Program Management Issues

Program Management for Faculty Development: Addressing the Changing Faculty Roles in a Direct Assessment Competency-Based Model

Linda J. Mast, PhD, Bobbi Winter, DHSc, Miriam Ross, DHA, & Lisa McIntyre-Hite, PhD

Abstract

Competency -based education (CBE) models are gaining attention within higher education and continuing professional education in the healthcare sector. While there are many models of competency-based education, Walden Master of Health Administration CBE program uses a direct assessment model. The direct assessment CBE model is based on a truly student-centered and self-directed approach to learning. In a direct assessment program, credit hours or time are no longer a proxy for measuring student learning. In this model, rigorous assessments measure student learning and validate competency achievement. Students are in the driver's seat in terms of pacing their work efforts, and there is a non-linear approach to selecting the competencies they choose to complete. This has resulted in a very unique and personalized engagement with faculty based content areas of strength or limitations as informed by their prior knowledge and work experience.

The Walden University direct assessment model presents challenges for faculty who have primarily taught in more traditional, structured programs with specified sequencing of content that is delivered according to structure driven by faculty. This article describes the approach to faculty development that Walden University's Master of Health Administration CBE has implemented and how it has been utilized to address those challenges. Recent research on

Please address correspondence to: Linda J. Mast, PhD, FACMPE, College of Health Sciences, Walden University, 155 Fifth Avenue South, Suite 100, Minneapolis, MN 55401
Phone: (630) 442-3624; Email: linda.mast@waldenu.edu

the faculty development needs anticipated by faculty development practitioners and the C-BEN Quality Framework are introduced as a starting point to guide a program management approach for faculty development as more healthcare administration programs implement competency-based curricula.

Introduction

Healthcare administration programs have shifted to an approach focusing on competencies to improve the level of preparedness of graduates for future leadership in the healthcare industry (Jones, 2015, Friedman & Frogner, 2010). This focus on competencies, known as competency-based education (CBE), was endorsed by the Department of Education in 2013. The CBE approach includes a focus on the type of knowledge, skills, and attitudes students need to meet the needs of the workplace in contrast to what the teacher thinks the student should know (Garman & Johnson, 2006). With the many variances among programs regarding how competency-based models are implemented, timely and relevant faculty development strategies become one way in which CBE program quality is defined and evaluated. The C-BEN Quality Framework for CBE programs was developed in response to the need to define quality as it relates to competency-based education across the spectrum of CBE models (C-BEN, 2015). The eight elements of quality established in the C-BEN Quality Framework are:

- demonstrated institutional commitment to and capacity for CBE innovation;
- clear, measurable, meaningful, and integrated competencies;
- coherent program and curriculum design;
- credential-level assessment strategy with robust implementation;
- intentionally designed and engaged learner experience;
- collaborative engagement with external partners;
- transparency of student learning; and
- evidence-driven continuous improvement.

The C-BEN Quality Framework specifically discusses faculty development within element one ("demonstrated institutional commitment to and capacity for CBE innovation") and element four ("credential level assessment strategy with robust implementation"). Specifically, the C-BEN standards indicate

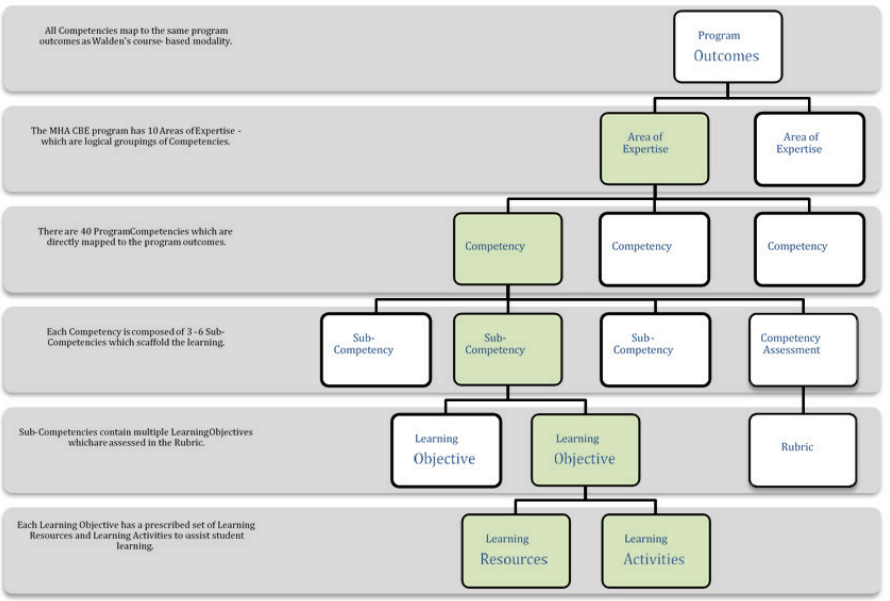
that the institution should develop and adopt a faculty and staff model that meets the unique needs of its CBE program, noting that developed or highly developed CBE institutions have a deep understanding of learner needs in a CBE model. Another performance indicator is that faculty members are identified for specialized roles and have been trained on these roles, and that the institution is committed to refining the faculty and staff structure to support the needs of students based on data. Walden University's Master of Health Administration CBE (MHA CBE) program is in its second year and faculty have refined their practice as well as roles and responsibilities based on qualitative and quantitative feedback of students, indicating that the C-BEN standards provided useful guidance for assessing and refining faculty development initiatives for the MHA CBE program at Walden University.

Program overview

The Walden University Master of Health Administration (MHA CBE) program uses a direct assessment model and includes 40 discrete competencies (Figure 1). The program was launched in May 2016 and has primarily attracted students with significant work experience in healthcare who may have been out of formal education environments for a long time.

Figure 1

Direct assessment CBE model at Walden University



Source: Walden University, 2015

All competencies in the program were developed with employer input and included use of faculty subject matter experts and instructional design experts.

Because there was still little research available related to direct assessment in competency-based curriculum in higher education at the time development started, best practices in adult learning, online education, and outcomes-based assessment were used in the development process (McIntyre-Hite et al., 2015). Since the program was launched, a team of faculty were recruited and hired who specifically expressed interest in working within the CBE model. While all faculty have doctoral degree, and bring significant teaching experience, few have had prior experience with teaching and supporting students in a flexibly-paced, student-driven, direct-assessment CBE model. Therefore, initial onboarding, training, and ongoing faculty development has been a key focus of program management. Using foundations as a starting point for assessing faculty development offers the opportunity to evaluate effectiveness of faculty development and identify opportunities for enhancements.

Assessing faculty development

Faculty development status and progress can be assessed along a continuum using the C-BEN Quality Framework elements and standards that directly apply to faculty development. The two key standards within the C-BEN Quality Framework align specifically to faculty development are illustrated in Figures 2a and 2b.

Figures 2a & 2b

Faculty development standards within the C-BEN Quality Framework

Figure 2a

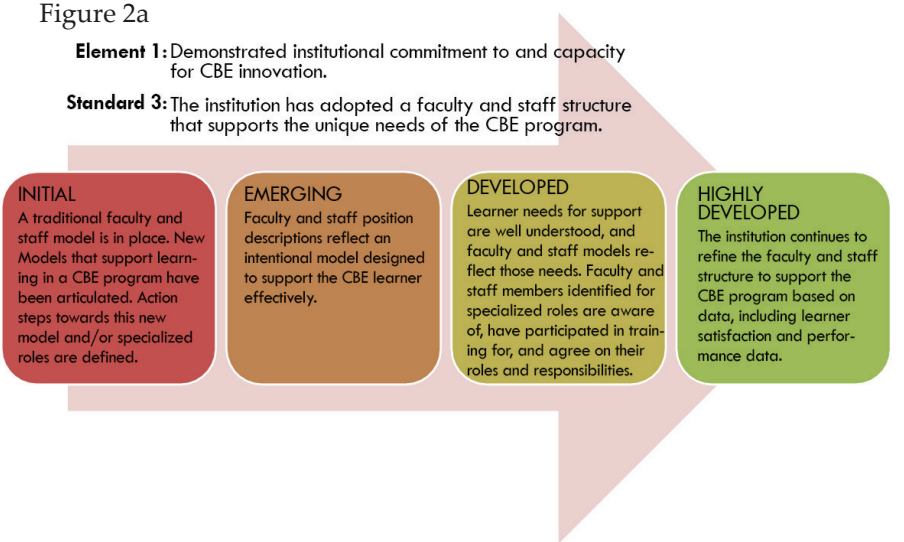
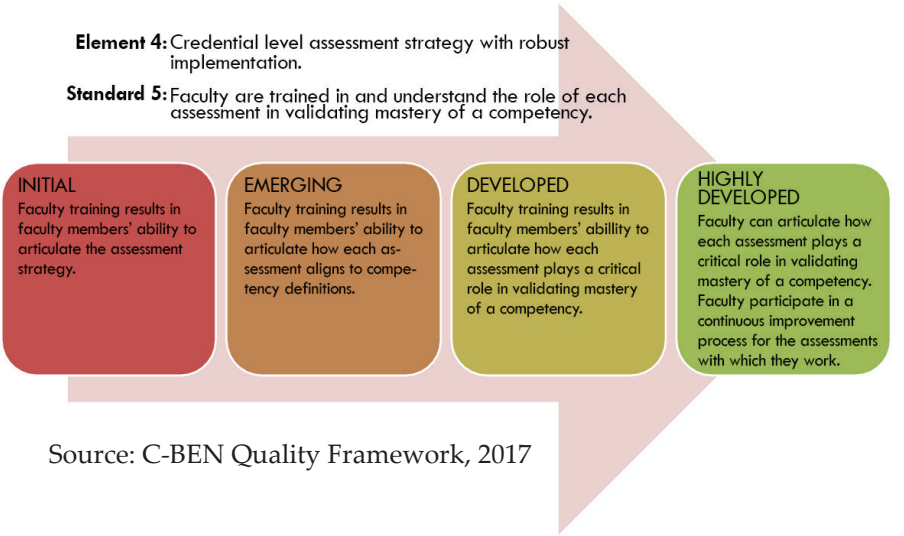


Figure 2b



Source: C-BEN Quality Framework, 2017

Sorcinelli and her colleagues surveyed 500 members of the Professional and Organizational Development (POD) Network in Higher Education, the largest professional association of faculty development scholars and practitioners in higher education, to gain insights into the top issues that faculty development practitioners expect to face in the coming years (Sorcinelli, 2007). While a variety of issues were identified, there were three common themes: (a) a changing professoriate; (b) the changing nature of the student body; and (c) the changing nature of teaching, learning, and scholarship,

These three themes and the C-BEN standards within the Quality Framework serve as a useful foundation for the implementation and ongoing refinement of faculty development initiatives for the MHA CBE program at Walden.

