanted significant changes in the letter. Fortunately, the new health minister, Rosy Bindi, favored the project and signed the original letter of agreement. \(^{91}\) Costelloe reported that Bindi told the UPMC team that if they could

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\(^{87}\) Hambrick and Mason, “Upper Echelons.”


\(^{91}\) Ibid., 175–176.

\(^{91}\) Ibid., 178.
give her a plan for a turnkey project in six months, UPMC could have the government funding for the project.

Despite the support of Italian and Sicilian officials, others were against the creation of an American transplant center in Palermo. Sicily is one of the poorest parts of Italy. There is a great deal of poverty, unemployment, underdevelopment, political patronage, and corruption.\footnote{Alberta Sbragia, Italy: A Regionalized Nation, presentation to UPMC-ICSD employees, Pittsburgh, PA, May 13, 2009.} The Mafia is a strong part of the Sicilian culture, and it is based in Palermo. The presence of the Mafia in Palermo indirectly affected the implementation of ISMETT. In 1992, two famous anti-Mafia prosecutors, Giovanni Falcone and Paolo Borsellino, were murdered by the Mafia. After these killings, there were extensive efforts to eliminate the Mafia throughout Sicily; Costelloe noted that in 1998 when ISMETT began construction, these efforts were still going on. The first contractor awarded the ISMETT project was unable to obtain a required certificate from the police indicating that he was free of Mafia connections. In addition, the director of Civico Hospital would not sign the authorization for the land for the new ISMETT facility for six months. Then there was a lawsuit from the construction contractor who could not obtain the anti-Mafia certificate, which delayed things for 18 months. The original plan was for the new facility to open in 2000, but it actually opened in 2004.

Another problem that UPMC did not sufficiently consider at the beginning was the level of development of the primary and secondary health-care systems. Costelloe said that in the early phase, when they had a temporary facility inside one of the public hospitals, they only had a pathology lab; they did not have a clinical lab, a blood bank, radiology, or much clinical support. “You would not do that unless you thought that these services were readily available in the environment….But we soon found out that, for example, for lab tests, they did not have the lab tests that we needed. Or, if you wanted a CT scan you would have to wait three months and the blood bank did not have a good supply or delivery system.” Because of the need to develop adequate infrastructure, the opening of ISMETT in its temporary location was delayed from October 1998 to July 1999.

The eventual success of ISMETT has now led to the creation of the RIMED research center in Palermo. It is another example of public-private cooperation. According to Gridelli, medical research in Italy is excellent, but there is a need to improve the transference of this research to commercial applications. Construction for RIMED was due to start in 2013 and to be completed in 2016. It will create 600 new high-level job opportunities (primarily in clinical research), and will have a large impact on employment in Sicily.

The first large venture overseas is probably the most difficult, particularly if it is a complicated project such as ISMETT. Expansion to cancer centers in Ireland in the mid-2000s was apparently less difficult. According to Bogosta, the initiation of cancer centers in Ireland was also opportunistic, but gave UPMC another opportunity to expand its reputation as a global brand and diversify its sources of revenue. Yuhas reported that the Irish were interested in a partnership with UPMC for financial capital, knowledge transfer, strategies to support research and clinical program
An Academic Medical Center’s Expansion into the European Union

According to Yuhas, Ireland has a socialized model of health care, and treatment is essentially free if received in a public hospital. However, waiting times to be seen and treated can be extraordinarily long, and therefore 60 percent of the people in Ireland carry private insurance. Private hospitals such as UPMC’s Beacon Hospital have developed over the last twenty-five years to address elective surgical waiting lists in the public sector.

Unlike most other private hospitals that focus on elective surgical procedures, Beacon Hospital has developed into Ireland’s first and only full-service community teaching hospital. It is affiliated with the Royal College of Surgeons in Ireland (RCSI) and has evolved into a teaching organization, including collaborating with the RCSI on rotations of registrars (residents) between the public hospitals and Beacon. UPMC Beacon also operates Ireland’s busiest emergency department. Yuhas commented: “Traditionally, the public system has never collaborated with the private system, but UPMC has challenged this model by working directly with the Government in areas like cancer care, to create structures (via service level agreements) where patients, insured or not, can access care through a reimbursement scheme with the Health Service Executive (HSE), the public system.”

