

FROM SURGERIES TO STARTUPS:
HOW INSTITUTIONS SHAPE ENTREPRENEURIAL ACTIVITY
IN THE FIELD OF HEALTH CARE

Abstract
W. Chad Carlos

Despite an emerging stream of literature connecting institutions to entrepreneurship, little is known about how conflicting institutional pressures operating across multiple spheres of social influence shape entrepreneurial activity. In this study, I explore how institutions that constrain entrepreneurship in one social sphere may be counteracted by institutions that facilitate entrepreneurship in other spheres. Using panel data on all physician founded ambulatory surgery centers in the United States from 1990-2008, I find that institutions associated with the regional culture, organizational field, and profession influence the propensity for doctors to become entrepreneurs and shape the strategies they employ in organizing their new ventures.

Category: Entrepreneurship

Keywords: Entrepreneurship, Institutional Theory, Health Care

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Executive Summary
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Why do we see more entrepreneurial activity in some locations compared with others? Why do certain types of new ventures gain acceptance, while others do not? Questions such as these have been of keen interest to scholars, policy makers, and entrepreneurs alike. To date, however, the bulk of research investigating these topics has focused primarily on economic explanations, such as the availability of resources, the supply and demand for new products and services, or the proximity of new ventures to their suppliers, customers, and competitors. In addition to the economic approach, another primary stream of research stems from the psychological perspective and focuses on the individual attributes and traits of entrepreneurs. While the economic and psychological approaches have provided many valuable insights into the phenomena of entrepreneurship, prior research has often paid less attention to the ways in which the broader social environment shapes entrepreneurial outcomes. This dissertation builds on a recent line of research that considers how institutions such as social norms, regulations, and taken for granted cultural beliefs influence how entrepreneurs identify and exploit entrepreneurial opportunities.

Through an analysis of over 4,000 new health care ventures established in the United States from 1990-2008 I examine the ways in which social institutions that vary across local regions influence the propensity for doctors to engage in entrepreneurial activity. In this executive summary, I briefly discuss the context of this study, the main findings and the implications for research and practice.

Entrepreneurship in the Field of Health Care

During the modern era of American medicine, the hospital has served as the center of the health care system. In particular, for most of the 20th century, nearly all surgical procedures were confined to the hospital setting and carried out on an inpatient basis (requiring overnight stay). However, following World War II, a series of technological advances in anesthesia and surgical tools made it possible for minimally invasive surgeries to be performed on an outpatient basis. Outpatient procedures represented a radical departure from inpatient surgeries, by reducing the operating time per surgery and eliminating the need for overnight hospital stays. With the advent of outpatient surgery, a few entrepreneurial doctors recognized an opportunity to create a new kind of health care facility that utilized outpatient surgical techniques outside the hospital in independent physician owned centers. These centers began to appear in the early 1970s, and came to be known as ambulatory surgery centers (ASCs). ASCs represented a novel combination of outpatient surgical techniques administered through a new mode of health care delivery that replaced the hospital with specialized freestanding centers owned and operated by physicians.

For physicians, establishing a surgery center offers many benefits. Most notably, ASC owners capture profits not only from the surgeries they perform, but also from the fees they charge for the use of their facility and from providing other ancillary services in their center. In this way owning an ASC goes beyond the traditional self-employed practitioner model of private practice and represents a more entrepreneurial role in which physician owners invest in and manage facilities where much of their profits are derived from services that they do not perform themselves. Furthermore, surgery centers are attractive to physicians because they provide added convenience by granting physicians more control over scheduling. This is important because scheduling time in hospital operating rooms can be inconvenient and inefficient as it is common

for surgeries to be delayed or cancelled if an emergency procedure must be scheduled, or if a previously scheduled surgery takes longer than expected. Not only does control over scheduling provide added convenience to physicians and patients, but it also increases revenue potential by enabling physicians to perform a higher volume of surgeries each day.

Despite these compelling economic incentives, very few physicians established ASCs in the early years. By 1975, there were only between 20-55 ambulatory surgery centers across the nation (O'Donovan, 1976 ch. 9; Marks et al., 1980). Growth remained slow during the 1970's, but increased slightly in the 1980s following favorable changes to regulations and reimbursement policies; yet, by 1990 just over 1,000 ASCs were in operation in the United States. Over the next 18 years, the industry blossomed and by 2008 the total number of surgery centers exceeded 5,000. It is interesting to note, however, that significant variation exists in terms of *where* doctors have been more active in founding surgery centers. An investigation of the geographic distribution of ASCs in the United States reveals surprising patterns. For example, by 2008 only 91 ASCs were in operation in New York, compared with 106 in Missouri—a state with less than one third of the population of New York. What accounts for this regional variation? In addition to differences in the economic conditions and regulatory policies, I argue that the varying social environments also play an important role in influencing when, where, and how doctors engage in entrepreneurship.