Changing professoriate

The POD respondents in Sorcinelli's 2006 study discussed key changes in professoriate to include expanded roles, demand for continuous learning to keep up with technological change, and the need for more collaboration among faculty. These issues reflect very similar experiences among the MHA CBE faculty team. For example, McIntyre-Hite et al. (2015) emphasized that once the program launched, faculty found that, in addition to teaching, significant time would need to be dedicated to revising rubrics, creating resources, and providing updates to the program based on assessment data and student

feedback in a nimble and flexible process. In a direct-assessment CBE model, faculty roles shift and include curation of the learning experience in real time based on qualitative student feedback and quantitative data. For many faculty, this constant review, revision, and curation of relevant, engaging, and updated content is a new skill.

Similar to needs identified by POD respondents, keeping up with technological change has also been a focus for faculty development for the MHA CBE program. Given that the Walden University learning management system for the competency-based programs is specific and unique to CBE, many specific training approaches were required to keep faculty informed on how to adapt to the technology and how to use it to best engage with students in a substantive manner without dictating the direction of the interactions. Ensuring faculty proficiency with the technology is important because new students need guidance and support as they enter CBE programs.

One of the most unique aspects of the MHA CBE program is the necessity for collaboration that comes from the design of the direct assessment model. Faculty who serve as subject matter experts (SMEs) collaborate with faculty who serve as assessors for the same competency. The role of teaching and support are disaggregated from the assessment. Assessors are anonymous to the student to provide an independent assessment based on a very detailed rubric. Thus, faculty partners collaborate to discuss student progress and any plans for how to best support student learning. In addition, each student also has an academic coach who works closely with them throughout their time in the program and are a key part of the collaboration process. The need for a CBE-specific faculty and staff structure, as described in the C-BEN Quality Framework Standards, underscores the importance this structure plays in creating an environment where necessary collaboration occurs.

Another aspect of the changing professoriate identified in the POD study revolves around work-life balance. This can be especially challenging for part-time faculty; bringing highly valued real-world perspectives to teaching is not easy because they are balancing multiple work demands as well as demands in their personal lives. For the MHA CBE faculty, there can be a risk of burnout since there are no breaks. Students in the MHA CBE program work at their own pace on a continuous basis, and there are no breaks in study like there are in traditional course-based programs. However, because students progress through competencies at different times, faculty report that the time requirements for communication and grading assessments, while continuous, are more flexible and offer greater opportunities for personalized feedback as opposed to grading sizeable numbers of papers at once as faculty are required to do in a traditional online course. Ensuring faculty and staff structure is designed to support these differences is essential.

Changing nature of student body

Advancement in available technology in the past 20 years has resulted in significant growth in the number of online programs, hybrid model programs, and, more recently, the expansion of competency-based delivery models. With these expanding program options, access to higher education attracts more adult learners, including many who have significant life and work experience. The MHA CBE program provides a clear example of the changing nature of the student body that requires some adaptation in faculty approach to teaching. The majority of MHA CBE students have significant work experience in the healthcare sector (i.e., physicians, nurses, and individuals who are currently in administrative positions in healthcare settings). They have typically been out of a formal higher education environment for quite some time and frequently express some anxiety and apprehension about being successful. Student populations are more diverse. There are students in the MHA CBE program who are international and for whom English is a second language. This places unique demands on faculty to be able to customize their approach to feedback and support to students as they progress through competency modules. There are many ways to meet the unique needs of the changing student body which can be positive for faculty and support student success. Some of these identified by Walden MHA CBE faculty are listed below (Ross, 2017).

Connect with students as they enter a competency with a friendly and substantive general announcement and personal connection.

- Encourage students to share their view of the competency and their professional experience related to the competency content. This can save time, avoid confusion, and encourage completion.
- Share faculty expertise through discussion and encourage students to share.
- Discuss the learning resources to encourage students to access the information as well as writing center resources.
- Encourage general writing skills in addition to strengthening scholarly tone and APA style knowledge.
- Provide supplemental course information that will engage students in discussions and keep dialogue current. Encourage general writing skills in addition to strengthening scholarly tone and APA style.

Based on their professional background and experience, students entering the program have different levels of professional competency and confidence in their self-perceived knowledge base, which may influence their ability to successfully achieve the competencies. Once they begin working on compe-

tency content, they sometimes find it more difficult than expected, leaving them feeling anxious and overwhelmed by the time needed to successfully complete the various objectives. The CBE program provides the unique opportunity for Subject Matter Experts (SMEs) and Assessors to work one-on-one with students and facilitate their learning in a way that is outcome driven and most valuable to them. SMEs in the Walden CBE program can interact with each student as soon as they begin to explore the competency. Students are encouraged to share their background and experiences with the topic covered, providing SMEs the ability to frame responses to questions and requests for additional information in a way which empowers students to leverage their skills and experience. This may require additional research by faculty to determine how to best accomplish this goal. There is a strong emphasis on the development of problem solving and critical analysis skills. The goal of these student-faculty interactions is to optimize learning and facilitate the correlation of previous experience to new insights developed as students work through the competencies. It is important that students view their experience as a shared journey with their SME and coach. This aspect of the faculty role often requires additional support and training as outlined in the C-BEN Quality Framework standard to ensure that faculty are trained in and understand the role of each assessment in validating mastery of a competency.

As CBE programs continue to grow, faculty see variance in individual learner style when it comes to how students navigate each competency. Students may approach a competency and engage in assessment of their learning by going directly to the assessment after engaging with faculty and may achieve that competency on a first attempt. However, some students approach a competency as assessment for learning, with the understanding that they may take multiple attempts to achieve the competency. Students use the feedback they receive on an assessment to address any gaps in learning and attempt the competency assessment again once they have a greater understanding of areas in need of improvement. Learner styles in this modality differ from traditional online courses in which all students move through content at the same pace and typically only have one attempt per course assignment. In this regard, faculty must be flexible and attuned to the learning style each student brings to a competency.

Another aspect of the nature of the student body identified by Walden CBE faculty is the challenge that students experience in making the transition to scholarly writing. When communicating with students, it is not unusual to find it has been many years since they produced any written work outside of emails and text messages, and that they have relied on Google to provide them with the resources they need to successfully complete their professional tasks.

Use of scholarly resources is required to assist students in the development of evidence-based responses for written assessments. SMEs and assessors work with students to develop and improve their writing skills, providing detailed feedback on work products with links to additional resources they may find beneficial. Development of scholarly writing skills is an ongoing focus as students progress through the competencies, and Walden faculty who teach in the MHA CBE program have expressed that it is exciting to see students grow as they work on more complex learning and assessment activities.

Changing nature of teaching, learning and scholarship

Ability to engage students in a learner-centered approach is considered the most critical challenges to address in faculty development and support services offered to faculty (Sorcinelli, 2007). The scholarship of teaching is central to many of the support activities available to Walden University faculty through the Center for Faculty Excellence. At Walden, the Center for Faculty Excellence provides faculty support through regularly scheduled webinars, with an extensive library of information available on-demand on a vast range of topics to support learner-centered teaching strategies. In addition, there are online forums established by faculty where student-centered teaching ideas can be exchanged and new opportunities explored.

The scholarship of teaching has gained broader appreciation in part due to the work of the Carnegie Foundation for the Advancement of Teaching. Walden's MHA CBE faculty identify a key benefit of the direct assessment CBE model is the ability of students to use their professional expertise and skills in a scholarly and creative way as they complete projects and assignments. They have discovered that faculty can encourage this process as they gain experience in the CBE learning model and develop a thorough understanding of the content related to the competencies they teach. Since Walden MHA CBE faculty work with students in several different competencies at different points, they can observe how students improve their scholarly approach to learning as they progress through the MHA program.

MHA CBE faculty roles

Interviews with faculty nationwide examined the faculty experience teaching CBE as contrasted with traditional teaching models and reported that alternating between classroom instruction and online instruction under the same job parameters was as difficult (Rainwater, 2016). For the MHA CBE program at Walden University, there was a decision by intention to recruit and appoint a team of faculty who specifically expressed interest in the CBE model of teaching. Faculty in the Walden MHA CBE program teach only in

the CBE program which eliminates the difficulties faculty at other institutions have expressed regarding alternating between CBE and traditional models of teaching. It allows faculty to focus on developing and refining teaching techniques which are specific to student success in CBE.

