



Fifty Years of Contributions of Behavioral Science in Family Medicine

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Behavioral Science has made innovative and integral contributions to the evolution of family medicine over the past 50 years. This paper divides this journey into four developmental eras: Early Years, Middle Years, Recent Years, and the Future. Over this time, the family physician's role in treating behavioral health concerns has changed from primary responsibility to new models of collaboration and team care. Likewise, behavioral scientists in family medicine have enhanced their scope of attention from the foundational focus on family dynamics and behavioral health care, to physician well-being, contextual care, and team-based communication. The educational and clinical functions of behavioral science faculty have expanded, with significant contributions to research and scholarly work that have defined academic family medicine, and development of leadership roles within clinical teams, academic departments and centers, and larger health systems.

The new specialty of family medicine was founded upon a broad biopsychosocial agenda. "The sine qua non of family practice is the knowledge and skill which allow the family physician to confront relatively large numbers of unselected patients with unselected conditions and to carry on therapeutic relationships with patients over time."¹

Founders of the academic discipline of family practice (now family medicine) carefully considered how to practice and teach this unique and needed specialty. What were the skills needed for patient communication, maintaining long-term relationships, and managing patients within the context of families and communities? Many physicians, behavioral scientists, educators and researchers have tried to answer these questions.² Their body of work is the 50-year academic history of behavioral science in family medicine.

Methods

Building on several prior reviews and original writings, contributions were interpreted by authors representing a spectrum of perspectives within academic family medicine.

It is beyond the scope of this brief overview to include all seminal contributions to the evolution of behavioral science in family medicine. We chose to highlight frequently used key references that illustrate overall trends. Likewise, there are certain important domains such as community-oriented primary care and interprofessional training where behavioral scientists have made substantial contributions; however, a full exploration of these topics is beyond the scope of this article.

In addition to the general literature review, a thematic analysis

identified the relative frequency of behavioral science terms and concepts published throughout this history. The PubMed literary search engine identified articles published from 1966–2016 using key words in titles and abstracts. The 50-year period was divided into three roughly equal time frames with four extra years for the start of the specialty when few articles were published and residencies were just beginning. The authors reviewed 40 behavioral science terms, and agreed upon 20 commonly used terms found with even modest frequency in published articles and reports linked to family medicine. Via iterative literature searches spanning our three time periods up to 2016, the behavioral science terms were linked to family medicine, family practice, and primary care to assess the relative frequency of terminology over time. Repeated searches combined related terms (ie, substance use and addiction) and dropped very infrequently used terms. These 20 most commonly found terms are shown in a frequency chart (Figure 1) across three time periods.

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Thematic Analysis Results

Several trends are apparent in the thematic analysis. The Recent Years (1996–2016) query produced 661% more total hits than the Early Years (1966–1986) query. This likely reflects an increase in pertinent journals, increased interest in the behavioral sciences in the literature, and the expanded number of behavioral science faculty and their participation in scholarly as well as educational activities. Certain terms changed in prominence between the eras. For example, “Family Therapy” was cited in 4.7% of the articles from the Early Years, but only .7% in the Recent Years. Similarly, “Integrated Care” and “Shared Care” were not cited in the Early Years, but had 25 and 46 citations respectively in the Recent Years. The term “Behavioral Science,” quite common in the Early Years, has been mostly eclipsed by “Behavioral Health” in the Recent Years.

The Early Years (1966–1986): Launching Programs

Founders of academic family medicine defined the essential knowledge and skills needed for those entering this new primary care specialty, striving to reach beyond the technical aspects of medicine toward humanistic comprehensive care for each person.³ This required new skills in diagnosis and management of common psychiatric illnesses, assessment of normal individual and family development, and adaptation to illness and loss. In addition, the early founders anticipated the development of competencies related to family assessment and interventions. “It is axiomatic that the specialty of family practice (now family medicine) is involved in the comprehensive, ongoing care of individual patients and their families, and that the knowledge and skills required by the family physician include a broad range of clinical competencies.”⁴ “It is

also axiomatic that the family is the basic unit of care extending well beyond the individual as the patient...”⁵

