Healthcare Management Education Settings in the United States: History and Perspective

Peter Hilsenrath
Eberhardt School of Business
University of the Pacific

History of Healthcare Management Education

Schools of business, public health and health professions are all host to programs in healthcare management. This is the case in the United States as well as much of the rest of the world. It is a field that has been evolving and is rich in social complexity. A recent paper in this journal detailed the marginalization of women in health administration in the early and mid-20th century as the field became more “professional” (Arndt, 2010). The purpose of this paper is to describe and explore the lack of locus of academic setting in graduate healthcare management in the United States. It provides historical narrative and uses institutional economics for theoretical perspective. The paper serves as a resource for scholars of management history and university administrators as well as prospective graduate students to help understand differences between healthcare management programs in schools of business versus health science settings. This is of growing importance as health expenditure and employment increase in developed and developing countries.

The history of healthcare management education is relatively short. It is not a form of academic inquiry with obvious roots in antiquity such as medicine or philosophy even though “hospitals” have existed since at least the 12th century with the Order of Hospitallers in Jerusalem (Risse, 1999). Some put the origins of hospitals earlier such as ninth century Bagdad, Childebert’s 6th century establishment of the Hotel-Dieu in Lyon, or as early as 4th century Byzantium (Chevallier, 2008; Miller, 1978). Rather, graduate level business and public health education are
comparative newcomers to academic enterprise. The first graduate program in business was established at the University of Pennsylvania in 1881 while the first school of public health was founded at Johns Hopkins University in 1916. Healthcare management education lagged the arrival of business education more generally. Part of this explanation lies with a hospital emphasis in the origins of healthcare management education and hospitals did not expand rapidly until the late 19th and early 20th century. A survey of American hospitals counted only 178 hospitals in 1873 while a later survey found 4,359 in 1909 (Levey, Hilsenrath and Hill, 1998). Larger hospitals gained market share especially after World War I. The growing complexity of healthcare services and the shift away from charity care to an increased willingness to pay for those services, many of them new and based on emerging technologies, catalyzed the need for qualified hospital and healthcare managers (Thomasson, 2002; O’Leary, 2008).

Medicine was transformed in the late 19th century and early 20th centuries with a host of new technologies such as the X-ray, new medications and surgical procedures. Medical education was soon subject to radical reform. In the United States, changing technology and higher standards associated with the Flexner Report led to closure of many medical schools (Starr, 1982). Surviving medical schools faced expectations that were more rigorous. There was debate in the early 20th century about appropriate qualifications for healthcare management. Many thought that an MD with additional training in management was the preferred route. Non-physician managers commonly held the position of superintendent with functions analogous to hotel keeping. Many were women from nursing or the Catholic clergy (Arndt, 2010). Physicians were sometimes contemptuous of “lay” managers who they thought would be unable to lead or manage in the world of modern medicine (Snoke, 1987).
The Rockefeller Foundation was probably the first to sponsor study of healthcare management education in 1922 and this work influenced establishment of the first undergraduate program at Marquette University in Milwaukee in 1926. But, this program was short lived and closed after two years due to weak demand for its graduates (Wren, 1980). Other universities experimented with non-degree programs in the 1920s for hospital managers including Temple, Harvard and New York University (Davis, 1929). The Rockefeller Foundation funded a second more important study by Michael Davis published in 1929. It recommended a one-year curriculum of education that included accounting, statistics, management and organization, economics, law, public health, business policy and history. This was to be followed with a year of administrative internship in a hospital setting.

The first full time graduate program in hospital administration was founded at the University of Chicago in 1934 (Hartman, 1938). It was intended for students with previous experience and was committed to a curriculum of serious study (Anderson, 1985). The program was housed in the School of Business with close ties to the University Clinics. Michael Davis, who helped establish the program, believed that this arrangement would provide for the necessary curriculum but would also expose students to the culture and practice of providing health services (Davis, 1984). Physicians were encouraged to apply but few did. The success of the Chicago program encouraged Northwestern University to establish a graduate program in healthcare management in 1943. And similar to the University of Chicago, this was housed in the School of Commerce.