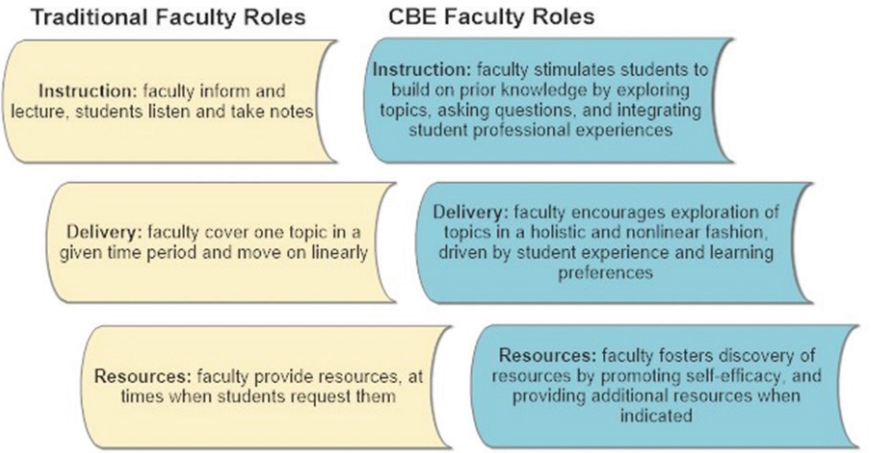
Unlike traditional online classrooms, students determine the amount of time they spend on each competency. The type of assistance needed from faculty is based on faculty-student interactions and the unique learning needs of each student. This can be difficult for new faculty who are used to controlling the degree of participation and timing of assignment submissions. One of the benefits of CBE is it allows faculty to focus their efforts on assisting students who may be having difficulty with a concept, rather than attempting to have ongoing engagement with each student in a class. This is particularly beneficial for international students who may struggle with understanding information which is not presented in their primary language. SMEs may find they need to devote additional time to researching topics and information which is applicable to the unique needs and experiences of individual students rather than managing student questions using the a more traditional one-size-fits-all approach. The following quote from Newbold (2017) resonated with the Walden MHA CBE faculty:

> Faculty must demonstrate a commitment to responding to questions, requests, and invitations for conversation without preplanning. The teacher's agenda cannot be preset, as one might in a traditional course, until the student sets his or hers. In essence, the faculty member might broadly know what her class is about – he/she most certainly is the content expert—but he/she may not know the structure of delivery until the student determines the course of action. For this reason and many others, it is essential that CBE institutions offer faculty the opportunity and space to learn from one another.

The key faculty roles in the MHA CBE program are presented in Figure 3.

Figure 3

Key faculty roles



Source: Winter, B. (2017)

Faculty development initiatives at Walden University

Within the context of the anticipated needs for faculty development as presented in Sorcinelli's POD research and the C-BEN Quality Framework, specific faculty development initiatives within the Walden MHA CBE program are discussed in this section.

Formal faculty training

Newbold et al. (2017) observed that faculty are challenged when called upon to adapt to a relatively new pedagogical paradigm without formal training. Formal training is an important part of faculty development for the MHA CBE program. Customized onboarding and training called Tempo Faculty Orientation (TFO) for faculty teaching in the MHA CBE model is provided for all new faculty. It is important for a new faculty member to understand the overall structure of the CBE learning model as explained by program outcomes, areas of expertise, and achieving competencies. Students often have difficulty understanding the need to rewrite and improve their assignments to achieve competency. Helping them understand that this is a positive not negative part of the program is essential to student growth and success. In TFO training, the faculty experience mirrors the self-directed, direct assessment model that students experience in the Walden MHA CBE program. New faculty engage in applied exercises in CBE assessment process to understand the CBE model,

training in the unique learning management system. Comprehensive training includes a combination of independent application of teaching expectations as well as synchronous webinar based collaborative engagement where new faculty can engage in collaborative discussions specific to the direct assessment model.

The direct assessment model encourages students to use their professional expertise and experience to produce deliverables that reflect their creativity and individual learning goals. This aligns with Knowles' theory of self-directed and autonomous learners, with faculty facilitating the learning experience and assisting students to reach their educational goals (Dardin, 2013).

Students use the rubric to determine whether to *achieve* or *master* the competency, with additional critical analysis and research required to achieve the latter. Assessors provide substantive feedback which encourages students to further explore ideas and engage in critical analysis of the assessment criteria. Students enter the program with a range of skills and experience, and faculty and coaches must adapt their level of mentoring and feedback accordingly. It is important that students understand the assessment process is part of the learning experience, and they should not become frustrated if they do not achieve the competency on their first attempt. New faculty must recognize the importance of rubrics and their role in facilitating an objective assessment of the student work. Training around assessment feedback and how to encourage persistence through multiple attempts is key in ensuring faculty support students through their assessment process. During the orientation process, new assessors can review previously scored assessments which provide a framework for developing their student feedback. New faculty may find it challenging that they do not always have full control over what information is presented to the student. Sharing of information between all members of the team is imperative, and any perceived challenges can be mitigated by developing a close working relationship with the SME and coach to establish clarity on assessment expectations. The exchange of ideas and information becomes routine as the faculty gains experience in the CBE process. New faculty receive mentoring from both academic leadership and colleagues in the MHA CBE program.

Faculty team meetings

Monthly faculty meetings are an excellent opportunity for SMEs, assessors, coaches, and administrators to share best-practices and discuss opportunities for improving the student experience. It is a supportive environment where student feedback is regularly examined, and faculty can share experiences on ways to enhance student engagement. Monthly meetings are an important

way for faculty to remain current and engaged in the CBE program. Meetings eliminate confusion when there are program changes and promote the sharing of information and best practices. They also foster a team approach to the process of helping students achieve success. By engaging as group, administrators, faculty, and coaches can respond appropriately to resolve difficulties or complaints.

Community of practice/informal training

The Center for Faculty Excellence recently collaborated with MHA CBE academic leadership to host a four-week structured program, called a Junto. The Junto is a time-limited approach to one of the POD best practices of facilitating teaching circles where faculty can share experiences and support each other. The Walden CBE Junto used scholarly inquiry from selected journal articles, collaboration with colleagues in discussion board, and a synchronous webinar where executive leadership for CBE programs university-wide presented key information about the Walden CBE model and solicited feedback from faculty participants. The Junto created a space for open discussions of best practices, challenges, and aspects that surprised faculty most about transitioning to CBE teaching model.

Project teams including faculty, coaches, and academic leadership have been engaged in creating support tools for faculty such as Assessor Guidelines. Student feedback has a direct impact on the program that is more robust than with traditional programs. Student and faculty comments make a positive difference in the program. Faculty have ownership of the specific competencies they teach and make recommendations for enhancements to summative assessment activities, resources, or instructions provided to the student for completing the assessment. This ownership is important to faculty satisfaction and is a major difference between traditional and CBE learning. The benefit to students is a vibrant learning experience than remains current and engaging. Faculty and coaches work together to improve the student learning experience. Based on feedback related to assessor comments as well as SME and coach discussions with students, competency content is updated, assessments are revised, and additional resources provided on an individual basis dependent on student need. This nimble and student-centered approach enables faculty to respond to constant changes in healthcare regulations and professional standards, and assists faculty in determining where modifications in content and assessment criteria are needed. The goal is to optimize student learning and ensure the information presented is relevant to the students' work setting.

Use of learner satisfaction and performance data

The C-BEN Quality Framework standard related to institutional support for CBE identifies highly developed programs as those where the institution continues to refine the faculty and staff structure to support the CBE program based on data, including learner satisfaction and performance data. The Walden University MHA CBE program strives to achieve this level of development in several ways. Reports from student focus groups are regularly shared with faculty and staff to provide insights on faculty impact on student experience. In addition, regular and systematic collection of students' experience as well as assessment outcomes trends are reported as a regular part of program management and decision making. This data shapes refinement to processes and helps to identify potential areas where further faculty training or faculty involvement in quality improvements are indicated.

Conclusion: implications for faculty development

As healthcare administration programs continue focus on competency-based models, consideration of how to manage faculty development is essential. Teaching strategies and the use of technology to support competency-based models may differ significantly from the faculty experience in traditional teaching models. Part of effective program management requires that the changing nature of the professoriate, the changing nature of the student body, and the changing nature of teaching, learning, and scholarship are understood and incorporated into faculty development initiatives. Use of the C-BEN Quality Framework can help guide decisions on developing and delivering relevant CBE training and support to faculty as they navigate evolving faculty and student roles where students are much more self-directed. To best summarize the importance of customized faculty development for CBE, faculty reflections on the student experience are clearly illustrated in the following narrative by a Walden CBE faculty member:

> Every student is unique and brings strengths, skills, and learning goals to a competency. Students all need to meet competencies but how they develop and learn is different. We need to provide both structure, opportunity, and the space to enhance their skills. As an example, I have worked as SME and assessor with a student who began as a minimalist in all aspects of learning. He did what was required and often used three attempts. As he has moved through the program, I have observed major improvements and a desire to exceed expectations.

This is often the case when students have opportunities to improve skills based on structure, content, and creativity – and one-on-one contacts with a team that cares about their success (Newbold et al., 2017). Effective program management that invests in faculty development to support the unique demands of teaching in a CBE model will help ensure a quality student learning experience.