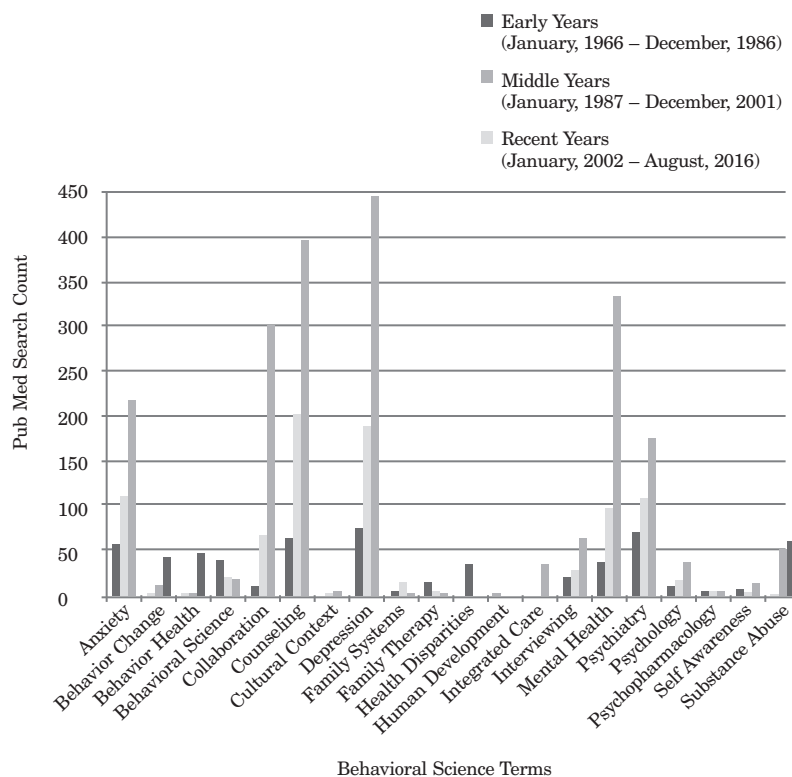
Curriculum Experimentation

The initial development of academic family medicine afforded national financial support for experimentation, including support for “behavioral scientists” from many disciplines. Strong collaborations occurred, particularly with community- and family-oriented psychiatrists and family therapists. Psychologists, social workers and pastoral counselors helped expand the clinical diagnostic and psychotherapy skills of family physicians. Anecdotal discussions and writings of early leaders remind us how the academic focus for each program did not reflect national standards but rather the unique background, perspective and skills of the faculty within each program.^{6,7,8,9,10,11,12,13}

There were tensions from the start. Were family physicians expected to care for all the physical, emotional and social needs of their patients? Should family physicians manage mental health disorders alone or refer to a mental health specialist?¹⁴ And, where was the line for referral? How much should curricula emphasize diagnosis and treatment of common disorders versus helping family physicians improve their interviewing skills, individual and family assessment skills and their own self-awareness?¹⁶

Published articles in journals such as *Family Medicine* and *Families, Systems, and Health* (initially *Family Systems Medicine*, founded in 1983), document the continued struggle to balance clinical and educational agendas for behavioral science in family medicine. The behavioral science learning agenda for many family physicians was not dissimilar to that for a formally trained psychotherapist and paid little attention to working with multi-professional teams. This model unintentionally led many trainees to feel overwhelmed with this expanded role,

Figure 1: Word Frequency



though a handful of residents and early career family physicians did become fully trained therapists. The latter group, with extensive general systems training disproportionately evolved into a variety of leadership roles in teaching and practice.

The vast majority of family medicine residents stayed within the boundaries of traditional medical roles, but with a humanistic foundation. In the mid 1980s, family medicine again wrestled with name change back to general practice versus the more expansive concept of family medicine.^{1,2} The retreat failed as the specialty recommitted to the name family medicine but clarified that teams would complement the skills and knowledge of the family physicians.

Developing Competencies

As each academic program developed its own culture, the Society of Teachers of Family Medicine (STFM) and related organizations were critical in bringing together thought leaders and eventually creating national curricula. National meetings of the STFM Group on the Family in Family Medicine and the Forum for Behavioral Science in Family Medicine were established. In 1982, the STFM Task Force on Behavioral Science was created to review teaching of behavioral science in family medicine.^{17,18} Their survey of STFM members found that 90% of responding programs employed behavioral science faculty. They noted a shift from part-time psychiatrists teaching behavioral science to more full-time non-physician behavioral science faculty. The primary focus of the curriculum was on counseling/interviewing, family dynamics/systems and the doctor-patient relationship.