Interest in graduate healthcare management education increased after World War II. However, not all agreed that it should be anchored in a school of business. Early leaders in the field saw difficulties in placing healthcare management in business schools. Business schools were widely seen as lacking academic rigor in the mid-20th century. It was feared this weakness might
undermine professionalization of the field. Moreover, the non-profit, physician-led tradition of most hospitals was embedded in a culture quite different from that of business schools. There was opposition to the bottom line orientation and instead, there was emphasis on external benefits and the public goods nature of health services (Donabedian, 1972). There may have been some concern about insufficient integration of physician control in business school culture. Most business schools did not embrace a specialized concentration in healthcare management and preferred a more generic approach to management education. This sentiment prevailed for years and is only now changing as the health sector becomes more dominant and American MBA programs differentiate in an environment of vigorous competition (Senft et al., 2008; Chumney et al., 2008; Schultz, 2004).

The Hill-Burton Act of 1946 provided billions of dollars for hospital construction (Clark, 1980). It also provided for long-term care and ambulatory facilities but most federal and other public resources went to hospitals (Starr, 1982). Demand for hospital administrators was expected to increase substantially. It was argued, with support from the Kellogg and Pew Foundations that new healthcare management programs were needed and should be housed in health science centers, especially schools of public health, in part to emphasize health specific content. For example, in 1948 the Kellogg Foundation sponsored a report under the direction of Charles Prall of the University of Pittsburg (Prall, 1948, Taylor, 1956). The Prall report was overseen by the Joint Commission on Education of the American College of Hospital Administrators, which consisted of fifteen members, nine of whom were physicians. The Joint Commission participated in the establishment of six new hospital administration programs, five of which were housed in schools of public health and the sixth in a medical school. The Association of University Programs in Health Administration (AUPHA) was founded at this time to help
develop this emerging field. It was initially a small and informal organization consisting of representatives from the relatively few, mostly health science center based programs that existed at the time.

The first PhD program in Hospital and Health Administration was founded by Gerhard Hartman, a graduate of the University of Chicago, at the University of Iowa in 1946. It was established as a stand-alone program in the College of Medicine but developed ties with the College of Business. Other doctoral programs followed but they have been fewer in number and with more limited enrollment than masters programs. Healthcare management programs commonly employ generalists trained in programs such as their own, but also rely heavily on those trained in social science and management disciplines such as economics, sociology, management science and organizational behavior.

In 1952, the Kellogg Foundation made a grant to the AUPHA to study and recommend improvements for hospital and healthcare management education. The director of the study was Herluf Olsen, a former Dean of the Amos Tuck School of Business Administration. In contrast to the Prall Report, the Commission on University Education in Health Administration report (1954) also known as the “Olsen Report” concluded that programs should be located in schools of business but should afford considerable autonomy to develop their own curricula (Commission on University Education in Health Administration, 1954). The Olsen Report reviewed a dozen programs in the United States and Canada at Berkeley, Chicago, Columbia, Iowa, Johns Hopkins, Minnesota, Northwestern, Pittsburg, Saint Louis, Toronto, Washington (in Saint Louis) and Yale. Only two of these, Northwestern and Chicago were housed in business schools.
Institutional Economics and Healthcare Management Education

Economic theory holds that behavior and performance follow from market structure and incentives (Carlton and Perloff, 2005; Dafny, 2010). Structure and incentives differ markedly between health science centers and business schools and this has led to variations in behavior. Health science centers are financed primarily from patient revenues, grants and contracts. For example, the 126 fully accredited US allopathic medical schools in fiscal 2010 received just 4 percent of their revenue from tuition and fees (Association of American Medical Colleges, 2011). Government and parent university support accounted for another 6 percent of revenue. Even public medical schools received only 11 percent of revenue from state, local and government support. Most revenue comes from other sources. Practice plans at public and private medical schools generated 37 percent and grants and contracts provided another 30 percent of revenue. This is a very different financial foundation than commonly found in schools of business. It has created a culture of reliance on faculty who generate patient or other external revenues. The model works reasonably well for medical and biological education (Mann, 2010). The model also works well for much of public health but can be problematic in healthcare management education where many essential areas of expertise lack significant levels of external funding.