References

Competency-Based Education Network. C-BEN Quality Framework (September 2017). Retrieved from http://www.cbenetwork.org/sites/457/uploaded/files/CBE_Quality_Framework.pdf

Cummings, G. (2011). Investing in teachers to invest in themselves. *Journal of Adult Education. 40* (2), 9-23.

Dardin, D. C. (2014). Relevance of the Knowles Theory in distance education. *Creative Education, 5*, 809- 812.

Friedman, L. H., & Frogner, B. K. (2010). Are our graduates being provided with the right competencies? Findings from an early careerist skills survey. *Journal of Health Administration Education, 27*(4), 269-296.

Garman, A. N., Johnson, M. P. (2006). Leadership competencies: An introduction. *Journal of Healthcare Management, 51*(1), 13-17.

Guglielmino, L., Long, H., & Heimstra, R. (2004). Self-direction in learning in the United States. *International Journal of Self-Directed Learning, 1*(1), 1-17.

Heimstra, R. (2013). Self-directed learning: Why do most instructors still do it wrong? *International Journal of Self-Directed Learning, 10*(1), 23–34.

Jones, W. (2015). *Health care administration faculty perceptions on competency education, graduate preparedness, and employer competency expectations.* Walden University ScholarWorks Walden Dissertations and Doctoral Studies.

McIntyre-Hite, L., Kadrie, M., Pederson, H. & Hudgins, T. (2015) Developing an online direct-assessment competency-based masters in healthcare administration: Insights, challenges, and lessons learned. *Journal of Healthcare Administration Education, 32*(4), 613-619.

Newbold, C., Seifert, C., Doherty, B., Scheffler, A., & Ray, A. (2017). Ensuring faculty success in online competency-based education programs. *The Journal of Competency-based Education, (2)*, 3.

Rainwater, T.S.M., (2016) Teaching and learning in competency-based education courses and programs: Faculty and student perspectives. *The Journal of Competency-based Education, 1*(1), 42–47.

Sorcinelli, M.D. (2007). Faculty development: The challenge going forward. *Peer Review, 9* (4), 4-8.

Editorials

Competency in Health Administration Education

Dean G. Smith, PhD

Over the first 34 volumes of the *Journal*, it is fair to say that discussion of competency has had a prominent, if not a dominant, role. In all, 65 articles have had "competency" in the title – more frequent than all other terms save those actually contained in the title of the *Journal*. Since Muawwad-Jarawan and Theodory's (1985) contribution, authors have been commenting on or analyzing what it is we expect from our students in health administration education. Under the leadership of Andy Garman (2018), this issue adds eight articles to this count.

The first three contributions are invited essays. Broom & Gentry (2018), the "kings" of accreditation implementation, offer background on how competencies are measured, related challenges facing our field, and some perspective on the direction of the process. Begun, Butler and Stefl (2018) also provide a perspective on how we arrived at the current state of health administration education's use of competencies. They focus on the challenges of leadership and propose an Oath for Healthcare Management. New graduates from our programs would be hard-pressed not to agree with the spirit of any of the eight points of the Oath, and challenged to live up to them. Hernandez, O'Connor and Meese (2018) expand the discussion of competencies outside of North America.

The next five contributions are original research related to competency. Cellucci, Molinari, and Young (2018) assess the transition to competency-based education in undergraduate programs. Walker and Gelmon (2018) examine their own program and suggest that any program's competency-based curriculum is dependent on the quality of the assessment practices used to track competency development and demonstration. Data matters. Agris et al. (2018) suggest that gaining competence in the Professionalism and Ethics domain be a central focus for the healthcare management field. Clearer definitions and

standards may be required to move this suggestion forward. Fick et al. (2018) queried a sample of fellows of the American College of Healthcare Executives on their perceptions of recent graduates' competencies. They found a set of areas well met (e.g., professionalism) and others not well met (e.g., change leadership).

Standish (2018) conducted an analysis of competency models used in accredited graduate healthcare management programs. An interesting finding includes the breadth of competency models. Does this indicate a lack of a clear definition of the profession?

Finally, Mast et al. (2018) provide guidance for program managers on how to prepare faculty to teach under a competency-based model.

Each of the papers in this issue makes a contribution towards our understanding of – and perhaps our competence in – working within a competency-based education model. To be sure, these will not be the last papers published in the *Journal* on the subject.

References

Agris, J., Brichto, E., Meacham, M., & Louis, C. (2018). Developing Professionalism in Healthcare Management Programs: An Examination of Accreditation Outcomes. *Journal of Health Administration Education, 35*(2), 187-204.

Begun, J.W., Butler, P.W., & Stefl, M.E. (2018). Competencies to What End? Affirming the Purpose of Healthcare Management. *Journal of Health Administration Education, 35*(2), 133-156.

Broom, K.D. & Gentry, D. (2018). The Past, Present and Future: Our Journey through Competency-Based Education. *Journal of Health Administration Education, 35*(2), 123-132.

Cellucci, L.W., Molinari, C., & Young, J. (2018). Competency-Based Educations in Undergraduate Programs Certified by the Association of University Programs in Health Administration. *Journal of Health Administration Education, 35*(2), 175-186.

Fick, J.W., Dishman, L., Adler, K., & Williams, L. (2018). Exploring Hospital CEOs' Perceptions of Health Administration Graduates' Leadership Competencies. *Journal of Health Administration Education, 35*(2), 229-268.

Garman, A.N. (2018). Competency-based Education in Healthcare Management: Current State & Future Directions. *Journal of Health Administration Education, 35*(2), 119-122.

Hernandez, S.R., O'Connor, S.J., & Meese, K. (2018). Global Efforts to Professionalize the Healthcare Management Workforce: The Role of Competencies. *Journal of Health Administration Education, 35*(2), 157-174.

Mast, L.J., Winter, B., Ross, M., & McIntyre-Hite, L. (2018). Program Management for Faculty Development: Addressing the Changing Faculty Roles in a Direct Assessment Competency- Based Model. *Journal of Health Administration Education, 35*(2), 279-294.

Muawwad-Jarawan, E., & Theodory, G.C. (1985). Development and verification of role-specific competencies for hospital administrators in Lebanon. *Journal of Health Administration Education, 3*(3), 293-302.

Standish, M.P. (2018). Competency Models in Graduate Healthcare Management Education: Analysis of Current Practices and Recommendations for Getting to Best Practices. *Journal of Health Administration Education, 35*(2), 267-278.

Walker, E., & Gelmon, S.B. (2018). Using technology to bolster student engagement while validating course curricula: A case study of two graduate health management programs. *Journal of Health Administration Education, 35*(2), 205-228.

Competency-based Education in Healthcare Management: Current State & Future Directions

Andrew N. Garman, PsyD

As this special issue of the *Journal of Health Administration Education* goes to press, the Association of University Programs of Health Administration (AUPHA) and the Commission on Accreditation of Healthcare Management Education (CAHME) are gearing up for events to commemorate their 70th and 50th anniversaries, respectively. I was not around for most of this history; my involvement really started around the time of the Institute of Medicine's report, To Err is Human (Kohn et al., 2000). The report told the story – in horrifying statistical detail – of just how much preventable damage our health systems were causing to our patients. It also brought healthcare managers to the table in sharing responsibility to address these challenges.

In 2001, AUPHA and CAHME came together with leaders from the field of practice at a summit in Orlando to consider the current state and future needs of the profession. I was a junior faculty at the time; all of my knowledge of what transpired came second-hand from people who were in the room and from publications in the *Journal of Health Administration Education*. One of the key conclusions I do remember was that healthcare management education needed for forge stronger partnerships with the field of practice. This included more clearly – and collaboratively – defining what graduates should be able to do on day one as they entered their post-graduate roles. This conclusion in turn opened the doors for the field to embrace a competency-based approach to defining educational outcomes.

I remember being excited by the prospect of healthcare management taking competency-based education seriously. As a clinician-turned-industrial psychologist, I had already seen the competency-based approach help other healthcare professions better define their scope or practice as well as their standards of professional competence. I had also begun some early work in competency-based leadership development in the healthcare management profession.

In the years to come, there would be great strides across the field. The newly established National Center for Healthcare Leadership led efforts to develop and validate an extensive interprofessional leadership competency model for the health systems, to help them strategically align their own talent management and leadership development initiatives. Soon after, many of the major professional associations in the healthcare management space came together to start building bridges across their competency development efforts, and came to consensus on a high-level framework that could collectively house each of their own competency models. During this period, CAHME also evolved its accreditation criteria to require programs to adopt a validated competency model, to use that model as the basis for education and assessment, and to make the model available to the public – thus ushering in our modern era of competency-based education.

In 2017, I was asked by NCHL to lead a team in revising its interprofessional leadership competency model. As in previous major revisions, the approach would need to involve both an assessment of which competencies most clearly distinguished high vs. typical performance, and also a future scan to determine how these competencies are likely to change in the decade to come. In pursuing this work, I also began reflecting on where competency-based education in healthcare management seemed to be working well, and where may have gone off the rails. Through this reflection, I came to the conclusion that it was probably time for a more substantial dialog about how our profession approaches competency-based education. Thus this special issue.

