The Bravewell Collaborative
THE PHILANTHROPIC COLLABORATIVE FOR INTEGRATIVE MEDICINE

EXAMPLES OF THE EMERGENCE OF INTEGRATIVE MEDICINE IN COMMUNITIES

Phase 2 of a Continuing Study to Map the Field of Integrative Medicine

Submitted by:

Mapping Committee
Bravewell Collaborative
The Philanthropic Collaborative for Integrative Medicine

March 2005

INTRODUCTION

Overview:

In the spring of 2004, the Bravewell Collaborative commissioned the second phase of its study to map the field of integrative medicine. The first phase of the study was completed in 2003 and gathered information from physician leaders and thought leaders, principally in academic institutions. Following their review of the results of that phase, the Collaborative's Mapping Committee recommended that the second phase of the study concentrate on the emergence of integrative medicine at the community level and chose community hospitals, spas and hospice as the focal areas for the study. A fourth area – pediatrics -- was added when one of the Collaborative's member foundations funded a meeting of pediatricians in integrative medicine, which presented opportunities to gather information for the Mapping Study from the participants in that meeting.

This report discusses the findings of interviews conducted with individuals from 4-7 organizations in each of the four focal areas.

The Bravewell Collaborative:

The Bravewell Collaborative (formerly the Philanthropic Collaborative for Integrative Medicine) exists to bring about optimal health and healing for individuals and society by:

- Organizing and sustaining a community of philanthropists dedicated to advancing integrative medicine.
- Offering strategic and informed program initiatives which create optimal healing environments for both patients and healers.
- Creating an atmosphere of collaboration that stimulates and supports innovation in integrative medicine.
- Providing educational opportunities for health professionals, consumers, philanthropists and others in position to move American healthcare to integrative medicine.

The Collaborative is an operating foundation composed of philanthropists from a variety of backgrounds who work together in partnership with medical leaders across the nation to promote the principles of integrative medicine. In addition to the mapping study, the Collaborative's work includes the following initiatives:

- **Sustaining Model Clinical Centers:** To empower and accelerate the growth of leading clinical centers of integrative medicine which can serve as models for change in the healthcare delivery system.

- **Support Physician Leaders:** To empower and support physician champions of integrative medicine to help transform the culture of healthcare and to reclaim relationship-centered healing.

- **Medical Education and The Consortium of Academic Health Centers for Integrative Medicine:** To develop and support efforts that build the capacity of physicians to practice integrative medicine, and to support the infrastructure of the Academic Consortium.

- **Public Education:** To reach opinion leaders and the general public and educate them ion the values and programs of integrative medicine. The current focus of this effort is a two-part public television series entitled, "Good Medicine", scheduled to air in early 2006.

- **Growing a Dynamic Community of Philanthropists:** To create, support and grow a dynamic community of committed and informed philanthropists.

The Mapping Committee:

Each of the Collaborative's initiatives is overseen by a committee of Collaborative members. The Mapping Committee, responsible for this project, includes the following:

Georgine Busch
The Earl and Doris Bakken Foundation
Kailua-Kona, Hawaii

Ruth Stricker Dayton
The Marsh
Minneapolis, Minnesota

Virginia Hubbell
Mental Insight Foundation
Sonoma, California

Ann Lovell
David C. and Lura M. Lovell Foundation
Tucson, Arizona

Lura Lovell
David C. and Lura M. Lovell Foundation
Tucson, Arizona

The study was conducted by Bill Henry, president of ForeSight Strategies, Arden Hills Minnesota, a consultant to the Collaborative.

MAPPING PHASE 1

The Collaborative's mapping strategy seeks "to identify, confirm, organize and document the existing landscape of the rapidly developing field of integrative medicine." The first phase of the study was completed in April 2003 by Stephanie Clohesy of Clohesy Consulting in Cedar Falls, Iowa. The focus of Phase 1 was major academic centers and thought leaders in the field of integrative medicine – it sought to develop a broad understanding of the forces at work in the emergence of integrative medicine in the United States and Canada.

Phase 1 gathered data from 72 websites, 117 articles in the scientific and popular literature, and detailed interviews with 29 respondents. The study developed a database that is maintained by the Collaborative, as well as a report summarizing its findings. That report is available on the Collaborative's website at http://www.pcintegrativemedicine.org/stratinit/mapping.asp.

PHASE 2 DESIGN

Mapping Committee Recommendation:
In March 2004, the Mapping Committee recommended that the Collaborative undertake the second phase of the mapping study. In the second phase, the study sought to identify one to three market niches where integrative medicine is developing a foothold, and examine the forces at work in that process in a few illustrative cases or innovative models. Niches might include community hospitals, spas, private (as distinct from academic) physician clinics, community health centers or hospices. The intent was not to provide encyclopedic information on all organizations in the selected niche(s), but rather to study a small number of organizations to spotlight important factors, locations and models in the emergence of integrative medicine. A key goal of the second phase was to identify places where integrative medicine is emerging in

communities, as an adjunct to information on the academic and other major centers on which the Collaborative is currently focused.