To understand the social institutions that influence physician entrepreneurship, it is important to consider the history of professional norms regarding entrepreneurship in the field of medicine. In one sense, doctors have a long history of entrepreneurship. In fact, during the 19th century doctors were one of the most entrepreneurial groups of actors (Starr, 1982). During this era, they were very active in entrepreneurial activities such as creating and marketing their own tonics, potions, and cures. Although some doctors were quite successful in these business ventures, problems arose as a result of the inability of patients

and consumers to differentiate legitimate doctors from “quacks” and charlatans. These problems challenged the legitimacy and standing of the profession as a whole leading doctors to engage in collective efforts under the banner of the American Medical Association (AMA) to defend the autonomy of the profession and fortify its legitimacy. Since its founding in 1847, the AMA has been the primary professional association for doctors and much of its early mission was to mobilize resources and in efforts to professionalize the practice of medicine. These efforts included downplaying the logics of business and entrepreneurship that had been pervasive throughout the 1800s and emphasizing the values of patient care based on scientifically sound methods. Central to these professionalization efforts, the AMA worked to establish higher educational requirements, professional licensure, ethical guidelines, and standards for practice (Starr, 1982).

Through this work the professionalization of medicine led to a stronger emphasis on separating the dimensions of profit from patient care, and certain business practices were explicitly condemned. Early on, the AMA code of ethics introduced language unequivocally denouncing advertising, saying that it is “derogatory to the dignity of the profession . . . to resort to public advertisements” (AMA, 1847, p. 98) and that physicians “should not solicit patients” (AMA, 1957, p. 2). Furthermore, profiting from business activities other than the direct care of patients was heavily frowned upon. In fact, the AMA code of ethics stated that “a physician should limit the source of his professional income to medical services *actually rendered by him*, or under his supervision, to his patients” (AMA, 1957; p. 3). While this pronouncement allowed for physicians to continue operating as self-employed practitioners, it clearly discouraged them from pursuing other entrepreneurial endeavors such as owning certain types of health care facilities (like ASCs) where they could generate income from services they were not directly involved with.

Despite these constraining norms, doctors are not influenced solely by the social prescriptions of their profession. Like other actors, doctors live out their lives experiencing pressures associated with different spheres of their social life that may at times contradict the expectations imposed upon them by their profession. The central findings of this dissertation support this view and suggest that even after accounting for the influence of key economic and regulatory factors, differences in the local social environment play an important part in shaping when, where, and how doctors engage in entrepreneurial activity.

Main Findings

One of the primary findings in this dissertation is that variation in regional culture related to entrepreneurship plays an important role in shaping entrepreneurial outcomes. The idea that culture can influence economic activity, including the creation of innovations and the establishment of new ventures, has long been of interest to scholars from various fields. From Weber's (1958) conception of a "spirit of capitalism" to Kirzner's (1984) notion of an "entrepreneurial spirit," scholars have pointed to the power of local cultural elements in shaping entrepreneurship. More recently, it has been shown that culture plays a primary role in fostering entrepreneurship above and beyond the impact of material resources and industrial infrastructure alone, and that these cultural influences vary across regions (Saxenian, 1996). However, despite the interest in connecting culture to entrepreneurship, a review of the past 20 years of research on this topic suggests that our understanding of how culture shapes entrepreneurship is still in its infancy.

From a theoretical perspective, I adopt a cognitive view of culture as a socially shared system of knowledge and set of taken for granted beliefs that influence thought, provide scripts for action and define attitudes towards life (Geertz, 1973; Zucker, 1977; Scott, 2008a). In regions characterized by a strong culture of entrepreneurship, not only is the act of becoming an entrepreneur celebrated, but also the essential entrepreneurial skills and know-how are engrained

in the local social fabric. These shared scripts and schemas shape the perceptions of actors in regards to entrepreneurial opportunities. In this way, they view their environment through an entrepreneurial lens and may be more apt to recognize and exploit existing opportunities. In areas where entrepreneurship has become an institutionalized part of the local culture, constraining norms in other spheres such as the profession may be less powerful. Empirically, I find that the influence of regional culture on the number of ASCs founded is significant and meaningful. In fact, a one standard deviation increase in the strength of entrepreneurial culture in a region is associated with a 36.7 percent increase in the number of ASCs founded.