Without question, the pace of change in the health sector has accelerated in recent years. The same can be said for higher education, leadership development, and all of the professions, healthcare and otherwise. In the health systems, ongoing leadership development is becoming much more widely recognized as a critical activity for supporting strategic goals (Crowe et al., 2017; Li et al., 2017). Leadership development is itself becoming much more of a science, with a recognized set of core practices and evidence-based principles (Lacerenza et al., 2017). On the horizons of higher education, concerns about cost-related access problems have taken competencies to an entirely new level in which demonstrations of mastery are emphasized over mere course completion (Franklin & Lytle, 2015; Kelchen, 2015). And in the professions, the accelerated rise of computer-assisted decision support is redefining roles, changing professionals from expert authorities to helpful guides (Susskind & Susskind, 2016). In navigating our healthcare management profession to the prominent future we know it needs, keeping up with all of this change is no small task, yet not doing so poses no small risk.

To help us elevate our dialog, I worked with our editor, Dean Smith, to envision a special issue on competency-based education. As always, he has been an outstanding partner and support throughout this process. I then reached out to a few colleagues who I knew had particularly important perspectives to share and invited their contributions. These included Jim Begun, Mary Stefl, and Peter Butler, three veterans of health administration education who had leadership roles in the original Orlando meeting of 2001; Kevin Broom and Dan Gentry who, through their roles as CAHME workshop leaders, have visibility across the field on the successes and challenges of meeting the accreditation criteria; and Bob Hernandez and colleagues, who have been partnering with the International Hospital Federation to help professionalize healthcare management globally, using competencies as a foundation. Knowing there were many other important voices in the AUPHA community and beyond, we also issued a call for papers to the AUPHA Open Forum. Through these efforts, we have assembled a robust and diverse set of perspectives on the present and future of competency-based education, as well as additional historical context in which to understand this work. I am sincerely grateful to everyone who contributed to this effort in the midst of every other responsibility vying for their attention.

Ultimately, what competency models provide is a common language about performance. As with any language, if the conversation is not respectful, or is not taking place at all, it is doing little good. I hope you find the articles within this special issue a helpful contribution to elevating your own work and thinking as an educator of our next generation of healthcare leaders.

References

Crowe, D., Garman, A.N., Li, C., Helton, J., Anderson, M. A., & Butler, P. W. (2017). Leadership development practices and health system financial outcomes. *Health Services Management Research, 30*(3), 140-147.

Franklin, C., & Lytle, R. (2015). E*mployer perspectives on competency-based education*. Center on Higher Education Reform, American Enterprise Institute.

Kelchen, R. (2015). *The landscape of competency-based education: Enrollments, demographics, and affordability*. Center on Higher Education Reform, American Enterprise Institute.

Kohn, L. T., Corrigan, J., & Donaldson, M. S. (2000). *To err is human: Building a safer health system*. Washington, D.C., National Academy Press.

Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Joseph, D. L., & Salas, E. (2017). Leadership training design, delivery, and implementation: A meta-analysis. *Journal of Applied Psychology, 102*(12), 1686-1718.

Li, C., Barth, P., Garman, A. N., Anderson, M. A., & Butler, P. (2017). Leadership development practices and patient satisfaction: A study of U.S. Academic medical centers. *Patient Experience Journal, 4*(1), 97-102.

Susskind, R. & Susskind, D. (2016). *The future of the professions: How technology will transform the work of human experts.* Oxford University Press.

Invited Essays

The Past, Present and Future: Our Journey through Competency-Based Education

Kevin D. Broom, PhD, MBA, and Daniel Gentry, PhD

Abstract

Authors Kevin Broom, PhD, of the University of Pittsburgh, and Daneil Gentry, PhD, of the University of Iowa, address the history and current state of competency-based education in the field, based on their experience in their programs as well as conducting numerous accreditation site visits at other institutions through the Commission on Accreditation of Healthcare Management Education. The need for better assessment and reporting tools regarding competency effectiveness and attainment are discussed, and the authors make recommendations for future improvement.

Please address correspondence to: Kevin D Broom, PhD, MBA, University of Pittsburgh, Health Policy & Management, A626 Crabtree Hall, 130 DeSoto Street, Pittsburgh, PA 15261
Phone: (412) 24-0898; Email: kevinbroom@pitt.edu

Introduction

Over the last decade, the field of healthcare management education has experienced a journey through the implementation of competency-based education (CBE). We address where we have been, where we are, and where we still need to go as a field. Our goal is to facilitate continual improvement in the field of healthcare management education, and by doing so improve the management and leadership of healthcare organizations and to improve population health. We draw upon our own experience working with the Commission on Accreditation of Healthcare Management Education (CAHME) in order to assess how effectively the community is implementing CBE, to include where we have challenges and how we should address these challenges moving forward.

Our insight flows from direct observations while conducting 32 accreditation site visits, participating in deliberations during 12 Accreditation Council meetings, teaching 16 accreditation boot camps, consulting for 7 programs, and helping directly manage 7 CAHME-accredited programs. We combine our observational data with additional experience conducting peer-reviewed research using CAHME data on accreditation outcomes. In combination, we can see trends across the field that help enlighten our areas of success and our ongoing challenges with implementing CBE.

Where we have been

In 2006, CAHME approved the implementation of competency-based education (CBE) as a means to reshape its accreditation standards and to push the field of healthcare management education to better prepare graduates for an ever-changing health industry. The goal was to move the academic community beyond teaching knowledge and towards developing more robust sets of industry-driven competencies that would enable our graduates to better meet the management needs of our industry stakeholders. The revised version of the accreditation standards codified CBE into many accreditation criteria, thereby pushing the healthcare management education community to begin implementing this new competency-based approach. In 2007, the initial test case occurred under the revised accreditation standards, and the full implementation across the academic community occurred in 2008. CAHME revised the accreditation standards again in the fall of 2013, eliminating the required 19 content areas that served as a "common denominator" across all programs. This change more directly tied the accreditation process to each program's unique mission. For the 2018-19 accreditation visits, another revision to the accreditation standards is on the horizon. In advance of this change, we reflect on a decade's worth of observations, evidence, and experience, and we use this insight to assess the current state of CBE implementation.

Where we are

Programs initially had little difficulty selecting the competency model they determined to have best met their needs. A number of mainstream competency models (e.g., National Center for Healthcare Leadership, Health Leadership Alliance, Joint Medical Executive Skills, etc.) existed prior to the implementation of the new CBE-focused accreditation criteria, and many programs chose to adopt these models. Alternatively, some programs chose to use one of these models as a starting point, but then modified the model, typically by revising a few select competencies, adding new competencies, or reducing the overall number of competencies down to what they considered a more manageable number. A few even chose to create their own models that more uniquely suited their programs, although this approach also involved review and consideration of the existing models.

Although most programs had success with choosing a model, many programs had difficulty articulating how their models helped them achieve their mission and meet their industry stakeholders' needs. In short, articulating the supply-side perspective was easy, but articulating (and documenting) the demand-side perspective was difficult. In addition to the links between industry needs and the selected models, programs also had difficulty demonstrating how their chosen sets of competencies would be attained through their curricular infrastructure. Over subsequent years, the frequency of these challenges subsided as more programs became familiar with CBE and cycled through the accreditation process. The evidence indicated that programs were indeed learning from the challenges other programs faced within the healthcare management community (Broom, Wood, & Sampson, 2013). Despite these initial successes, challenges persist. Most notably, programs continue to face difficulty establishing a strategic management framework, assessing competency attainment, relating that directly to individual student development and using the results for program quality improvement.

Regarding the strategic management framework, some programs still face difficulty adequately framing their long-term vision for the program, as well as their near-term mission. Some programs appear hesitant to establish parameters for the types of students they will primarily target and the types of careers for which programs are preparing students to pursue. In addition, many programs exhibit inadequacies in regularly monitoring the health industry as a means of assessing current and future needs. In particular, programs systematically fail to obtain sufficient input from important stakeholders such as employers. Many programs also do not optimally measure the attainment of goals/objectives, and they sub-optimally implement/assess action plans designed to achieve any goals/objectives where they fall below

their benchmarks. The challenges here are many, including lack of experience in strategic planning in an academic environment; insufficient time to spend on these activities in the face of other priorities in environments where resources are either static or shrinking; difficulties reconciling goals and objectives for not only education, but also for research and service at the varying program, department, college and university levels; and lack of direction from having an inadequately articulated mission and vision for the program.

Another frequent problem with the strategic management process is that some programs are too internally focused (i.e., too supply side-focused). Simply put, they do not seek adequate input from their industry partners. Most common is a very passive approach to scanning the external environment (e.g., faculty attend industry meetings and bring information back). This type of approach lacks intentionality in the planning and collection of environmental scan data, the analysis of that data, and using the results of that analysis for program improvement. Conversely, the most effective programs will regularly attain, assess, and use information in an intentional, regularly timed, and systematic manner from their alumni, internship/residency preceptors, employers, advisory groups, professional associations, accreditors, industry think tanks, and other groups.

Regarding competency assessments, observational and empirical data both indicate that competency assessment remains the major challenge with CBE. Difficulties assessing competency attainment and using the results of the assessments for program improvement is persistent across time (Broom, Turner, & Brichto, 2016). Until we solve that particular challenge, we anticipate programs will continue to have difficulty with program improvement, thereby slowing the rate of programmatic improvement across the field (and therefore the full implementation and intent of CBE). Evidence from the Accreditation Council meetings and the boot camps indicates much work remains in this area. The major barriers here can be viewed sequentially regarding the journey towards full implementation of competency-based education, and CAHME's newest set of criteria (fall 2017) provides a much more explicit framework for programs actively engaged in making progress for CBE. The challenges in this area relate directly to the major steps in the CBE implementation process: identifying and adopting a set of competencies driven by mission, vision, and values; implementing the set of competencies fully across the required curriculum (and other degree requirements); building an infrastructure and processes to collect, analyze, and utilize competency assessment data (direct and indirect); implementing a process to communicate obtainment of competencies to the students as they progress through the program and at graduation; and implementing a process to use assessment data to improve the quality of the program.