Although the Irish medical and social culture is more similar to the American culture than the Sicilian culture, there were still issues for UPMC in starting up in Ireland. Bogosta reported that there were some cultural barriers related to management control, and noted that “there were also a significant amount of negotiations regarding the proposed management fees.” Yuhas observed that “not being an ‘Irish’ organization yields some cultural barriers to entry when many of the business relationships are built on long-standing social relationships.” Other problems included market volatility, politics associated with market entry, and lack of understanding of the breadth and depth of UPMC’s experience. Yuhas said there are political parties that are against the concept of private health care and parties which embrace privatization as a means of improving access to key services. “However, in general, UPMC’s arrival to the health care landscape in Ireland is respected and [UPMC is] recognized as a high quality provider.” Bogosta added that UPMC is now meeting its objectives in Ireland, although it took longer than expected.

Conclusion and Implications

UPMC’s foray into operations in the European Union (and now other locations) may be viewed as an extension of its mission to provide world-class health care in partnership with academic researchers devoted to advancing the state of knowledge. In the 1990’s, Thomas Detre, UPMC’s founding director, believed that it was important to be recognized beyond regional and national borders. Detre’s successor, Jeffrey Romoff, saw that the strategic opportunities in international

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91 For example, in 2007 the median wait time for all medical procedures was 3.5 months; in 2010, it had fallen to 2.1 months. From Valerie Moran, Charles Normand and Alan Smith, “Chapter 8: Ireland,” in Waiting Time Policies in the Health Sector: What Works? eds. Luigi Siciliani, Michael Borowitz, and Valerie Moran (Paris: OECD Healthy Policy Studies, OECS Publishing, 2013), 147–166, 162.
expansion could benefit the host nation, UPMC, and the Southwestern Pennsylvania region by providing jobs as UPMC transformed into a global health enterprise. UPMC now considers its long term strategy into foreign markets to be the following:

UPMC seeks to continue to augment the existing clinical capabilities within these markets in order to remain at the forefront of the provision of highly specialized medical care. This includes the implementation of new clinical models, additional treatment modalities and clinical and information technologies. Because the U.S. invests highly in healthcare, the intellectual property developed in Southwestern PA can be continually applied in these markets, driven by the evolution of the US healthcare market. In addition to the new models of care developed in Pittsburgh, UPMC applies knowledge gathered by operating in a range of foreign markets not only across foreign markets, but also within the Southwestern PA region.

The relatively successful expansion abroad of UPMC and a few other AMCs may encourage other academic medical centers to consider international expansions. However, it should be noted that going abroad is still risky and complicated. Even in the European Union it took longer than expected for both ISMETT in Italy and the cancer centers and Beacon hospital in Ireland to be considered successful. Some earlier efforts in the Middle East were ended because of lack of commitment by those countries. A 2009 plan to operate a hospital in Cyprus in the European Union has been postponed because of the economic conditions in the country. UPMC’s ICSD management summarized the benefits and risks of foreign operations as follows:

This is an opportunity to expand unique services and capabilities to new patient populations. This expansion provides UPMC with diversification of both our economic and clinical models and promotes continued growth overseas as well as maintaining UPMC’s position as a clinical leader internationally. The risks that UPMC faces are similar to those of any company expanding overseas and include the uncertainty of operating in foreign regulatory and clinical environments, fluctuations in foreign currency, and the challenges of doing business across varied cultures.

The forms of expansion can vary depending on the time span and type of service provided; most now involve a type of contract, such as a management contract to run a hospital. It is still unclear whether equity investments will become more common in the future. According to the UPMC management, it is very important to have strong local partners who understand the political and health care environment; thus strategic alliances such as joint projects and joint ventures seem more likely than wholly-owned operations.

The AMC managers running offshore programs must be culturally sensitive, flexible, and open to new ideas. They must learn about the political and social culture of the country and the medical system in which they will be operating. They have to understand labor laws and

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94 Brignano, A History of UPMC, 195.
95 ICSD management, e-mail message to author, September 23, 2013.
96 We were not provided with data to determine how “successful” in a financial sense.
97 Twedt, “UPMC Banking on Continuing.”
98 ICSD management, e-mail message to author, September 23, 2013.
reimbursement systems. The AMC managers must understand the quality of primary and secondary health care systems and be prepared to educate their suppliers. Bogosta said they must be able to “interface effectively with government officials.” It is important to understand and effectively use informal channels, as they may be more important than the formal channels. They need to realize that it will take a long time for them to be accepted “as part of the fabric rather than a carpetbagger.” Even with good partners, an AMC can expect to have opposition from groups who compete with the new foreign presence. Since in most cases host country government funding is involved, Gridelli argued it is especially important to show that the AMC is “doing good work efficiently.” While the core activities of all AMC centers should be the same—“that is, they should provide the same quality of care, they need to adapt some things to the different regions.”