The mapping study serves several functions in the Collaborative. First, by describing some of the processes of the emergence of integrative medicine, the study provides a conceptual base for the Collaborative's strategies and a context for its decision-making. In addition to this often implicit function, the mapping study has found more explicit use in the Collaborative's work, for example in identifying some of the principles and potential invitees for the Bravewell Award process. The first phase of the study was also helpful in understanding the relationships of the centers in the McKinsey study to other aspects of the emergence of integrative medicine.

The database that emerged from the mapping study may be its most tangible benefit to the Collaborative. As additional data elements are added to the database, its value to the Collaborative should expand. Eventually it could become a central resource, holding contact information, reports on research and policy studies, personal and organizational contact information, and other important data.

The value of the mapping study in the Collaborative's planning and strategy development – and to the field -- depends to a large extent on the degree to which fresh information is added to the study. However, efforts to "refresh" the study do not have to be as widely encompassing as the original mapping study tried to be -- its utility in the Collaborative's planning does not depend on how well the study characterizes every niche of IM in every community, but rather on how well it signals important changes and on the degree to which it helps formulate a context for understanding those changes. The work proposed by the committee in this phase seeks to identify some of those changes in areas not thoroughly studied in the original mapping study.

Niches Included in the Study:
The niches that the committee decided to study in this phase are noted below:

Spas. Especially because spas provide the opportunity to address one's health seriously without entering what most people view as the "healthcare delivery system," they provide an opportunity to understand a portion of the market that may be more responsive to consumers and may also be less constrained in its creativity. A difficulty in studying the niche is the very broad range of what might be thought of as "spas" from resort and destination spas to very small, local, day spa operations.

Community Hospitals. Some local hospitals, often in concert with specific elements of their medical staffs, are developing integrative medicine approaches. Some of these may (or at least intend to) influence medical practice throughout the organization, while others are more isolated departments or clinics. In large part, these are "second generation" initiatives, following the shake out of earlier efforts in the 90's. Because these hospitals often have the potential to influence their communities and their medical staffs, these initiatives may have importance beyond the opportunity for growth of market share that is likely driving them. In addition, studying community hospitals also provides the opportunity to develop some understanding of clinical practice in these settings.

Hospice. Palliative care appears to be an area of significant growth for integrative medicine. While the term "hospice" is difficult to define in any exclusive way, and hospices may often be part of larger organizations such as hospitals or long-term care facilities, understanding how some of these organizations provide integrative care should provide useful information. In particular, palliative care often engages the family and the consumer in ways that other healthcare does not.

A fourth "bonus" niche became evident as the study was beginning. A "summit" meeting of 6 leading pediatric integrative medicine clinics was funded by one of the foundations that is a member of the Collaborative. Preparation for the Summit included interviews with the participants, and the Summit's funders as well as the interview respondents agreed to the inclusion of the mapping questions in those interviews.

Organizations Studied.
The organizations included in the study are identified in each niche below:

Community Hospitals

Allina/Abbott-Northwestern Hospital, Minneapolis Minnesota
Healtheast Woodwinds Hospital, St. Paul Minnesota
Advocate Lutheran General Hospital, Park Ridge Illinois
North Hawaii Community Hospital, Kamuela Hawaii
Sutter California Pacific Hospital, San Francisco California

Hospice

Zen Hospice, San Francisco California
Mayo Palliative Care, Rochester Minnesota
San Diego (California) Hospice
Essential Care, Buffalo New York

Spas

Miraval, Tucson Arizona
The Marsh, Minneapolis Minnesota
Clifton Springs (New York) Spa
Canyon Ranch, Tucson Arizona

Pediatrics

Timothy Culbert MD, Minneapolis Minnesota
Russell Greenfield MD, Charlotte North Carolina
Kathi Kemper MD, Winston-Salem North Carolina
John Mark MD, Tucson Arizona
Lawrence Rosen MD, Westchester County New York
David Steinhorn MD, Chicago Illinois
Richard Walls, La Jolla California

The Survey

In each niche, 4-6 organizations were identified to be surveyed on the basis of the same criterion that was used in the original mapping study:

> *we looked for those people and institutions that seem to be the most visible and influential in the field and publicly (i.e. often quoted, featured in media, sources of research and/or information). We didn't look for people who are visible because of a particular research innovation; we looked for people/institutions that are affecting the institution-building of the field.*

One of the issues inherent in studying widely different market niches is the comparability of organizations within and across niches, and the resulting relevance of various questions. For example, while it makes good sense to ask hospitals and pediatric clinics how their care is reimbursed by insurance companies, that question is probably more difficult for hospices to answer, and largely irrelevant to spas. As a consequence, the interview questions were designed to first describe the organization and niche under study, and second, to lead to comparisons across niches.