Agency Theory

Institutional and evolutionary economics sheds light on the development of healthcare management education, especially at health science centers. Institutional and evolutionary economics are interdisciplinary. This school emphasizes historical and social factors including causes of political relationships (Hodgson, 2000; Keil, 1998). An important pillar of institutional
thought is agency theory. It stresses lack of alignment of incentives between principals and agents. This well-recognized concept is ubiquitous in social science and occurs in Adam Smith’s work (Crowley and Sobel, 2010). It posits that principals, often consumers, have objectives that agents can help meet with specialized expertise, access or other attributes useful for carrying out a transaction. The agent however, may have incentives that lead to non-optimal outcomes for the consumer. Agency theory has widespread application, used for example to assess governance of Benedictine Abbeys (Rost, et al., 2010).

Agency theory has been found to be an important part of how physicians and hospitals behave (Encinosa, Gaynor and Rebitzer, 2007; Forgione, Vermeer, et al., 2005). Health science centers have an agency problem with respect to managerial education. Prioritization of patient and grant revenue can jeopardize the management curriculum and scholarship because of scarcity of grant or contract funding for management faculty salaries. Adherence to healthcare management specific accreditation criteria has helped mitigate this problem. Core curriculum guidelines developed by the Council on Accreditation of Healthcare Management Education (CAHME) have included population health, policy, organization, operations, human resources, information technology, law, governance, leadership, communications, statistics, economics, marketing, finance, ethics, strategy, quality assessment and professional development (CAHME, 2011). On the other hand, health science centers often rely on adjunct faculty or other imperfect substitutes to teach management offerings. Business schools conform to a more traditional academic structure. Financial incentives are better aligned with student orientation. Operational funding is commonly associated with tuition, state subsidy or endowment funds. These resources are used to maintain market levels of salary compensation. This facilitates alignment of faculty with appropriate expertise and helps assure suitable curricula.
Rise of the MBA

Two reports published in 1959 sought to address the problem of insufficient rigor in business schools. The Gordon and Howell Report funded by the Ford Foundation and the Pierson Report funded by the Carnegie Foundation led to a revision of business school education (The Economist, 2009). They found that business schools were undemanding and lacked adequate grounding in theory. Students and faculty were determined to be of low caliber and there was not enough emphasis on research or ethics. Business education was revamped in the years following these watershed reports. Theory and quantitative techniques came to play a larger role in the curriculum with faculty more engaged in research and scholarship. The image of business schools improved as education became more abstract and theoretical (van Baalen and Karsten, 2010). Masters degrees awarded by business schools in the United States increased from 4,000 in 1949 to 168,000 in 2008-09 (Herrington, 2010; United States Department of Education, 2011).

Changes in business school curriculum spilled over to graduate healthcare management education, especially the master in health administration (MHA). Curriculum changes occurred with a shift from one year to two years of didactic education and a subsequent diminution of practical experience such as hospital internships. The number of masters programs in healthcare management increased significantly from the 1960s along with growth of the health sector. The AUPHA listed 115 graduate programs in 2011, including four in Canada (AUPHA, 2011). Seventy-two of these were full members accredited by CAHME. The remainder consists of associate members without accreditation.

Description of Management Employment in Healthcare
Table 1 provides an estimate of managerial employment in healthcare from 2008 to 2018. The Bureau of Labor Statistics (BLS) estimated there were 284,000 medical and health service managers in the United States in 2008, 206,800 (74%) of whom worked in healthcare. The remainder worked in other sectors such as insurance, consulting and government not shown in Table 1. There are other related functions for managers in healthcare such as general management, financial, human resource and health information systems management. The BLS put the total number of managers in healthcare at about 615,000 in 2008. Growth of managerial employment in healthcare of about 103,000 (17%) jobs was projected from 2008 to 2018. This is faster than growth of all nonfarm employment expected to grow by 10 percent.