The integration of family systems was an early and continuing premise for behavioral science curriculum in family medicine.¹⁹ Interviewing skills for “family meetings” for families with complex illness were supported by several early textbooks: “Family Therapy and Family Medicine”²⁰,

“Working with Families”⁷ and “Family-Oriented Primary Care”.¹⁰ Original ideas about family development and the family life cycle, formulated by sociologists, family therapists, and family oriented psychiatrists, needed to adapt to changing family life contexts and the role of culture and broader systems influencing health and illness. Training for family care demanded more sophisticated thinking and caution as research revealed more diverse types of families and greater variations in the family life cycle. Physicians’ training needed to encourage a more nuanced understanding of how diverse families function and adapt to change, especially when facing health related challenges. Concepts of “cultural competence” and “cultural humility”, so widespread in current academic medicine, were an early focus of family medicine.²¹

Early core competency discussions occurred in 1986²², when the STFM Task Force outlined core competency objectives for behavioral science education. Designed as a working document, goals and objectives were created for: (1) sociocultural issues, (2) normal development/developmental crises, (3) doctor-patient relationships, (4) family systems and life cycles, (5) biopsychosocial assessment, (6) biopsychosocial management, and (7) personal/professional relationships. The American Academy of Family Physicians²³ also published their first guidelines for a behavioral science curriculum which has undergone multiple revisions.

Middle Years (1987–2001): Establishing Curricular Consensus

Several themes emerged from our reflections on the evolution of the Middle Years of behavioral science in family medicine: collaboration and common ground, core behavioral health topics and skills, communication skills, provider self-awareness and reflective practices, and biopsychosocial and contextual care.

Collaboration & Common Ground

While behavioral scientists frequently felt isolated in their unique programs and developed unique curricula, STFM and the Forum meetings provided valuable venues for support, coordination of curricula, and inspired opportunities for educational influence. The STFM Group on Behavioral Science continued to develop common ground and teaching resources through the publication of the “Resource Guide for Behavioral Science Educators in Family Medicine.”²⁴ Yet even within STFM, full collaboration took time to develop. There was overlapping membership but different foci for the STFM Group on Families in Family Medicine and the Group on Behavioral Science. Most behavioral scientists needed to choose between the two national behavioral science meetings, the Forum, or the STFM Conference on Families in Health, and the more general STFM Annual Spring Conference. With such competition between conferences, the last Conference on Families and Health occurred in 2008, enabling behavioral science presentations to be mainstream in the STFM Annual Spring Conference. With significant collaboration, the two groups were combined in 2011, creating the largest STFM group, the STFM Group on Family and Behavioral Health (now known as the STFM Family and Behavioral Health Collaborative). This consolidation has resulted in increased behavioral science faculty attendance and programming for the STFM Annual Spring Conference, ensuring a more robust collaboration within our academic specialty.

From Mental Health to Behavioral Health Integration

As discussed later in the paper, the language of behavioral science has shifted to reflect the movement toward integration. In the Early Years, terms borrowed from psychiatry included transference, countertransference, psycho-pathology and

resistance to change by the patient. Gradually terms like family systems, normal family functioning, genogram, adherence to treatment plans, care coordination, shared care, collaborative care and integrated mental health have evolved. The lexicon of integrated care became confusing to participants as many key terms were interpreted differently. Creating a consensus of meaningful terms emerged in the next era when the Agency for Healthcare Research and Quality (AHRQ) provided a Lexicon authored by CJ Peek.²⁵ The risk in this evolution was the minimization of the psychotherapeutic influence regarding the clinician-patient relationship, transference and counter transference issues.

In many ways, the Middle Years saw an increase in potential content and then a consolidation of focus. Training gradually shifted toward the family physician learning skills to work collaboratively with others more fully trained in psychotherapy and diagnosis of diverse behavioral

problems. Family physician training focused more on assessment, brief psychosocial interventions and sharing care with other behavioral health clinicians.^{14,26}

Curriculum has been steeped in the biopsychosocial model of health and illness, especially that individual behavior and patterns exist within complex systems including families and other social networks.²⁰ Figure 2 summarizes how key components that are now frequently addressed in behavioral health curriculum share a unifying focus on a strong patient-physician relationship.

Core Behavioral Health Topics and Skills

Core behavioral health topics have included screening and the diagnosis and treatment of mental health conditions common to primary care such as depression, anxiety and somatic symptom disorders. Additional areas of focus include health promotion and the interplay of physical and emotional health.

Communication Skills

As core principles for behavioral science education were consolidated, so were models and tools for teaching communication skills.¹⁶ In 1986, Stewart & Lieberman published *The Fifteen Minute Hour*²⁷, predicting the changes for increased productivity to be implemented in the Middle Years. This influential work on therapeutic communication with patients is now in its fifth revision. Protocols for family-oriented interventions were developed.²⁸ Schirmer and colleagues reviewed 15 instruments developed to measure patient-physician communication.²⁹ One notable product of this review was the Patient-Centered Observation Form (PCOF).³⁰ These concepts and tools helped create a shared framework and shared language to teach and assess competency in patient-centered communication skills.