Similar to the influence of the local culture of entrepreneurship, the degree to which for profit logics have become accepted in the local health care community is associated with significantly higher rates of entrepreneurial foundings. As other scholars have noted, changes in beliefs and values of an organizational field can occur when outsiders migrate into the field. This dynamic is readily apparent in the field of health care, where the presence of for profit entities has increased dramatically over the last few decades. Exposure to for profit health care models has been shown to fundamentally change the skills and beliefs of physicians. One study reported that 94 percent of physicians indicated that involvement with managed care practices significantly changed the skills required to be a physician, and that of these physicians, 89 percent said the most essential new skills needed for their career success were those related to business and administration (Bucci, 1999). Physicians at for-profit hospitals have also been found to be less likely to express concerns about issues related to conflict of interest (Musacchio, Zuckerman, Jensen, & Freshnock, 1986). This is particularly relevant to the act of starting an ASC, because one of the major criticisms of ASCs is that they violate ethics of conflict of interest by enabling physicians to refer patients to a center in which they have a direct financial interest.

The ways in which the growth of for-profit entities can change the norms and beliefs in the health care field is vividly illustrated by Atul Gawande's investigation of the high cost of health care in McAllen, Texas. Noting the proliferation of for-profit health care providers in this community, Gawande finds that as the acceptance of for profit motives became more accepted in

the local health care community that doctors began to “to treat patients the way subprime-mortgage lenders treated home buyers: as profit centers” (2009, p. 11). When logics that view patients as “profit centers” are imported into the organizational field of medicine, it fundamentally changes how doctors perceive entrepreneurial opportunities, making profit-generating activities a more acceptable possibility. The findings of this dissertation support this claim and indicate that a standard deviation increase in the proportion of for profit hospital beds in a region is associated with a 20.9 percent increase in the number of ASCs founded.

In addition to the importance of regional culture and ideologies embedded in the local organizational field, I also find that advocacy on the part of professional associations can play a key role in fostering entrepreneurship. The work of establishing and maintaining normative institutions falls largely on the shoulders of professionals, who have been conceptualized as the most important crafters of institutions (Scott, 2008b). In particular, professional associations serve as the vehicle to disseminate professional norms, beliefs, and values. In the context of ASCs, surgical associations played an important role in legitimizing the practice of outpatient surgery through the publication of studies validating the efficacy of outpatient procedures and issuing formal endorsements of these practices. They also engaged in techniques to frame ASCs as consistent with the broader values of the medical field, such as providing more patients with access to high-quality care in a more efficient and cost-effective manner. Professional associations can also foster entrepreneurship more directly by engaging in activities such as lobbying for favorable regulations and subsidies. The results of this study indicate that in states with a greater number of professional associations advocating for ASCs. A one standard deviation increase in the number of professional associations supportive of ASCs was found to be associated with a 41.9 percent increase in the number of ASCs founded.

Conclusion

This dissertation explores how different types of social institutions influence the propensity for certain professionals (doctors) to engage in entrepreneurial activity that deviates

from the normative prescriptions of their profession. This work departs from traditional entrepreneurship studies based on economic and psychological perspectives, and contributes to a growing number of studies proposing that entrepreneurship is a socially constructed activity. This is not to say that economic and psychological factors are not important drivers of entrepreneurship, but rather to argue that the institutional environment plays a critical role in shaping how entrepreneurs *perceive* economic opportunities. In particular, this research sheds light on instances where potential entrepreneurs face economically enticing, yet normatively frowned upon opportunities. The findings from this study suggest that economic incentives alone may not be enough to propel actors to exploit opportunities if doing so may be viewed as socially inappropriate. Under such circumstances social support from overlapping spheres of influence may be drawn upon to enable entrepreneurial activities that are constrained by pressures in other social spheres.

From a practical standpoint, the study of professionals as entrepreneurs is an important, yet surprisingly understudied area. Currently, health care costs in the United States exceed \$2.5 trillion, or 16 percent of GDP. While this dissertation makes no claims regarding the efficacy of ASCs to lower health care costs or to provide greater access to health care services, considering the powerful potential of professionals to develop innovations and create new ventures that address these kinds of problems is a crucial area of study. To date, policy looking to promote innovation and entrepreneurship has often centered on economic incentives and regulatory mechanisms. This study, however, suggests that it may also be important for policy makers to consider implementing social mechanisms that influence how actors interpret entrepreneurial opportunities. Given that professionals, such as physicians and scientists, occupy a special position in our society with access to expertise knowledge and valuable resources that enable them to develop and implement world-changing innovations, the study of professionals as entrepreneurs is a critical area of both theoretical and practical significance.

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