Almost all of the interviews were conducted over the telephone (interviews in two hospitals in the Twin Cities were conducted in person). Mr. Henry conducted all of the interviews. The interviews were scheduled in advance, and copies of the interview questions were provided to the interviewees prior to the interview. Responses to the interview questions were recorded and entered into the study database.

While some of the questions did not apply to all respondents, the same set of questions was used for all interviews. Those questions are included below:

1) *When was your center/organization formed?*
2) *What was the catalyst for its creation?*
3) *Is it organized as a for-profit or nonprofit organization?*
4) *As an integrative center, how does it differ from "ordinary" centers in the same field?*
5) *What is its mission?*
6) *Are everyday realities reinforcing the mission or are they pressuring the organization toward changing the mission? What are the major pressures?*
7) *Is the center structured within or in association with a larger organization or is it a stand alone entity?*
8) *If part of a larger organization, to what extent is it nurtured by that organization? What is the rationale for this nurturing?*
9) *What is the size of the center: visits/year & revenue /year?*
10) *Does your center have a written strategic plan? Marketing plan?*
11) *What activities does the center undertake (care, research, education)?*
12) *How is the center managed?*
13) *What is the chief management position? How broad are those responsibilities?*
14) *How is the center governed? How active is the board?*
15) *Does the center seek philanthropic support? For operating costs? Other?*
16) *What are the ages of the clients seen in the center?*
17) *How are clients referred to your center?*
18) *What is the breadth of conditions treated at the center?*
19) *Are there any limitations on the health conditions or issues you work with? If so, what?*
20) *What is the breadth of services provided?*
21) *What CAM approaches / providers are used?*
22) *To what extent are the center's services reimbursed by third party payors?*
23) *Is a uniform "history and physical" developed on each new patient/client?*
24) *How are services integrated?*
25) *How does the physical environment enhance integrative care?*
26) *Is a diagnosis arrived at? If so, how?*
27) *To what extent do you see your practice as a success from a clinical/service standpoint?*
28) *As a business?*
29) *What are the major issues or concerns you have about your center?*
30) *Anything else that should be included here?*

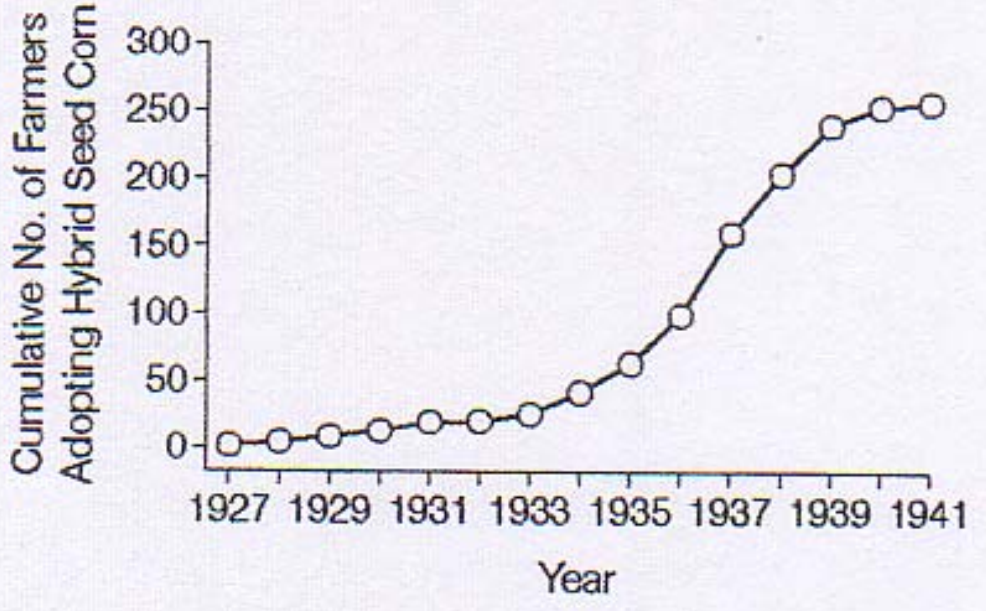
Responses to the interviews were collated and analyzed to identify findings and to develop conclusions and recommendations. A preliminary summary of the results of the study was presented at the semi-annual meeting of the Collaborative in North Carolina in November 2004. The information in this report was authored by Mr. Henry and has been reviewed by the Mapping Committee of the Bravewell Collaborative.