Where we need to go

To advance the state of CBE, the academic community must start by doing a better job of assessing student competency attainment. Accreditation findings show that two-thirds of all programs face significant challenges with systematically and comprehensively measuring student competency attainment. Assessing competency attainment is primarily designed to help develop the student. Measuring levels of competency attainment within individual courses and throughout program-level activities (e.g., comprehensive exams, capstone courses, internships/residencies, structured mentor relationships, etc.) and then communicating and discussing those results with the student is helpful and beneficial for their own professional development. Accomplishing this involves (a) measuring something, (b) measuring the right thing, and (c) communicating what you measured. Students, faculty, programs, the industry, and our society will all benefit.

Moreover, one third of all programs have no course-level assessments of individual student competency attainment. In these cases, faculty do not play a role in measuring competency attainment within their courses, and those programs rely solely on program-level assessment tools. Many other programs will assess some (but not all) competencies within their courses, or they will assess competencies within some (but not all) courses. Faculty members must take on this individual responsibility by developing and implementing competency assessment tools within their courses as a means of complementing and contributing to program-level assessments. A major obstacle to solving this dilemma is the lack of research on how to develop competency assessment tools.

Faculty members should consider leveraging their research agendas to help advance CBE. For instance, faculty could treat competencies as constructs. Many doctoral programs teach research skills focused on designing and assessing tools that measure constructs. These same tools could be applied to CBE, thereby ensuring we have valid and reliable measures of those constructs (i.e., making sure we measure the right thing). By applying the same methodological rigor to competency assessments that we do to our own health services and policy research, we can legitimately say that our measures are meaningful and useful for students and prospective employers. Publishing examples of these tools – and demonstrating their validity and reliability – should facilitate further research. This will lead to more effective assessment methodologies that help ensure we are meeting the students' developmental needs and our industry stakeholders' needs for effective leaders in a healthcare setting that is only growing in complexity and uncertainty.

Finally, faculty must use the results of these assessments to continually improve their courses. The feedback loop is a critical piece of leveraging course-level data for use in moving CBE to the next level. The same course-level data should be compiled at the program-level for use by program directors. Given the nature of course-level and program-level evaluation, program directors will face multiple barriers to assessing competency attainment at the program level. Faculty compliance with measuring and reporting is an ongoing challenge. The timing and frequency of reporting from faculty, as well as the need to provide timely feedback to students, places a significant burden on both faculty and program leadership. This requirement must be balanced against research, teaching, service, and administrative requirements. The quasi-experimental preponderance of CBE assessment is likely to mean program directors must identify program-level approaches that triangulate across multiple challenges such as aligning different types, sources, and levels of data. Overcoming these barriers will be critical to drawing conclusions about competency attainment with some degree of confidence.

Another rich area for research focuses on program leadership. Program directors should address how they measure and assess the fit between their competency model, external stakeholders' needs, and current and future missions. Program leaders, or perhaps more appropriately CAHME, should assess whether specific characteristics of competency models can create a competitive advantage in building and/or maintaining industry partnerships, attracting good students, and placing graduates into the workforce. Additionally, leaders should assess if industry satisfaction with graduates increased since the implementation of CBE and determine how/if that satisfaction relates to the heterogeneity across programs. Do industry partners appreciate the current level of diversity in competency models across the programs, or would they prefer greater (or less) diversity? Additionally, should CAHME require some base level of commonality across programs, or do the five current competency domains adequately serve that purpose?

Additionally, some CBE-related research could directly benefit health industry partners. How do we assess the impact of CBE on individual performance in the workforce? Are graduates from CBE programs more effective in their roles than graduates from non-CBE programs? Researchers might also attempt to measure the organizational impact of CBE. Are organizations led and managed by graduates from CBE programs more efficient, effective, etc., than organizations led and managed by graduates of non-CBE programs? To facilitate this research, academic partner organizations such as the Association of University Programs in Health Administration (AUPHA), CAHME, or the NCHL could provide grant funding via health industry partnerships

that assess individual and organizational outcomes resulting from the implementation of CBE. Academic conferences and peer-reviewed journals could develop conference themes or special editions soliciting CBE-based studies, with a specific emphasis on individual and organizational outcomes within healthcare delivery (as opposed to within academic settings). Health industry partners could work with researchers to conduct internal consulting assessments on how CBE graduates performed within their organizations.

Prospective health industry employers can play the strongest role in advancing CBE from the demand side. When evaluating candidates for administrative fellowships or jobs, employers should explicitly request competency assessments from candidates as a means of evaluating their abilities. Competency assessments would complement grade point averages, but also have the potential to subsequently replace them within the application packets (if competency assessments prove to be a better predictor of abilities and potential job performance). Industry demand will push programs to improve their processes used to measure and document student competency attainment; and, better measurement and documentation efforts will enable and drive program improvement initiatives. For example, if only the National Council on Administrative Fellowships (NCAF) sites were to require competency assessments as a component of applications, that would have a major impact on encouraging programs to better assess, document, and communicate to students their competency attainment. Beginning with the 2017 cycle, the National Administrative Fellowship Centralized Application Service (NAFCAS) requires an assessment of competencies on the part of the recommendation process. This requirement is a good start, but program-level assessments would serve as a more rigorous and useful measurement of the candidate's competency level, especially given each program's unique competency model.

Finally, professional organizations should also play a role. Organizations such as the American College of Healthcare Executives (ACHE), Healthcare Financial Management Association (HFMA), Health Information and Managements Systems Society (HIMSS), and others should think about ways to encourage CBE within their membership. This encouragement can occur while new members are still in the student stage and continue throughout their careers. Levels of competency attainment are not static; they can increase with further education and experience, or they can regress if members neglect their continuing education. A good starting point might be to revise the assessment tools used for board certification. Although the academic setting has been moving away from these for over a decade now, qualifying exams for most professional organizations still focus on knowledge and understanding, and use lower-level assessment methods.

For the field to continue to move forward with CBE, collaboration within and across graduate programs, academic associations, professional associations, and health industry employers is key. Sharing of approaches, methods and tools, data collection and management systems, ways of communicating results to students, and the utilization of assessment data to improve program quality is paramount. Demand-side encouragement (and participation) ensures that academic settings stay responsive to health industry needs and that competencies are sustained throughout the career for future health executives. The demand side provided the initial pressure to implement CBE within healthcare management education. Those same industry influences should encourage the continued implementation of CBE until fully implemented and the industry validates the achievement of desired positive outcomes, both from an individual and organizational perspective. Right now, those outcomes are still unknown because they are not being adequately measured across the education and practice fields. Table 1 summarizes the proposed relationships between what major themes need to be addressed and the different participants within the academic and health industry communities who should play key roles in addressing each.

Table 1

Matrix showing key themes and participants

Theme	Participant				
	Faculty	Program Directors	Health Industry	Academic Partners	Professional Organizaitons
Building/Assessing Competencies	X	X			X
Developing Assessment Tools	X	X			X
Quality Improvement	X	X			
Assessing Industry Satisfaction		X		X	
Individual/ Organizaitonal Outcomes	X		X	X	
Reporting Competency Attainment		X	X		

Conclusion

The movement to CBE more than a decade ago began with a push from the organizations within the health industry that hire graduates of healthcare management programs. The feedback that programs were attracting and graduating smart and committed individuals who had good knowledge and understanding, but inadequate skills and abilities, was met with unease and some resistance by educators. Since then, much progress has been made on the journey to CBE, but the promise remains unfulfilled, particularly because graduate programs have yet to produce convincing evidence that CBE translates to proven results within the practice community. The importance of CBE with regard to the missions and visions of the accredited graduate programs, certified undergraduate programs, and programs seeking either of these distinctions (or more generally, striving to improve) cannot be understated. Like the health organizations that hire our graduates, we must be clear about our core business, which is to educate current and future generations of healthcare mangers and leaders. And we must all – healthcare organizations and academic programs alike – collaborate to improve healthcare delivery and health for the communities we serve.

When this journey began right around the turn of the 21st century, one of the many conversations about mission-driven, competency-based healthcare management education occurred in an AUPHA Board meeting. The notion of eliminating an extremely prescriptive list of 19 curriculum content areas within the CAHME criteria produced a fair degree of controversy. It was met with high levels of discomfort among many and faced outright resistance among some. We recall and articulate a very memorable comment by one of the Board members at the time, Dr. Sandy Potthoff, now Chair of the Department of Health Policy and Management at the University of South Florida, who questioned why we should not go down a different path. More than half a century of preparing healthcare managers and leaders using a prescriptive formula had (to no one's surprise) produced programs that looked almost identical. Furthermore, that path had not resulted in the kind of healthcare system our fellow citizens all need and deserve. As an educational field, and in partnership with the healthcare industry, we should allow programs to decide and communicate their own missions and visions. They should adopt sets of competencies consistent with those missions, the kinds of students recruited, and the jobs for which they are being prepared. Finally, those decisions would frame the educational curricula and professional development activities that meet their missions, help attain their visions, and move us further toward the triple aim of higher quality care, better value, and improved population health.