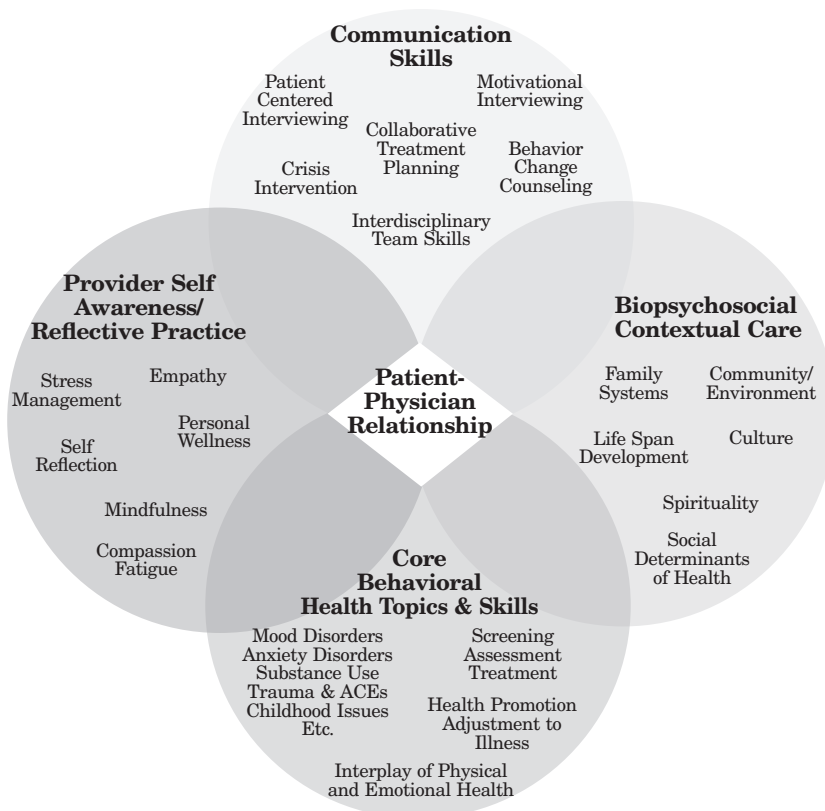
Provider Self-Awareness and Reflective Practice

Balint groups have been a quintessential venue for self-reflection within family medicine education.³¹ Begun in England with practicing general practitioners, Balint groups are structured to help physicians understand how they are influenced by their patients and how patients might view their doctors. Though Balint groups continue in some programs, in others focus has shifted to mindfulness, self-regulation, self-care, and narrative practices as self-reflection tools and ways to reduce risk of burnout.³² Family medicine's early concern with mindfulness,³³ well-being, and burnout³⁴ has become a focus for national medical training of all specialties, and the ACGME.

Biopsychosocial / Contextual Care

While the Early Years focused upon teaching family physicians to consider family influence on health and how to engage families, the Middle Years also focused on how families are influenced by communities and cultures.^{35,36,37,38} The concept of the patient in the context of family "and community", originally stated

Figure 2: Domains in Behavioral Science Teaching



in our founding documents required a more sophisticated teaching agenda regarding diverse cultures and communities. Fundamental to this development is the awareness that none of us can ever “know” the life and experience of another. Excellent contextual care is inextricably intertwined with excellent communications skills.

Recent Years (2002–2016): Moving Towards Integration

Development of the ACGME “Milestones” provided an opportunity to review and solidify the role of the behavioral sciences in graduate medical education. Milestones interwoven throughout the sub-competencies include the behavioral science topics of patient-physician interactions, interprofessional communication and functioning, integration of psychosocial contexts and interpersonal awareness. As national accrediting bodies have embraced these principles, academic family medicine continues to provide leadership.

Behavioral Science Workforce Development

There are multiple examples of long-standing training opportunities for future behavioral scientists within several programs, and increased training is now available. Initiatives to build a highly skilled workforce for family medicine include the continuation of the Forum for Behavioral Science in Family Medicine, the STFM Annual Spring Conference, and the Collaborative Family Healthcare Association annual conference (CFHA). Developed to create future education leaders, the STFM Group on Family and Behavioral Health created the Behavioral Science Family Systems Educator Fellowship in 2010. As of 2017 more than 100 behavioral science educators will have graduated from this yearlong fellowship program which provides critical mentorship, resources for education, and networking opportunities.