Although it is clearly difficult to expand abroad successfully, there are many benefits to be had beyond the simple financial ones. Learning is a two way street. Doctors, nurses, technicians and managers on both sides can benefit from their experiences with another culture and another way of providing medical services. Internationalization should be an enriching experience for all.
Table 1. International Activities of US AMCs as of 2012

<table>
<thead>
<tr>
<th>College/University</th>
<th>International Presence</th>
<th>Location(s)</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baylor College of Medicine (<a href="http://www.bipai.org">www.bipai.org</a>)</td>
<td>The Baylor College of Medicine International Pediatric AIDS Initiative</td>
<td>Sub-Saharan Africa, Romania</td>
<td>Care, treatment, health professional training in case, and treatment of HIV infected children</td>
</tr>
<tr>
<td>Cleveland Clinic Lerner College of Medicine (<a href="http://www.clevelandclinic.org/canada/default.aspx">www.clevelandclinic.org/canada/default.aspx</a>) (<a href="http://www.skmc.ae/en-us/Pages/Home.aspx">www.skmc.ae/en-us/Pages/Home.aspx</a>)</td>
<td>Cleveland Clinic Canada, Sheikh Khalifa Medical Center, Cleveland Clinic Abu Dhabi (opens 2013)</td>
<td>Toronto, Canada Abu Dhabi, UAE</td>
<td>Comprehensive health care</td>
</tr>
<tr>
<td>Duke University School of Medicine <a href="http://medschool.duke.edu/education/duke-nus">http://medschool.duke.edu/education/duke-nus</a></td>
<td>Duke – NUS Graduate Medical School</td>
<td>Singapore</td>
<td>A strategic collaboration begun in 2005 to create a medical school</td>
</tr>
<tr>
<td>Geisel School of Medicine, Dartmouth (<a href="http://www.dmsdardar.org/">www.dmsdardar.org/</a>)</td>
<td>Dar Dar Project</td>
<td>Dar es Salaam, Tanzania</td>
<td>HIV/AIDS clinical trials, pediatric HIV program, and faculty/student exchanges</td>
</tr>
<tr>
<td>Harvard Medical School (HMS) <a href="http://www.dhfmr.hms.harvard.edu">www.dhfmr.hms.harvard.edu</a></td>
<td>Dubai Harvard Foundation for Medical Research</td>
<td>UAE</td>
<td>To replicate the HMS research model in Dubai and the Middle East.</td>
</tr>
<tr>
<td>Johns Hopkins University School of Medicine <a href="http://www.hopkinsmedicine.org/international/international_affiliations/">www.hopkinsmedicine.org/international/international_affiliations/</a></td>
<td>Anadlou Medical Center, Clemenceau Medical Center, Clinica Las Condes, Tokyo Medical Center, Johns Hopkins International Medical Center, and others</td>
<td>Turkey, Lebanon, Chile, Japan, Singapore, and other locations</td>
<td>Full care medical provider; Johns Hopkins provides a variety of medical services to hospitals in Lebanon, Chile, and Japan; Oncology care</td>
</tr>
<tr>
<td>University of California, San Francisco School of Medicine <a href="http://www.currytbcenter.ucsf.edu">www.currytbcenter.ucsf.edu</a></td>
<td>Curry International Tuberculosis Center</td>
<td>Kenya, Tanzania, India, Indonesia, Mexico</td>
<td>Promote the development of national tuberculosis programs</td>
</tr>
<tr>
<td>University of North Carolina (UNC) at Chapel Hill School of Medicine <a href="http://globalhealth.unc.edu/">http://globalhealth.unc.edu/</a></td>
<td>Institute for Global Health and Infectious Disease, UNC – Project Uganda, UNC – Project Malawi</td>
<td>Malawi, Uganda Other projects in Africa, Asia, and Latin America</td>
<td>Research, care, and training programs; establish first pediatric intensive care unit, focused on pediatric cardiac surgery</td>
</tr>
<tr>
<td>University of Pittsburgh Medical Center (UPMC) <a href="http://www.upmc.com/about/partners/csd/locations/Pages/default.aspx">http://www.upmc.com/about/partners/csd/locations/Pages/default.aspx</a></td>
<td>ISMETT, Beacon Hospital, Others</td>
<td>Italy, Ireland, China, Japan, Singapore, Kazakhstan</td>
<td>Transplant center, cancer centers, second opinions, etc.</td>
</tr>
<tr>
<td>The University of Texas MD Anderson Center <a href="http://www.mdanderson.org/about-us/facts-and-history/institutional-profile/index.html">http://www.mdanderson.org/about-us/facts-and-history/institutional-profile/index.html</a></td>
<td>MD Anderson Cancer Center</td>
<td>Spain</td>
<td>Dedicated solely to cancer treatment and research</td>
</tr>
<tr>
<td>Weill Cornell Medical College <a href="http://qatar-weill.cornell.edu/">http://qatar-weill.cornell.edu/</a></td>
<td>Weill Cornell Medical Center in Qatar</td>
<td>Qatar</td>
<td>Offers six-year premedical and medical education leading to a Cornell MD</td>
</tr>
</tbody>
</table>