References

Broom, K., Turner, J., & Brichto, E., (2016) How Well Do Programs Fulfill Their Role in Management Development? An Analysis of Competency Assessments Using CAHME Accreditation Outcomes. *Journal of Health Administration Education. 33* (4), 559-579.

Broom, K., Wood, S., & Sampson, C., (2013). Current Trends in Graduate-Level Healthcare Management Education: An Examination of Accreditation Outcomes. *Journal of Health Administration Education, 30*(3), 159-179.

Competencies to What End? Affirming the Purpose of Healthcare Management

James W. Begun, PhD, Peter W. Butler, MHSA, and Mary E. Stefl, PhD

Abstract

The 2001 National Summit on the Future of Education and Practice in Health Management and Policy in Orlando, Fla., was a significant event in the continuing evolution of the profession of healthcare management. The 2001 National Summit signaled a crisis of sorts, with widespread calls for transformation in the education of healthcare managers in the United States. Recommendations from the Summit focused on bridging the academic -practitioner divide, strengthening the applicant pool, and affirming the distinctive nature of healthcare management.

The primary lasting consequence of the Summit has been the movement to link the educational curricula of healthcare management programs to competency frameworks. In the meantime, however, healthcare management holds an increasingly tenuous position as a profession. In the rush to address concerns of employer stakeholders, the educational community has neglected attention to more foundational questions about the purpose, values, and role of the healthcare manager.

Educators can assume a more proactive leadership stance in distinguishing healthcare management from generic management and in defining a profession that inspires "the best of the best" to enter the field. As a foundational step, we propose explicit adoption of an Oath for Healthcare Management for those entering healthcare management.

Please address correspondence to: James W. Begun, PhD, Division of Health Policy and Management, School of Public Health, University of Minnesota, D262 Mayo Building, MMC 510, 420 Delaware Street SE, Minneapolis, MN 55455; Phone: (612) 624-9319
Email: begun001@umn.edu

Acknowledgement: We are grateful to Andrew N. Garman, PsyD, MS, Rush University, for his insights and his leadership in motivating us to address critical issues facing healthcare management as a profession.

Introduction

The 2001 National Summit on the Future of Education and Practice in Health Management and Policy was organized when the field of healthcare management was at a turning point. The advent of integrated delivery systems, public awareness of quality issues in America's hospitals, and ever-escalating healthcare costs were undermining confidence in the management of the U.S. healthcare delivery system. There was concern that academic programs were not providing adequate skills and knowledge for future healthcare managers, and that the continuing professional development activities aimed at mid- and senior-level executives did not meet the changing needs of the field. The field was "at a critical juncture" (Dalston, 2001, p. 203).

Convened in Orlando, Fla., the two-day conference brought together some 200 leaders in healthcare management education and practice to analyze current education and leadership development efforts, and propose new initiatives for improvement. This was a unique opportunity for the varied stakeholders in healthcare management education and practice to interact and dialog, and there has been no similar effort of this magnitude or impact since that time. As the health sector continues to evolve and experience profound changes, it is now prudent to ask if and how the efforts of the 2001 National Summit have led to improvements in healthcare management education and practice.

Background

The 2001 National Summit was sponsored by the Robert Wood Johnson Foundation and the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services. It was hosted by the Association of University Programs in Health Administration (AUPHA), the Accrediting Commission on Education for Health Services Administration (ACEHSA), and the Healthcare Research and Development Institute (HRDI). ACEHSA is the predecessor agency of CAHME (Commission on Accreditation of Healthcare Management Education). HRDI included practitioners from some of the nation's most prominent healthcare organizations.

During the 2001 National Summit, thought leaders in the field addressed the evolving role of the healthcare management executive in improving the American healthcare system. Presentations focused on how best to prepare those entering the field as well as continuing the development of both mid- and senior-level executives.

To draw on the richness and diversity of the attendees, the conference planners created a series of working groups. Each group was facilitated by an academic and a practitioner. The groups were tasked to address three key concerns ("National Summit …," 2001):

1. What constitutes an effective national strategy to support specialized education in healthcare management?
2. What steps are necessary to improve the supply and placement of effective executives and leaders in healthcare management?
3. How should programs in healthcare management be measured, evaluated and compared?

The results from these working groups were distilled into recommendations that were designed to set the agenda for the next generation of healthcare management education and practice (Appleyard, Lofton, & Greene, 2001). Not surprisingly, the recommendations also reflected the concerns and challenges that were identified by those individuals and groups organizing the 2001 National Summit.

Bridge the academic-practitioner divide

A central concern was the growing gap between academia and the field of practice. The historical roots of many healthcare management programs were with the field of practice. Faculty members in these early programs were often former or current practitioners, and the typical "hospital administration" programs involved one year of on-campus study followed by a yearlong administrative residency in a hospital.

As healthcare delivery became more complex and as the focus shifted from managing hospitals to managing healthcare organizations more broadly (i.e., "hospital" administration programs became "health" administration programs), the academic content deemed necessary for effective healthcare management increased. When ACEHSA made two years of full-time study a requirement for accreditation of graduate programs, many programs eliminated the yearlong residency and instead substituted a summer internship as a field-based requirement.

At the same time, healthcare management programs were gaining greater credibility within the broader university, and the job requirements and expectations for faculty members grew. A doctoral degree typically was required for full-time, tenure-track faculty, with research and scholarship requirements to hold an academic position. The research valued within the academic community often had little relevance for practicing managers. Few practitioners had the desire or the skills to pursue this type of faculty role, and a growing number of full-time faculty had no experience in the field. Nor were there many concerted efforts to address this growing gap.

Participants in the 2001 National Summit strongly recommended that there be multiple efforts to improve communication and collaboration between the

academic and practitioner segments of the professional community for the benefit of future and current healthcare managers and leaders.

Strengthen the applicant pool

A recurring theme during the 2001 National Summit was concern about the quality of the applicant pool for graduate programs. It was generally expressed that the field was not attracting a sufficient number of talented young people and that there was a substantial gap between the diversity of patients served in the healthcare system and the applicant pool. While the number of women graduates of master's programs exceeded 50% in 2001, the number of minority applicants lagged far behind (Grady, 2001). Studies by the American College of Healthcare Executives (ACHE) repeatedly showed that minorities were significantly under-represented among practicing healthcare managers (Friedman, 2001).

Strengthening and diversifying the applicant pool were considered key steps in creating a healthcare system that can provide effective and equitable healthcare services in a context that respects the norms and values of the patients served. Participants discussed multiple ways of achieving this goal.

Measure excellence in healthcare management education

Another Summit theme dealt more specifically with the educational offerings at the graduate level. Review for accreditation had evolved, it was argued, to an "up or down" decision. Accreditation no longer distinguished degrees of quality between programs, so that programs that just barely met the accreditation criteria were treated the same as those of the highest quality, a situation that enabled mediocrity in the field. The accreditation criteria were largely focused on program inputs and university processes (Warden & Griffith, 2001). Other than the highly subjective rankings provided by *U.S. News and World Reports*, there was no way to measure outcomes or distinguish the quality of the 67 programs then accredited by ACEHSA (Gellmon, 2004).

As a means of defining excellence in educational programs, several 2001 National Summit sessions were devoted to defining core competencies for specific curriculum areas. For example, competencies were developed in ethics (Chaiken, Porter, & Schick, 2001), organizational behavior and theory (Friedman & McCaughrin, 2001), quality improvement (Baker & Wakefield, 2001), human resource management (Counte & Newman, 2001), financial management (Mauer & Grazier, 2001), and diversity leadership (Dreachslin & Agho, 2001). Those reports represent some of the earliest efforts at competency development in the field.

At the same time, it was acknowledged that healthcare management invests far less in continued professional development than other professions. It was argued that the available continuing education efforts were not robust enough to create the type of leadership needed for the evolving and increasingly complex delivery system (Griffith, 2001).

Thus, the recommendation was to create an advanced leadership institute that would fill these continuing education needs (Warden & Griffith, 2001). This institute would create opportunities for high-level continuing education as well as explore ways to measure competence at all levels of the field, from entry-level managers to senior executives. By their very nature, competencies are outcome measures and could provide a means of distinguishing excellence.

Affirm the distinctive nature of healthcare management

The Summit also provided affirmation that healthcare managers benefit from specialized programs of study. While core business skills provide a foundation, their application to the healthcare setting is often unique. Further, the complexity of the healthcare setting, the expectations of the public, the high stakes of the endeavor (Friedman, 2001), and a multitude of other factors underscore the need for an educational approach that does more than provide strong business skills.

Part of this education should focus on professionalism and the core values that distinguish healthcare management from generic management. These values can include a commitment to public service (Warden & Griffith, 2001) or a sense of wanting to serve a social need from a communitarian perspective. The recommendation, while not explicit, was that the field should preserve the values that are a key part of what makes the profession distinct and unique.

Response of the field to the 2001 National Summit

We first note that our field continues to struggle with the 2001 National Summit's recommendations around strengthening the applicant pool, particularly its diversity. While comprehensive evaluative data are hard to find, it seems abundantly clear that ethnic and racial minorities are woefully underrepresented in executive suites, in the student populations of most graduate healthcare management programs, and among educators, particularly when considered relative to the diversity of individuals and communities served by healthcare delivery. Efforts to increase diversity by the field's practitioner organizations, including the ACHE and AHA, are laudable, but they need to be invigorated and accelerated, particularly in the educational sector.