An additional workforce development effort is the creation of a

Behavioral Sciences Basics Wiki by members of the STFM Collaborative on Family and Behavioral Health. This Wiki is designed to be a continuously evolving repository for key resources for behavioral science educators. Furthermore, as the Integrated Behavioral Health (IBH) model has continued to expand, additional training programs for teachers of behavioral science have been developed, standardizing many aspects of training to teaching the IBH model in family medicine residencies.^{39,40}

Integrated Behavioral Health

The Integrated Behavioral Health model (IBH) is also described as integrated care, primary care behavioral health, collaborative family healthcare, and medical family therapy. It is defined as “care that results from a practice team of [medical] and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health and substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, adaptation to illness, and ineffective patterns of health care utilization.”^{25,41}

The IBH movement began in the late 1980s and early 1990s through the pioneering work of Don Bloch and the founders of the Collaborative Family Healthcare Association, nearly all of whom were affiliated with family medicine departments. From small beginnings, this approach to healthcare has spread to represent a mainstream form of care in family medicine residencies, governmental, and non-profit healthcare systems, and increasingly in the for-profit sector.⁴² The American Academy of Family Physicians published a position paper recommending co-location of mental health specialists in primary care settings, with perceived benefits including improved access, follow-up, innovation, and coordination of services.⁴³

With little scholarly literature that quantifies the growth of IBH services in family medicine residency settings, we present anecdotal data. In preparation for this paper, the authors conducted a survey of the educational sessions presented at the 1996, 2006, and 2016 STFM annual conferences. During this time, the number of sessions related to integrated behavioral health services in those years increased from 4 to 33 to 57.

As mentioned earlier, the terminology of integrated behavioral health evolved without consensus of definitions for related terms. AHRQ supported a series of meetings that yielded a published “lexicon” of common terms based upon a consensus of opinion by leaders in the field.²⁵ As the language developed, so has research about behavioral health integration.⁴⁴ Family medicine researchers at Wayne State University revealed that 83-89% of residency graduates agreed: (1) they learned important knowledge and skills from the psychology trainees, (2) their patient care was enhanced, and (3) they were more capable of team-based practice based on their interprofessional training environment.⁴⁵ Similar research from the Providence Oregon Family Medicine Residency revealed that 97% of graduates were more inclined to apply for or accept a job offer if the position included integrated behavioral health services. The aspects of the IBH model most appreciated by residents were warm hand-offs (100%), curbside consultations (97%), assistance with mental health referrals out of clinic (88%), and helping with patient crises (85%).⁴⁶ A 2014 consensus White Paper⁴⁷ noted that mental health services must be included in the core function of Patient-Centered Medical Home (PCMH). As the practice of medicine has evolved more and more toward a corporate model of standardized care delivery and sometimes rigid time constraints, we risk losing some core aspects of the biopsychosocial model.⁴⁸ Within residency programs, behavioral

science faculty provide teaching as well as IBH services which creates time management conflicts. As most training programs work within a predominantly fee-for-service payment model there is ever increasing pressure to see patients more quickly. When the behavioral health faculty take the time away from their own direct patient care to help trainees via direct supervision, coaching, mentoring, and with joint interviews, it reduces the opportunities to generate essential income. These practice realities are ripe for research to clarify best economic, patient care and educational needs. (For a timeline of historical events in behavioral science see Figure 3.)