THE CONTEXT OF THE STUDY: DISSEMINATING INNOVATIONS IN HEALTH CARE

The April 16, 2003 issue of the *Journal of the American Medical Association* carried an article entitled "Disseminating Innovations in Health Care," by Donald Berwick MD, MPH. Dr. Berwick's article is a summary of theory and research on the dissemination of innovation (principally that of Everett Rogers and Andrew Van de Ven) and the application of that work to health care. The article is especially germane to this phase of the mapping study, and provides an interesting backdrop to its findings and conclusions.

Berwick shows the curve of the typical adoption of an innovation over time originally developed by Rogers. The curve shows slow growth at first, followed by rapid adoption, and then leveling off as what was originally an innovation becomes standard practice. This "S-curve" is reproduced as Figure 1 below.

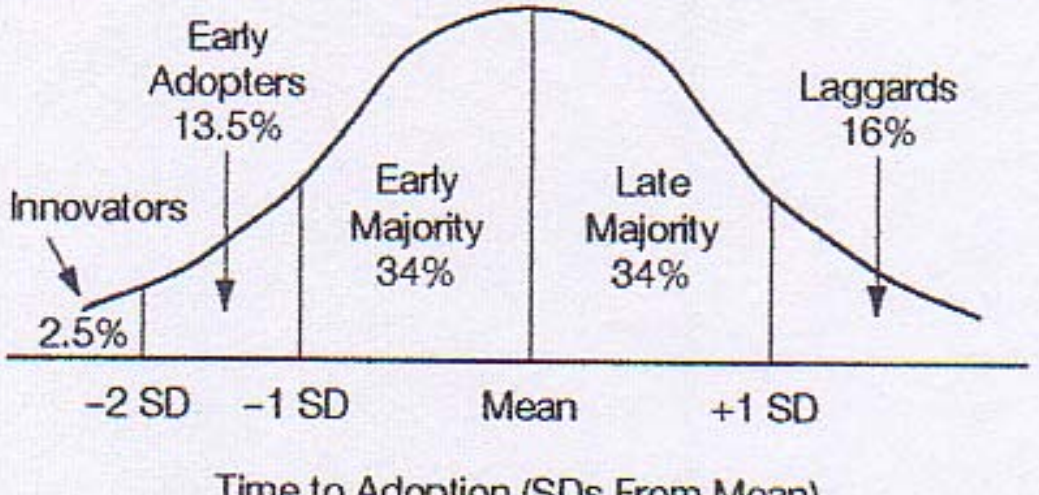
Figure 1. Cumulative Number of Adopters of Hybrid Seed Corn in 2 Iowa Communities



Reprinted with permission from Rogers.[21]

Berwick also discusses the characteristics of people who adopt an innovation at various points along the S-curve, again following Rogers' work. The categorization of adopters is shown in Figure 2 below.

Figure 2. Adopter Categorization on the Basis of Innovativeness



Reprinted with permission from Rogers.[21]

Berwick's comments on each of the categories of adopters include the following:

- ***Innovators*** are the first group to adopt an innovation, and account for the first 2.5% of adopters. "They are distinguished from the rest of the population by their venturesomeness, tolerance of risk, fascination with novelty, and willingness to leave the village to learn. . . . They belong to cliques that transcend geographical boundaries, and they invest energy in those remote connections. . . . Innovators tend to be wealthier than average or otherwise able to accept the risks and costs inherent in innovating. Locally, socially they tend to be a little disconnected. They are not opinion leaders; in fact, they may be thought of as weird or incautious. In health care, physician-innovators may be thought of as mavericks or may appear to be heavily invested personally in a specialized topic."

- ***Early Adopters*** are the next 13% of individuals who adopt the innovation. "They are opinion leaders; they are locally well connected socially, and they do not tend to search quite so widely as the innovators. They do, however, speak with innovators and with each other. They cross-pollinate, and they select ideas that they would like to try out. They have the resources and the risk tolerance to try new things. Such people are generally testing several innovations at once and can report on them if asked. They are self-conscious experimenters. Most crucially to the dynamics of spread, early adopters are watched. In health care settings, they are probably often chosen as elected leaders or representatives of clinical group(s), and they are the likeliest targets of pharmaceutical company detailing."

- The ***Early Majority*** is the third group, and comprises 34% of the total. Berwick says that people in the early majority "watch the early adopters," and "are quite local in their perspectives. They learn mainly from people they know well, and they rely on personal familiarity, more than on science or theory, before they decide to test a change. They are more risk-averse than early adopters." They "are readier to hear about innovations relevant to current, local problems than general background improvements. . . .Physicians in the early majority are readier to try those innovations that meet their immediate needs than those that are simply interesting ideas."