### Table 1: Managerial Employment in Healthcare, 2008

<table>
<thead>
<tr>
<th></th>
<th>Med &amp; Hlth Ser Mngrs</th>
<th>CEOs / Gen Mngrs</th>
<th>Finance Mngrs / Specialists</th>
<th>HR Mngrs / Specialists</th>
<th>Comp &amp; Info Sys Mngrs</th>
<th>All Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory</td>
<td>65,900</td>
<td>45,000</td>
<td>25,400</td>
<td>17,200</td>
<td>1,600</td>
<td>43,000</td>
<td>198,100</td>
</tr>
<tr>
<td>Hospital</td>
<td>108,500</td>
<td>25,500</td>
<td>37,700</td>
<td>31,200</td>
<td>6,000</td>
<td>91,700</td>
<td>300,600</td>
</tr>
<tr>
<td>Nursing &amp; Rsdtntial</td>
<td>32,400</td>
<td>25,000</td>
<td>9,300</td>
<td>12,600</td>
<td>200</td>
<td>36,500</td>
<td>116,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>206,800</strong></td>
<td><strong>95,500</strong></td>
<td><strong>72,400</strong></td>
<td><strong>61,000</strong></td>
<td><strong>7,800</strong></td>
<td><strong>171,200</strong></td>
<td><strong>614,700</strong></td>
</tr>
<tr>
<td>Growth % 08-18</td>
<td>17.8</td>
<td>6.8 / 10.2</td>
<td>15.6 / 19.9</td>
<td>13.3 / 26.9</td>
<td>28.5</td>
<td>15.4</td>
<td>16.8</td>
</tr>
</tbody>
</table>


The BLS data is useful and serves as a tool to monitor growth and change in healthcare management employment, but tells us little about who is best qualified for these positions. Higher education is an important, if not necessary, background for healthcare management employment. Yet we have little data on where undergraduate management training is sufficient
or where and what kind of graduate level training is expected. Clinical backgrounds are important for some positions but integration of clinical education with MBA and MHA level education is insufficiently developed. For example, nursing has a long history of management scholarship and practice not well recognized in business or public health schools (Meyer and Bishop, 2007).

There are no licensure requirements for most healthcare managers in the United States, except in nursing homes, unlike strict regulation of physicians, dentists, nurses, pharmacists and other providers. This leads to a freer market for management talent. However, a master’s degree in healthcare management or a related qualification has been a de facto prerequisite for advancement to the most responsible administrative positions. Healthcare managers work in a dynamic and rapidly changing environment. A wide range of competencies is desirable. Business schools provide comparative advantage in core management topics and arguably better prepare graduates for careers in healthcare finance, marketing and management information systems. But health science center-based programs offer a greater familiarity with the culture and operations of health services and may better prepare medical and health service managers. They also provide a population-based perspective with courses in epidemiology and public health that is important for health maintenance organizations (HMOs) and other organizations managing care.

Differences in academic culture go beyond agency and financial incentives. Norms, values and traditions vary substantially between business and health science academic settings. There are historical and anthropological reasons for this. One theoretical perspective with explanatory power embraces the demonstration effect. Demonstration theory was perhaps first popularized in 1899 by Thorstein Veblen in the Theory of the Leisure Class (McCormick, 1983). Veblen put
an anthropological spin on economic behavior. He saw tendencies on the part of lower and middle classes to emulate those at the apex of society. Others have argued that this occurs on a global level with less developed countries seeking to emulate the habits and culture of the wealthiest (Mason, 2000). This analysis can be extended to the health sector where a physician-led culture evolved promoting not only the compensation and professional autonomy of physicians, but also a wide range of secondary professions shaped in medical model with parallel conformance belief systems. Early work in health economics found that hospitals served to increase productivity and compensation of physicians at the expense of other stakeholders (Pauly and Redisch, 1973).

Research that is more recent argues that the power structure of professional control in academic medical centers is yielding to “managerial agency” with a different set of conformance standards (Kitchner, 2002). This is shifting control from physicians to a new generation with more of a business mindset. The organizational environment for physicians has been rapidly changing with many more opting for salaried positions. There has been a sharp increase in hospital-owned medical practices relative to physician-owned ones since 2005 (Harris, 2010). The increase is attributed to the complexity of contracting with payers, developing information systems including electronic health records and a desire for more regular working hours (Pham and Ginsburg, 2008; Rittenhouse, Casalino et al., 2008). This shift has potential to promote better integration of health services.

It is not clear how a change from physician professional control to a more nuanced managerial approach will affect the financial model of health science centers relative to the more traditional academic model of business schools. Academic health science centers also face another important potential challenge. Less generous public funding of the life sciences through the
National Institutes of Health (NIH) and other federal agencies in response to fiscal pressure threatens to undermine a financial paradigm that has been in place for decades. NIH funding obligations increased from 780 million dollars in 1970 to 30.9 billion dollars in 2010, a 7-fold increase in constant, inflation adjusted dollars (NIH, 2011; National Science Foundation, 2011).