Future

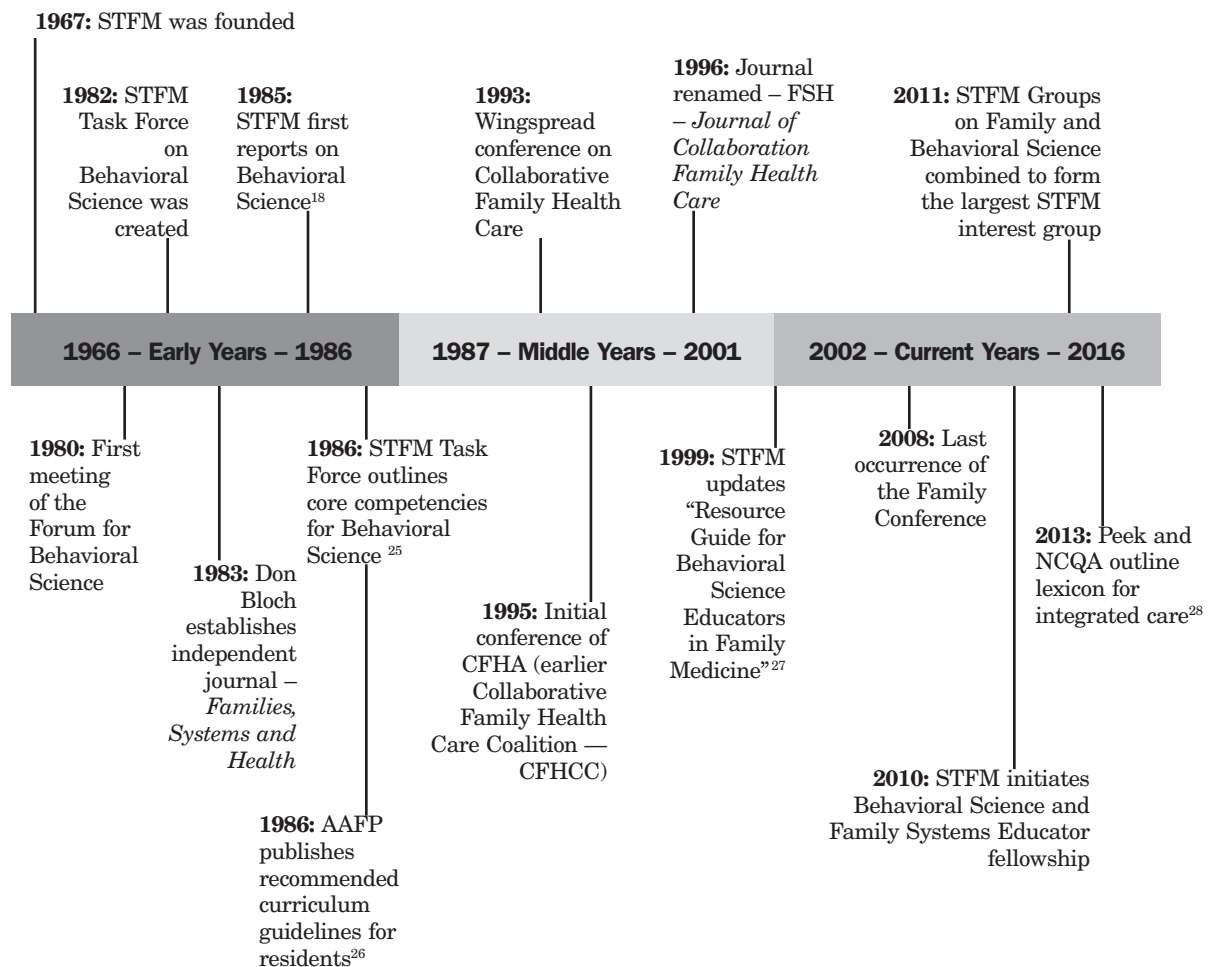
Our predictions for the future of behavioral science reflect the rapid changes underway in family medicine and health care delivery systems. The “Triple Aim”, the widely adopted goals for modern health care, simultaneously includes: (1) improving patient experience, (2) improving health of populations, and (3) reducing the overall costs.⁴⁹ This desired outcome cannot occur without enthusiastic and effective care teams. Therefore, the recent “Quadruple Aim,”⁵⁰ adds the goal of improving the experience for the health care teams. Efficiently addressing the “whole person” needs of patients and achieving the Triple and Quadruple Aims will require

experiments in team-based care, interprofessional education and practice.⁵¹

The roles of physicians, nurses, and all types of behavioral health care clinicians will continue to evolve and require new skills in leadership and collaboration. Behavioral science faculty often demonstrate and teach these skills and use them to fulfill significant institutional leadership roles in departments and academic health centers.

Since the beginning of our discipline, behavioral science educators and researchers have contributed not only as teachers but as leaders of practice, research programs and institutions by demonstrating communication, negotiation, and system

Figure 3: Historical Events in Behavioral Science



consultation.⁵² Their significant and expanding roles in family medicine must still be recognized. The authors recommend that behavioral science educators be designated as core faculty for all family residencies by AC-GME.

The collective “organism” of the health care team will find new ways to build and maintain the trust of patients and families. Patients in distress will still need a trusted health care professional’s personal presence to explore complex illness, treatment, and recovery in the context of family and community.⁵³ Family physicians will build and maintain trusting relationships not only with patients and families but also with other members of the expanding healthcare team including behavioral health providers and educators.

Few predictions hold over time except that the rate of change will accelerate.⁵⁴ We predict the role of psychopharmacology will change in behavioral health. The underlying basis of psychiatric and behavioral health disorders and treatment will shift toward a greater emphasis on the neuroplasticity of the brain and neuro-development as the dominant model versus a more biochemical explanatory model for psychiatry and behavioral health.⁵⁵ Talk therapy and interpersonal therapy strategies will become more frequently used models of helping patients. Improved options for tele-health, online self-directed care, and other means of offering psychotherapy will expand. The impact on children and adults of Adverse Childhood Experiences, or ACEs,⁵⁶ plus the pervasive impact of the social determinants of health will be understood more fully as powerful influences on brain function and overall health and health related behavior.⁵⁷

Expectations for the future reflect the commitments of the past 50 years. Behavioral science skills will remain essential for ensuring that the empathic clinicians who choose family medicine will remain adaptive and meet future patient needs.