- The ***Late Majority*** is the next third of the population, and is "even more conservative. . . . While the early majority look to the early adopters for signals about what is safe to try, the late majority look to the early majority. They will adopt an innovation when it appears to be the new status quo (for physicians, the standard of practice), not before. They watch for local proof; they do not find remote,

cosmopolite sources of knowledge to be either trustworthy or particularly interesting."

- Laggards are the last 16% of the population to adopt an innovation. These are "individuals for whom, in Rogers' term, 'the point of reference . . .is the past' . . . . they are often making choices that are wise and useful to the community or organization. They are the physicians who swear by the tried and true."

These distinctions are especially important in understanding how integrative medicine is emerging in each of the four market segments under study in this phase. Moreover, these distinctions are critical to the success of efforts to further stimulate the adoption of integrative medicine.

Berwick also makes the following points about the diffusion of innovations in healthcare:

- The more people know about an innovation, the more likely they are to adopt it.
- Because people tend to avoid novelty, unfamiliar changes bear an extra burden of proof.
- To diffuse rapidly, an innovation must be compatible with the values, beliefs, past history, and current needs of individuals.
- Simple innovations spread faster than complicated innovations.
- Innovations are more robust to modification than their inventors think.
- Local adaptation – often, simplification -- is nearly universal in successful dissemination.
- What we speak of as the "spread" of an innovation is usually better termed "reinvention."

FINDINGS: COMMUNITY HOSPITALS

In the studied hospitals, the principal role of integrative medicine is as a background philosophy of nursing care for inpatients. Integrative medicine is the central focus of the culture of nursing care in these hospitals – it empowers the patient, provides choices in care, and connects the body, mind and spirit. In some of the hospitals, this is a long-standing process, in others it has evolved over the last few years. In a couple of the hospitals, integrative nursing care is the basis for either the development of the hospital as a new entity or for a complete revision of how the hospital cares for patients. In those cases, integrative care is seen as a key factor differentiating the hospital from its competitors.

Most physicians in these hospitals do not practice integrative medicine, but they accept it as a component of the hospital's model of care. In most of these hospitals, though, there is a designated center providing integrative medicine on an outpatient basis. These centers are largely referral clinics (rather than primary care centers), staffed by one or more physicians who are experienced in integrative medicine, along with several CAM providers. Many of these centers also refer patients to a network of selected CAM providers in the community, and are occasionally referred patients by these providers.

While several of the hospitals in the study are embedded in multi-hospital systems, there is little evidence of integrative medicine spreading beyond the focal hospitals to other parts of the parent organization. That said, several of the hospitals that are part of multi-hospital systems reported that they are currently engaged in efforts to teach integrative approaches to staff in related hospitals, either on a department by department basis, or on a larger organizational basis.

Many of the respondents in the studied hospitals noted the importance of physician leadership in moving integrative medicine from an isolated model practiced by one or a handful of physicians to its larger role as the basis for inpatient nursing care. While staff in most of these hospitals tell stories of the importance of one or two physician leaders in helping to establish the importance of integrative approaches, in others – especially those that were formed specifically around integrative approaches – the influence of nursing, philanthropists and consumers appears to have played a larger role. In particular, the role of philanthropy in initiating integrative care in these hospitals was noted by many respondents.

Although investigation of credentialing practices is beyond the scope of this study, the topic arose in several of the interviews. Those hospitals that include CAM therapies in the services they offer (mostly to outpatients) evidence a variety of approaches to credentialing the providers of those services. For the most part, this credentialing uses

state licensing when that process is in effect. For other providers, hospital professional staff processes include consultation with CAM schools and other expert sources to identify characteristics that should be demonstrated by capable providers.

As has been noted by many others, third-party reimbursement for integrative medicine services provided by community hospitals is quite limited. The hospitals in this study do not charge for integrative medicine services provided to inpatients, especially because they are generally part of nursing services. Those services that are provided to outpatients are paid for on an out of pocket basis. Several of the interviewees indicated that some of their patients are reimbursed by their health insurance for a few CAM services, but that practice is the exception rather than the rule.

It is not only payment for CAM services in these outpatient settings that is the responsibility of the patient – so too is integration across services. While physicians and other professionals provide counsel and guidance, for the most part, it is the patient who is the integrator of care in these settings. There are few mechanisms for care planning, case presentations, or other directed patient-specific interactions among the professionals (i.e., biomedicine and CAM) who provide care in these settings. Most respondents reported that the various providers made notes in inpatient charts, and several said that the providers met from time to time, but there do not appear to be anything approaching universally-accepted standards of care that lead to true integration of services. It is rare to find even the types of communication that might be expected between, for example, a surgeon and a referring primary care physician (e.g., exchange of medical records, written notations on the procedure and its outcomes, conversations about the health status of the patient). Patients decide when to seek a service, how often, and from whom. Respondents report that patients also play a role in directing inpatient care, though that direction may be less evident when integrative services are more a part of the general nursing care, and less a "menu of services" from which patients choose.