**Graduate Healthcare Management Education and Market Share**

Figure 1 shows the changing mix of new members joining the American College of Healthcare Executives from 1970 to 2010. The relative share held by those trained in business, health science and other settings has been shifting. Graduates of business programs gained “market share” among new members of the American College of Healthcare Executives (ACHE) until the early 1990s. This share has been relatively steady since. Business graduates accounted for 24 percent of new members in 2010, whereas those with graduate degrees in health or hospital administration accounted for 47 percent. The share held by graduates of health and hospital administration programs has been in decline since 1970 when it accounted for 89 percent of new members. Those with clinical training have been gaining market share in recent years. This group includes graduates of nursing, medical and allied health programs. They accounted for 18 percent of new members in 2010. The ACHE is reasonably representative of healthcare management but is somewhat weighted toward those with careers in hospitals where the masters in hospital or health administration (MHA) has stronger roots. There is another reason Figure 1 understates market penetration of MBAs. Those with an MBA who also hold an MHA, MD or other advanced clinical degree are classified in the latter categories.
Graduate healthcare management education is diffuse and lacks a common voice. Most MBA programs in healthcare are not associated with the AUPHA, perhaps for historical reasons. The AUPHA was created in the wake of the Prall report, which leaned heavily toward building management education capacity in health science centers. In addition, the accreditation earned through the Accrediting Commission for Education of Health Services Administration (ACHESA), which evolved into CAHME in 2004, may be of less importance to programs with accreditation from The Association to Advance Collegiate Schools of Business (AACSB) (Dalston, et al., 2005). Many MBA programs may not see a need to enhance their credibility in
the field of management and do not perceive it necessary to signal any health specific competencies in this way (McKenna, Cotton, and Van Auken, 1997). It may also stem from a lack of familiarity with the field. This lack of cohesion of academic settings has its benefits. Fragmentation of healthcare management education facilitates a natural experiment in management education (Rosenzweig and Wolpin, 2000). It provides insight about relative strengths and weaknesses of rival approaches. On the other hand, this diffusion also undermines academic healthcare management’s national impact on policy and other matters in an arena with many powerful interest groups.

Asymmetric Information, Market Imperfection and Healthcare Management Education

Asymmetric information has been an important topic among economists for many years and is central to agency theory (Sloman, 2006). It is seen as a major source of market imperfection (Nalebuff and Stiglitz, 1983). Lack of information about prices, products, services and their attributes including quality is often the norm. This is considered a form of market failure and leads to economic inefficiency (Pauly, 1986; Mrozek, 1999). A wide range of institutions has evolved in many sectors of the economy to cope with this problem. Kenneth Arrow’s 1963 article entitled “Uncertainty and the Welfare Economics of Medical Care” is an important foundation in the field of health economics (Arrow, 1963; Haas-Wilson, 2001). Arrow argued, among other things, that reliance on non-profit hospitals and deference to physicians results from asymmetric information (Hall, 2001; Hammer, 2001). Society has placed trust in hospitals and doctors regarding appropriate care because of necessity to defer to their judgment. This creates vulnerability to induced demand, a phenomenon that health economists recognize but differ on the extent of its magnitude (Liu and Mills, 2007).
Gaps in information extend to the market for healthcare management education. There is lack of information about quality of healthcare management programs that best meet student needs. The internet has improved access to information and rankings such as those provided by US World and News Report have been important tools for shopping. Nevertheless, uncertainty remains. This affords schools considerable latitude to market and shape perceptions of program attributes (Schee, 2010). It can be difficult to determine the depth of expertise a program has in healthcare management, particularly if students lack knowledge of AACSB, CAHME, and Council on Education for Public Health (CEPH) accreditation criteria (AACSB, 2011, CAHME, 2011, CEPH, 2011). There are many options available ranging from vocational to academic and from business to health science settings. Universities offer traditional degrees as well as certificate and executive programs. Many of the more vocationally-oriented programs are provided by for-profit organizations, a relatively new element of healthcare management education (Parry, 2009). For-profit universities have been expanding in the United States and their heavy reliance on subsidized student loans has been especially controversial. The advent of for-profit healthcare management education is an important development that warrants research. It may contribute to a reversal of the trend towards conceptual abstraction and theory that took hold in the early and mid-20th century.