Clinical teams make this possible and behavioral science educators will continue to support patients, physicians, and clinical teams. Alternative payment models that support value-based and population-based rewards for integrated practices will help, and family medicine has the opportunity to demonstrate this value. While full funding develops, family medicine will creatively continue to “do the right thing” and demonstrate increasing success in creating balanced biopsychosocial care.

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References

- Stephens GG. The intellectual bias of family practice. *J Fam Prac* Dec 1975;2(6):423-8.
- Medalie, J (Ed.) *Family Medicine Principles and Applications*. Waverly Press Baltimore, Md., 1978.
- Willard WR. Report of the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education: Meeting the Challenge of Family Practice. Chicago, Ill: American Medical Association, 1966.
- Hunt, VR. The Unifying Principles of Family Medicine: A Historical Perspective. *Rhode Island Medicine* 1993;76:351-60.
- Geyman, J. The Family as the object of care in family practice. *J of Family Practice* 1977;5: 571-7.
- Huygen FJA. *Family medicine: The medical life history of families*. New York, NY: Brunner/Mazel, Inc. 1982.
- Christie-Seely J. *Working with the family in primary care*. New York, NY: Praeger Publishers, 1984.
- Doherty WJ, Baird MA. *Family-centered medical care: A clinical casebook*. New York, NY: The Guilford Press. 1987.
- Glenn ML. *Collaborative health care: A family-oriented model*. New York, NY: Praeger Publishers. 1987.
- McDaniel S, Campbell TL, Seaburn DB. *Family-Oriented Primary Care: A manual for medical providers*. New York, NY: Springer-Verlag New York Inc. 1990.
- Seaburn DB, Lorenz AD, Gunn WB, Gawinski BA, Mauksch LB. *Models of collaboration: A guide for mental health professionals working with health care practitioners*. New York, NY: Basic Books, A Division of HarperCollins Publishers, Inc. 1996.
- Blount A. *Integrated primary care: The future of medical & mental health collaboration*. New York, NY: W.W. Norton & Company, Inc. 1998.
- Patterson J, Peek CJ, Heinrich RL, Bischoff RJ, Scherger J. *Mental health professionals in medical settings: A primer*. New York, NY: W.W. Norton & Company, Inc. 2002.
- Peek CJ. Don Bloch's vision for collaborative family health care: Progress and next steps. *Families, Systems, & Health* 2015; 33(2): 86-98. DOI 10.1037/FSH0000128.
- Smilkstein G. The Family APGAR: A proposal for family function test and its use by physicians. *The Journal of Family Practice*; 6(6), 1231-9. June 1978.
- Bayer-Fetzer Conference. Essential elements of communication in medical encounters: the Kalamazoo Consensus Statement. *Acad Med* 2001;76:390-3.
- STFM Task Force on Behavioral Science. Behavioral science in family medicine residencies: Part I. Teachers and curricula. *Fam Med* 1985; 17(2):64-9.
- STFM Task Force on Behavioral Science. Behavioral science in family medicine residencies: Part II. Teacher roles, relationships, and rewards. *Fam Med* 1985; 17(2):69-73.
- Ransom DC. Random notes: the family in family medicine: reflections on the first 25 years. *Family Systems Medicine* 1993;11:25-9.
- Doherty W. & Baird M. *Family Therapy and Family Medicine*. New York: Guilford Press, 1983.
- Ring, JM, Niquist, JG, Mitchell, S. *Curriculum for culturally responsive health care: the step*, 2008.
- STFM Task Force on Behavioral Science. *Core Competency Objectives in Behavioral Science Education*, 1986.
- American Academy of Family Physicians. *Recommended Curriculum Guidelines for Family Medicine Residents: Human Behavior and Mental Health*, 1986.
- McCutchan F, Sanders D, Vogel M, eds. *Resource Guide for Behavioral Science Educators in Family Medicine*, Society of Teachers of Family Medicine, 1999.
- Peek CJ and the National Integration Academy Council. *Lexicon for Behavioral Health and Primary Care Integration: Concepts and Definitions Developed by Expert Consensus*. AHRQ Publication. Rockville, MD: Agency for Healthcare Research and Quality 2013; No.13-IP001-EF
- Engel GL. (1980). The Clinical application of the biopsychosocial model. *American Journal of Psychiatry*, 137, 535-44.
- Stewart MR, Lieberman JA. *The Fifteen Minute Hour: Therapeutic Talk in Primary Care*. Radcliffe Publishing: London: New York, 1986.
- McDaniel, S, Campbell, T, Hepworth, J, Loren, A. Family-oriented primary care. 2005; 237-42.
- Schirmer JM, Mauksch L, Lang F, Marvel MK, Zoppi K, Epstein RM, Brock D, Pryzbylski M. Assessing communication competence: a review of current tools, *Fam Med* 2005 Mar;37(3):184-92.
- Mauksch L, Dugdale D, Dodson S, Epstein R. Relationship, Communication, and Efficiency in the Medical Encounter: Creating a Clinical Model From a Literature Review. *Arch Intern Med* 2008;168(13).