Absence of reimbursement notwithstanding, interview respondents identified a number of reasons why integrative approaches have strategic importance for these hospitals. Almost all of the respondents noted that integrative medicine is seen as a competitive advantage in the marketplace, and a key feature distinguishing their hospital from others in that market. Some respondents also noted their belief that integrative medicine was becoming the "standard of care" in their community, that it was beginning to be demonstrated as effective at reducing lengths of stay, and that the hospital would not be able to compete without it. Many of the respondents noted that their hospital had experienced an increase in utilization after it became recognized in the community for providing integrative care. The experience of one of the hospitals illustrates this

point. This hospital was built in the last decade on a model of integrative care, both inpatient and outpatient. While the outpatient department continues to struggle, inpatient services appear to be quite successful, especially in service lines where patients exercise choice in where to receive care. The hospital had originally planned to develop on the basis of its strengths in cardiology and digestive diseases, with less emphasis on services such as orthopedic surgery. However, over the last several years it has seen a dramatic increase in the number of patients receiving knee and hip replacement surgery, to the point that it has developed special programs in this area. Interview respondents attribute this growth to word of mouth referrals from orthopedic patients who have received integrative care at the hospital and who strongly recommend it to others needing similar services.

Most of the respondents noted that integrative care continues to be supported by their hospital – or by the parent organization – for the strategic reasons noted above, despite continuing concern about the financial viability of the model.

FINDINGS: HOSPICE

While hospice is a relatively new form of care, having come into existence in the 1960s, its recognition of mind-body-spirit connections is well-established. Indeed, there is considerable overlap between the hospice model of care and that of integrative medicine. In addition to the mind-body-spirit connection, that overlap includes a strong orientation to the interests of the patient and family (in contrast to those of the providers). That said, the use of CAM approaches is a relatively new phenomenon in most hospice programs.

Because activities of daily living (such as walking, bathing, eating) are an important element of the model of care in hospice, there are many opportunities to introduce such aspects of integrative medicine as mindfulness, music, and touch. Moreover, the critical role of nursing in hospice, especially the broader acceptance of integrative approaches in nursing (in contrast, for example, with medicine), provides a mechanism for more rapid dissemination of integrative medicine.

A key issue in hospice is the pressure on costs resulting from the limitations imposed by Medicare regulations and the parallel restrictions on what can be covered by private insurance. The result is a relatively firm daily rate within which care must be provided. The limitations of this daily rate require new approaches (such as CAM) to compete with established approaches for reimbursement. As a consequence, many hospice programs seek philanthropic support for services that are not covered in the daily rate. Especially as the enrollment of hospice expands,

the ability of philanthropy to compensate for daily rate requirements will be limited. The result is likely to be continued pressure on the need for innovations in hospice to demonstrate cost-effectiveness.

The hospice programs included in the study are on a smaller scale than the hospitals studied, ranging from 40 to 750 cases at any one time. These are largely home care models, with some connection to an established inpatient hospice, usually within a hospital. Marketing efforts in these programs focus on encouraging people to enter hospice, or palliative care, programs earlier in the process, so that more detailed attention can be paid to symptom control. The effect of these approaches will be to expand the length of stay in hospice programs. These approaches are seen by the respondents in the interview as responses to increased awareness of issues of death and dying among both the public and health professionals. At the same time, respondents noted continued reluctance of patients, families and providers to confront issues of dying, and the resultant delay of entry into hospice programs of many otherwise appropriate cases.

Most of the hospice respondents interviewed in this study viewed as "old hat" many of the aspects of integrative medicine that are seen as more revolutionary in other areas of health care. For example, while contemporary medicine is examining the effect of the mind on various physical states, that connection is taken for granted in hospice, and is generally considered part of the model of care. Similarly, while the healing power of human touch is being explored in hospital nursing programs, it is an established part of the hospice model. And, at a fundamental level, hospice care is clearly patient-directed in ways that hospital care is just now exploring: there is little question in hospice that the wishes of the patient and his/her family are paramount in decisions about what care to provide when and where.

In this context, integrative medicine seems far less innovative, probably because it has a much longer and more visible history. That said, other aspects of integrative medicine, especially the application of various CAM approaches to hospice, are viewed as more revolutionary. As noted, because these aspects are seen as innovations, they must compete with more established approaches for funding within the daily rate limits set by Medicare. And, given the tight margins within which hospice programs operate, it is likely that such approaches will evidence only limited growth.