Sources: Websites listed in the table
Appendix I

UPMC and ICSD Current or Former Top Managers Interviewed for this Study

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Experience</th>
<th>Interview Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Bogosta</td>
<td>Executive Vice President of UPMC and President of UPMC’s International and Commercial Services Division</td>
<td>August 1, 2011, and then commented on an earlier draft of the paper on July 11, 2012.</td>
</tr>
<tr>
<td>Michael Costelloe</td>
<td>Former Senior Vice President, International (UPMC), Chief Operating Officer, UPMC and Director General of ISMETT</td>
<td>July 1, 2011, and again on October 12, 2011.</td>
</tr>
<tr>
<td>Bruno Gridelli, MD</td>
<td>Medical and Scientific Director of UPMC’s ICSD and Medical and Scientific Director of ISMETT</td>
<td>February 12, 2012.</td>
</tr>
<tr>
<td>George Huber</td>
<td>General Counsel and Senior Vice President for UPMC, Professor of Public Health Practice and Associate Dean for Policy</td>
<td>July 13, 2012.</td>
</tr>
<tr>
<td>Joel Yuhas</td>
<td>Senior Vice President of International Operations, UPMC and President and Chief Executive Officer of Beacon Hospital</td>
<td>September 20, 2011.</td>
</tr>
</tbody>
</table>
Appendix II

Semistructured Interview Questions

Ireland

1. How does ethnicity/nationality affect health-related behaviors, such as diet, exercise, and use of health services in Ireland?

2. We’re interested in how Irish culture (i.e., customs) affects the manager-employee, and employee relationships, in general, at Beacon Hospital and at the Cancer Centers.

Would you comment on how Irish culture (e.g., story-telling and religion) influences:
   a. the nature of hiring, training, retention, promotion, and termination.
   b. the work day and scheduling.
   c. interpersonal interactions and group dynamics.

3. We’re interested in how cultural diversity within the Irish health-care system affects the manager-employee, and relationships, in general, at Beacon Hospital and at the Cancer Centers. Would you please comment on how cultural diversity influences:
   a. the nature of hiring, training, retention, promotion, and termination.
   b. the work day and scheduling.
   c. interpersonal interactions and group dynamics.

4. Please comment on any important differences in managing operations between Beacon Hospital and the Cancer Centers. Please identify specific characteristics (e.g., individual personalities, history, resources) at Beacon Hospital or at the Cancer Centers that affect the operational dynamics in an important way.

5. Please discuss the impact of technological innovations on current operations and strategies for the future at Beacon Hospital and at the Cancer Centers.

6. What is your perception of how Irish health-care regulations affect the care delivery process in Beacon Hospital and at the Cancer Centers?
   a. How do Irish health-care regulations affect coordination, especially as it relates to communication among providers?
   b. How do Irish regulations affect the standardization of care processes and the use of protocols and guidelines? Do professional associations (i.e., the medical association) effectively resist the use of guidelines?

7. In what ways do the availability of resources for Beacon Hospital and the Cancer Centers affect the delivery of care?

8. Can you elaborate on how health care policies are developed and implemented in Ireland? For instance, can you assess the role of the Health Service Executive and how it has affected policies at the national and local levels?
9. What do you perceive to be the role of the legal system in Ireland, and how does it affect how the health care system operates?

10. With respect to the press, how do you think the presence of private US companies in Ireland, like UPMC, is perceived? Is this media perspective widely-shared the general public?

**Italy**

1. Please comment on any important differences between ISMETT and the two Irish initiatives (Beacon Hospital and the Cancer Centers) in core competencies that were necessary for managing operations:
   a. technological assets and procedural know-how.
   b. economic/financial and human resources environment.
   c. locational advantages.

2. Path Dependence: Please identify specific characteristics (e.g., individual personalities, history, resources) at ISMETT that affected the operational dynamics in an important way.

3. With respect to the press, how do you think the presence of private US companies in Southern Italy, like UPMC, is perceived? Is this media perspective widely shared among the general public?

4. We're interested in how Italian culture (i.e., customs) affected the manager-employee, and employee relationships, in general, at ISMETT.

Would you comment on how Italian culture influenced:

   a. the nature of hiring, training, retention, promotion, and termination.
   b. the work day and scheduling.
   c. interpersonal interactions and group dynamics.