31. Balint M. The doctor, his patient and the illness, 2nd edition. London, UK: Surrey Pitman Paperbacks. Also published by International Universities Press, Inc. New York, 1988.
32. ACGME. The Family Medicine Milestone Project. The Accreditation of Council for Graduate Medical Education and The American Board of Family Medicine, 2015.
33. Epstein, RM. Mindful Practice. *JAMA* 282.9, 1999;833-9.
34. Maslach C, Jackson SE, Leiter MP. Maslach Burnout Inventory (3rd ed.). Palo Alto, CA: Consulting Psychologists Press, 1996.
35. Aurswald, E. 1968. Interdisciplinary versus ecological approach. *Family Process*, 7, 202-15
36. IOM (Institute of Medicine). A Manpower Policy for Primary Health Care: Report of a study. Washington, DC, National Academy Press, 1984.
37. Nevin, JE. Community-Oriented Primary Care. *Health Policy Newsletter*; 1995;8(2).
38. Longlett, SK, Kruse, JE, Wesley, RM. Community-Oriented Primary Care: Historical Perspective. *JABFP* 2001;14:(1).
39. Hall J, Cohen DJ, Davis M, Gunn R., Blount A, Pollack DA, Miller WL, Smith C, Valentine N, Miller BF. Preparing the Workforce for Behavioral Health and Primary Care Integration, *J Am Board Fam Med* 2015 Sep-Oct;28 Suppl 1:S41-51. doi: 10.3122/jabfm.2015.S1.150054.
40. McDaniel S, Hepworth J, Doherty W. Medical Family Therapy. New York: Basic Books, 1992.
41. Agency for Healthcare Research and Quality(AHRQ). The Academy: Integrating Behavioral Health and Primary Care. <https://integrationacademy.ahrq.gov/>. 2016.
42. American Academy of Family Physicians. Mental health care services by family physicians (position paper). <http://www.aafp.org/about/policies/all/mental-services.html> 2011.
43. Blount A, Bayona J. (1994). Toward a system of integrated primary care. *Family Systems Medicine* 12(2), 171-82. doi:10.1037/h0089151
44. Agency for Healthcare Research and Quality (AHRQ). <http://www.ahrq.gov/>. 2016.
45. Porcerelli JH, Fowler SL, Murdoch W, Markova T, Kimbrough C. Training family medicine residents to practice collaboratively with psychology trainees. *International Journal of Psychiatry in Medicine* 2013; 45(4): 357-65.
46. Hill JM. Behavioral health integration: Transforming patient care, medical resident education, and physician effectiveness. *The International Journal of Psychiatry in Medicine* 2015; 50(1), 36-49 DOI: 10.1177/0091217415592357.
47. Baird M, Blount A, Brungardt S, deGruy F, et al. The development of joint principles: integrating behavioral health care into the patient-centered medical home. *Ann Fam Med* March/April 2014;12(2):183.
48. Hartzband P, and Groopman MD. Medical Taylorism. *The New England Journal of Medicine*.374;2:106-8. January 14, 2016.
49. Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, health, and cost. *Health Affairs* 2008;27(3).
50. Bodenheimer T, Sinsky C. From triple to quadruple aim: Care of the patient requires care of the provider. *Ann Fam Med*. 2014 Nov-Dec;12(6):573-6.
51. Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, health and cost. *Health Affairs* 2008;27(3).
52. Wynne L, McDaniel S, and Weber, T. 1986. *Systems Consultation: A new perspective for family therapy*. New York: Guilford.
53. DeGruy FV, Green LA. Return – For good this time – To practice in the context of families and communities. *Ann Fam Med* 2016;14(5).
54. Friedman TL. Thank you for Being Late: An optimist's guide to thriving in the age of accelerations. Farrar, Straus and Giroux, New York, NY. 2016.
55. Garland E, Howard MO. Neuroplasticity, Psychosocial Genomics, and the Biopsychosocial Paradigm in the 21st Century. *Health & social work*. 2009;34(3):191-9.
56. IOM Report. Institute of Medicine: Capturing Social and Behavioral Domains and measures in Electronic Health Records, Phase 2. Washington, D.C.: The National Academies Press, 2014.
57. Emanuel E. How can the United States spend its health care dollars better? *JAMA* 316(24). (p.2604-6) December 27, 2016.