FINDINGS: SPAS

If hospice resides at one end of a continuum of financial limitation of innovation, then spas reside at the other end. It is clearly the case that access to spas is not restricted only to wealthy clients, and spa respondents in this study repeatedly noted that the term "spa" can be applied to a very broad range of entities encompassing elaborate American resorts, traditional European spas, modern and traditional Asian spas, and smaller and more local establishments that vary greatly in scope and amenities. It is also the case, however, that consumers' decisions to purchase spa services are not constrained by limitations placed by public or private health insurance plans. These decisions much more closely resemble those made to purchase groceries, restaurant meals, or other consumer products than they resemble those made to seek other forms of health care, especially those forms investigated in other parts of this study.

As a consequence, spas evidence much broader differences than are found among hospice programs, community hospitals or pediatric practices. These differences are found in the size and scale of institutions (from services provided at the corner beauty salon to destination resorts), the breadth of services provided (from one or two services to very elaborate packages of services provided over days or weeks), the orientation to health issues (from only casual relationship to well-being to integrated service systems oriented to specific diseases or health conditions), and the degree of integration between Western scientific medicine and CAM (from none to physician-directed teams of CAM and other providers). In the context of Berwick's discussion of diffusion of innovation in healthcare, spas may evidence the most clear signs of continual reinvention. As a consequence, it might be argued that they also evidence the most advanced level of dissemination among the market niches in the study.

Even in the few spas included in this study, there are significant differences in size, scope and relationship to standard healthcare. Even so, the spas in the study share a very broad, holistic view of health and well-being that recognizes the importance of diet, exercise, mind-body connections and spiritual pursuits. In this context, CAM and Western medicine approaches are seen as working together to address or prevent illness and advance health. Like hospice, spas are focused on the interests of the consumer, and it takes little imagination to hypothesize that that focus derives from the consumer's buying power. Also like hospice, spas seek to align many resources in the pursuit of health: education, food, the physical environment, treatments, staff and exercise.

While the level of medical orientation of spas, like their beauty, was in the past probably best understood in the eye of the beholder, more recently

there have been very evident signs of explicit orientation of some spas toward medical approaches. In some spas, physicians, nurses, and other medical professionals provide services and play active roles in program design. Some spas collaborate with hospitals and clinics in program development, research and the provision of services. In some spas, some medical services are reimbursed by health insurance. In some spas where there is not an identifiable medical staff, there are nonetheless specific programs oriented to wellness and health, including weight loss and smoking cessation.

Three of the spas in the study have long-standing connections with medical provider organizations, and at least some of their programs are integrative, holistic extensions of traditional programs in, for example, cardiology or endocrinology. Respondents suggest that these programs could be the wave of the future in healthcare, especially if it can be demonstrated that they are more cost-effective than more standard approaches to disease management.

FINDINGS: PEDIATRICS

As noted earlier, the pediatricians included in the study are those that had been invited to participate in a conference on advancing the field of pediatric integrative medicine. They were invited on the basis of their clinical experience in integrative medicine. However, there is wide variation among these pediatricians in the level of clinical activity in which they are engaged at the present time. Their practices vary from those that are principally research-based, seeing but a few children each week to those with substantial inpatient and outpatient practices.

All but one of these practices is a consultative practice, depending on both word of mouth and referrals from other physicians. Only one of these practices engages in formal marketing, using a variety of patient education programs, brochures and other materials to increase its visibility in the community. Almost all of the practices engage in various forms of continuing education of physicians, and see that activity as important in building referrals. Only one of the practices employs a manager focused on pediatric integrative medicine. The others are managed by the pediatrician or as part of a larger and more diverse practice.

About half of the pediatricians in the study reported that their practice is seen as a strategy for growth and/or as an important point of differentiation from competing organizations by the hospital or the larger pediatric practice of which they are a part. Others noted that they are accepted because families ask for their services, because competing organizations are developing similar programs, or because they draw grant funding.

As is the case in other parts of integrative medicine, there is limited reimbursement for CAM services provided in these integrative pediatric practices. However, some payors reimburse acupuncture and biofeedback services for specific conditions, and there is some optimism among these pediatricians that reimbursement will improve as more data on efficacy becomes available. Most providers, however, simply bill patients directly, leaving the pursuit of reimbursement to the family.

Philanthropy is an important element in the existence of these practices. Three had substantial philanthropic support to cover initial operating costs, and all pursue such support for special projects and/or research.

Respondents all characterize their practices as clinically successful, citing their own research findings, as well as the comments of patients, families and referring colleagues. Most also report that their practices are business successes, although several are not generating a profit.

CONCLUSIONS

The findings noted above lead to several conclusions. These include the following:

- Integrative medicine has many faces and many homes in communities. Integrative medicine is no longer merely a phenomenon isolated to a few unusual medical practices or to research-driven academic institutions. Rather, it is emerging at the community level in many forms, demonstrating the adaptations that Berwick says are characteristic of successful diffusion of innovation.