**Conclusion**

There are advantages with both business and health science models of healthcare management education. Business schools have been more oriented toward enrollment and health science centers toward grant, contract and patient revenues. The former tends to insure a sound management curriculum, but the latter can lead to poor faculty alignment with core management course offerings. Health science centers do have comparative advantage in health-related
Training for healthcare managers occurs in both settings. But, employers may have an affinity for those with experiences similar to their own. They are likely to adhere to standards they know and what others in respective professional communities do. The competition between business schools and health science centers to produce managers will turn on how these standards and institutions evolve.

Graduate healthcare management education has been a natural experiment. Business and health science settings have been competing and evolving since the mid-20th century. The MHA has yielded as the dominant qualification for higher-level healthcare management positions. However, this evolution has not resulted in a clear verdict about which academic setting is preferable, at least not yet. Surveys of preferences should be conducted to help understand why relative preferences for the MBA and MHA exist as well as the related issue of which academic and organizational setting is favored, business or health science. In addition, it would help to have more research assessing the MBA and MHA relative to other graduate and professional qualifications, especially for clinical fields. There are at least 15 MHA/MBA programs in the United States. It would be helpful to know about the relative employability of graduates holding both degrees. Finally, business schools have opportunities to serve clinical professionals that should be more fully explored. Many physicians, nurses and other clinicians see the MBA as the most desirable management degree. The rapid growth of PharmD/MBA programs in the United States is evidence of this new market (Crismon et al., 2009).

Implementation of the Affordable Care Act of 2010 promises access to healthcare for millions more Americans. The legislation has many provisions but much uncertainty remains about how
to curb costs. Public healthcare spending, accounting for 45 percent of national health expenditures in 2010, has been increasing at unsustainable rates (Martin et al., 2011). This threatens the creditworthiness of the United States. The United States must find ways to restrain growth of Medicare, Medicaid and privately financed health insurance. More constrained spending will affect healthcare management and education. To date, cost control has not been as pressing an issue as is likely in the future. There has been relatively little need with third party payment and insufficient price competition. The culture of healthcare management has focused on service delivery and quality (Komashie, Mousavi and Gore, 2007). Physicians take an oath to provide care when it benefits patients. There is no qualification stating that care should desist when marginal cost exceeds marginal revenue. This is reflected in academia where management and organization textbooks put inadequate emphasis on efficiency or cost control. For example, two leading texts, White and Griffith (2010) and Burns, Bradley and Weiner (2012) provide no more than one chapter each on either financial management or managing for efficiency or value, a seemingly insufficient emphasis on perhaps the most important related task facing healthcare managers, that of cost control. More integration of the concept and practice of efficiency are expected and it remains to be seen which academic setting best excels at this task.

The evolution of graduate healthcare management in the United States and elsewhere has been buffeted by competing cultures of business and medicine. Most countries retain a degree of ambiguity about the nature of healthcare. Is it properly considered commerce or something else? And what is the proper mix of public and private sectors? Few countries, if any, have arrived at a satisfactory answer about how best to characterize healthcare. Countries other than the United States are also marked by diffusion of healthcare management education across business and
health science settings. Faith in markets collides with social entitlements and the dignity of human life rendering ambiguity about academic setting. Perhaps greater clarity will emerge about appropriate academic settings for healthcare management education as health services globalize and struggle to meet social expectations for more equitable and comprehensive care in the face of serious resource constraints (Aaronson et al., 2010).
References


American College of Healthcare Executives. (2010), Survey of Affiliates, Chicago


Association of American Medical Colleges (2011), AAMC Data Book: Medical Schools and Teaching Hospitals by the Numbers, Chicago.


Commission on University Education in Hospital Administration (1954), University Education for Administration in Hospitals. American Council on Education, Washington D.C.


Martin, A., Lassman, D., Whittle, L., Catlin, A. and the National Health Expenditures Accounts Team (2011) “Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades” Health Affairs Vol. 30 No 1, pp. 11-22.