- The four market niches included in this study are at different points, relative to their use of integrative medicine approaches, on the "s-curve" that Berwick and others use to characterize the diffusion of innovation. Pediatrics is probably the least evolved of the four niches, evidencing both fewer instances of the occurrence of integrative medicine, and less differentiation/adaptation. Pediatrics is probably at the midpoint of the first plateau on the s-curve. Community hospitals are somewhat more evolved, showing substantially more cases and more adaptation. They probably occupy a position at the beginning of the upslope between the two plateaus. Hospice is further along still, probably at the tipping point on the s-curve: integrative approaches are in common use. Spas are the most advanced relative to integrative approaches, probably at the beginning of the top plateau on the curve.

- The continuing development of integrative approaches in spas may be of interest because these are the most purely consumer-driven organizations in the study. Spas are developing increasingly robust health care services, and are beginning to collaborate with traditional healthcare providers such as hospitals, clinics and universities. There is some opportunity for hospitals to morph into spas and vice versa, possibly following the long tradition of such collaboration in Europe. And, as interest grows in patient-directed chronic disease management (abetted by health savings accounts and consumer-directed health plans), consumer-friendly options such as spas may prove quite successful.

- For similar reasons, the evolution of hospice may prove interesting, especially if ways can be found to overcome the limitations on innovation imposed by Medicare rate restrictions. Hospice is adamantly patient- and family-centered, and well-accustomed to building on the connections among mind, body and spirit. As more CAM procedures demonstrate their efficacy, they could find rapid acceptance in the hospice community.

- While there are important models of integrative medicine approaches in community hospitals, the continuing pressures on cost control mean that evidence-based processes will dominate. If integrative approaches can mount the data necessary to demonstrate their value, it is likely they will see broad adoption, especially because they provide important opportunities for the hospital to bond with nurses, physicians and the market. Absent such data, however, these approaches are not likely to advance quickly. In any event, it is likely that further expansion of integrative approaches in hospitals will require philanthropic support to offset the costs involved in both demonstrating efficacy and translating research into practice.

- Pediatric integrative medicine is developing the core leadership it will need to advance its diffusion over the next five to ten years. This leadership, combined with the opportunity to learn lessons from the experience of adult integrative medicine clinics, as well as the growing interest in integrative approaches in the public, could hasten the evolution of the field. However, except for children with very difficult conditions seldom addressed well by standard medicine (such as those with autism), pediatric care is probably more dependent on referral patterns than adult care. To the extent that this is the case, expansion of integrative pediatrics will probably occur most rapidly where there are established referral networks that see the value of such approaches.

RECOMMENDATIONS

Participation in the interviews, review of the findings and conclusions, and several months' immersion in the study leads me to the following recommendations:

- While the work of the Bravewell Collaborative is consistent with Berwick's model of the diffusion of innovation in health care, it could build on resources such as conversations with Berwick or Professor Van de Ven to develop more synergy among its efforts and yield more impact from the projects in which it invests. In particular, the Collaborative should consciously focus on building the early majority of physicians in adult integrative medicine. Consistent with Berwick's model, that would include spotlighting early adopters (as with the Bravewell Award and the Clinical Network), facilitating local interpersonal contacts (as might occur as the Network clinics are strengthened and their Bravewell Fellows come on line), enabling adaptations (through strengthening the clinics in the Network and implementing the curriculum and other innovations of the Academic Consortium), and demonstrating how integrative medicine meets needs (in public education efforts such as the PBS series).

- The evolution of integrative medicine in hospice and spas should be monitored to identify lessons that could be applied in other areas, thus hastening the diffusion of innovation in the field.

- Hospital programs in integrative medicine should be monitored to learn what strategic advantages they present for their institutions and how these advantages are realized. In particular, as cost pressures force hospitals to be more risk aversive, this monitoring could provide data on the experiences of hospitals that have adopted integrative medicine that would be helpful in leading others to pursue similar strategies.

- The Collaborative should consider mapping key processes in the diffusion of integrative medicine. Having mapped the evolution of integrative medicine among opinion leaders and in academic institutions, community hospitals, pediatric practices, hospice and spas, the focus of mapping should now turn to payment, policy, human resource development, licensing and credentialing, and the design of healthcare insurance. Understanding how each of these processes affect the diffusion of integrative medicine should help to identify leverage points both for the Collaborative and for other parties interested in advancing the field.

- The Collaborative should also consider mapping the development of other provider groups important to the spread of integrative medicine. Potential subjects might include chiropractic, pharmacy, and various

CAM fields. However, by far the profession with the greatest potential impact on the diffusion of integrative medicine is nursing. In this study, nurses were identified as key to integrative approaches in both hospice and community hospitals. And, as chronic disease management requires more and more effective forms of ambulatory nursing, nurses could be at the forefront of the adoption of integrative medicine approaches.