The primary lasting consequence of the 2001 National Summit has been the movement to link the educational curricula of healthcare managers to

competency frameworks, particularly at the master's degree level. Several of the papers presented at the Summit reflected an attempt by faculty experts to delineate competencies in specific domains, as noted earlier. Many of these early efforts at competencies lacked measurable, behavioral components. They focused on knowledge rather than also incorporating students' skills and abilities – or the outcomes of the learning process. Today, competency frameworks generally derive from consensus around key behavioral attributes of successful healthcare managers in their job settings (Garman & Johnson, 2006; Garman & Scribner, 2011; Schewchuk, O'Connor, & Fine, 2005).

The push towards competency-based education did not come in a vacuum, as it was part of a general movement by higher education to equip students with knowledge, skills, and abilities (KSAs) that would be valuable in the workplace. As well, a few healthcare management programs were already making individual attempts to define competencies for the master's level programs.

The development of competency-based healthcare management education was aided by another significant outcome of the 2001 National Summit: the emergence of the National Center for Healthcare Leadership (NCHL). While this organization currently focuses its efforts on developing healthcare leadership at the mid- and senior-levels, as well as coordinating administrative fellowship training through the National Council on Administrative Fellowships (NCAF), its early work included the development of a competency model (Calhoun et al., 2004) that was adopted by many healthcare management programs. At about the same time, the Healthcare Leadership Alliance, a consortium of professional membership organizations in the healthcare field, developed its own model that was used by other graduate programs in the field (Garman & Johnson, 2006; Stefl, 2008).

By 2008, the criteria for accreditation in health administration education required that all accredited graduate programs adopt a competency model. By this time, ACHESA had transformed into the Commission on Accreditation for Healthcare Management Education (CAHME) by expanding its membership to include practitioner organizations. (ACEHSA had previously derived support from professional membership organizations and AUPHA only.) Including practitioner organizations was viewed as one way of bringing academia and practice closer together.

CAHME's competency requirements have evolved over time. All accredited programs must now adopt a competency model that fits the program's mission and the type of positions its graduate enter. There is no one universally-accepted competency model. Over time, CAHME has placed greater weight on measurable outcomes, including measurement of the competencies within

a program's model for each student. While the competency framework movement certainly has shortcomings, it has been a major statement that educators are interested in engaging with employers of graduates.

As well, educational programs in healthcare management have continued to expand in number, particularly at the undergraduate level. As noted above, NCHL has emerged as an association devoted to developing and recognizing healthcare leadership, particularly at the mid-level and senior-level. Even more important than the development of individual leaders has been the focus on the development of the senior leadership team. Most large healthcare systems have established leadership training in-house or have arrangements with organizations to provide leadership training. Overall, these developments arguably have helped to bridge the academic-practitioner divide.

Tenuous position of the healthcare management profession

However, despite the developments, the field faces serious new challenges today. Most occupations strive to be labeled and treated as "professions." Healthcare management is no exception. Professional status brings with it respect, financial reward, job autonomy, and career satisfaction. Occupations that are deemed professions arguably attract and retain higher quality workers, because of the association of professional status with higher income, social status, and career satisfaction. Professional status affects the degree to which healthcare managers are respected within their organizations, particularly because healthcare managers are surrounded by clinical practitioners who more readily assume the mantle of professionalism. Professional status affects the degree to which healthcare managers are respected within their local communities, including by others in the organizations with which they interact. Finally, professional status is related to the ability to influence public policy agendas and outcomes at the local, state, and national levels.

Historically, movements by the field of healthcare management to upgrade entry-level education to the master's degree, to standardize curricula, to form a primary professional association, and to adopt a code of ethics, are all hallmarks of professionalization, and practicing healthcare managers today commonly consider themselves "professionals."

The professional community of healthcare management includes not only practitioners and their professional associations, but stakeholders such as employers, researchers, and regulators. Educators are a key component of professional communities. Because specialized knowledge and its control are the heart of the concept of professions (Abbott, 1988; Freidson, 2001), the educational sector is a key actor in defining, sustaining, and changing the professional community. Educators screen and train the incoming supply

of professionals, and they are in a position to influence the values as well as the technical knowledge of new entrants and practicing professionals who pursue continuing or advanced education. In licensed professions, educators become even more powerful, controlling entry when licensure requires a formal educational degree.

Periodically, the educational sector has transformed the status of a given profession. The Flexner Report in medicine, the emergence of optometry from the occupation of opticianry, and recent movements to upgrade entry-level education in such professions as physical therapy, pharmacy, and nursing, are examples of the power of the educational sector to lead change in healthcare delivery. In this sense, individual educators and their associations are social change agents, in addition to serving as guardians of the profession's knowledge base.

The extent to which the educational sector interacts with and influences the field of practice in a profession varies over time. The 2001 National Summit can be understood as an effort to increase and improve linkages between the educational sector and the practice community of healthcare managers. In doing so, the educational sector became more responsive to the demands of the practice community.

Legitimacy of the profession

A key element of professional status is the legitimacy granted by society (the public and its representatives) to the profession (Abbott, 1988; Begun & Lippincott, 1993; Khurana, 2007). Legitimacy is the basis for the claim to an exclusive work domain. Professions earn legitimacy in part through pursuit of the public interest, even when it clashes with professional interest. This is the "grand bargain" that professions make with society (Susskind & Susskind, 2016).

The "trust" perceived by the public in members of a profession is an imperfect but interesting indicator of such legitimacy. In the U.S., the nursing profession is continually rated as highest in public trust (Norman, 2016). Nurses are trusted to put the interests of patients ahead of their own. Such a position of trust certainly is an advantage in nursing's professionalization efforts, which include higher entry-level requirements for advanced practice (e.g., the doctor of nursing practice degree: DNP) and the pursuit of equal payment for many services traditionally provided by physicians. The high level of trusts enhances nursing's influence in organizational and public policy forums.

The legitimacy of healthcare management is much more problematic. Healthcare management is both part of and separate from the generic field of management. Healthcare management benefits from the advances made by

the general management knowledge base that apply in the healthcare arena. ("Evidence-based management" is the most recent summary expression of that benefit.) On the legitimacy front, however, the linkage of healthcare management to the larger field of management is challenging at best, and troubling at worst. Managers in general are not perceived as professionals by the public – or if so, they are rarely viewed in the same category as clinical professionals. The public's trust rating of managers is typically at the bottom of the list of professions. For example, HMO managers are rated as having high ethical standards and honesty by 12% of the public, compared to 84%, 67%, and 65% respectively for nurses, pharmacists, and medical doctors (the three highest of 22 occupations). "Business executives" are at 17% (Norman, 2016). In his study of the history of American graduate business education, Khurana (2007) implicates MBA programs as a primary culprit. He argues that business education has abandoned moral ideals in favor of a perspective that managers are merely agents of shareholders who are interested primarily in maximizing share value.

New threats to legitimacy

In the years since the 2001 National Summit, the knowledge base of healthcare management has changed in ways critical to the legitimacy of the profession. Relevant evidence has rapidly accumulated relating to the influence of the healthcare delivery sector on the achievement of population health.

The root causes for most health outcomes are factors such as social support, job status, income, education, and physical environment, collectively referred to as the social determinants of health (Marmot & Allen, 2014). The popular County Health Rankings Model of the University of Wisconsin Population Health Institute, for instance, estimates that 40% of health outcome variation is explained by social and economic factors, 30% by health behaviors, 20% by clinical care, and 10% by physical environment (University of Wisconsin Population Health Institute, 2017a). Frieden's Health Impact Pyramid is divided into sectors based on factors that improve health for more people at the lowest unit cost. The base layer of the pyramid is socioeconomic factors. The next layer is "changing the context to make individuals' default decisions healthy." Preventive interventions are next, followed by clinical interventions and finally, counseling and education (Frieden, 2015).

At the same time, evidence of the shortcomings of U.S. healthcare delivery on key indicators of population health – particularly in relation to other countries – is rife. Managers in healthcare organizations are urged to re-double efforts to standardize and integrate clinical services and to measure and improve clinical quality and performance, with a primary focus on individual care. For

example, according to White and Griffith (2016), "The purpose of any HCO [healthcare organization] is to provide care to individual patients. The purpose can be expanded to 'population health,' but the larger purpose depends upon excellence in care to individual patients" (p. 5). In fact, though, healthcare management alone cannot come close to resolving the challenges of population health improvement. Kindig (2010) refers to this as an "inconvenient truth … since the actors…are spread across the public and private sectors (government at all levels, employers, health care organizations, school boards, community organizations), there is no one actor or agent accountable and responsible for such broad population health outcomes as mortality, morbidity, and disparities." Improvement in population health is dependent on public policy and on programs that address the social determinants of health. Yet, more than 90% of health expenditures in the U.S. are devoted to clinical care activities (Begun & Malcolm, 2014).

As arbiters of the knowledge base of the profession and as social change agents, educators are responsible for acting on what they know. We know that social determinants are key to improving population health. Graduates of our programs work in and lead a diverse set of organizations, not just hospitals and health systems, but insurance companies, public health organizations, associations, and a multitude of other important organizations. Each of these graduates needs a lens on how they can partner with others to help address the increasingly quantifiable factors impacting health.

Distinctive nature of healthcare management

The tenuous legitimacy of healthcare management as a profession underscores the need to affirm the distinctive nature of healthcare management, and to act on that affirmation. The distinctive nature of healthcare management has long been recognized by many in both the practice community and the educational sector (Luke & Begun, 1987; Mick, 2004; Welton, 2004). In his Foreword to the published summary of the conference, Steven A. Schroeder, then President of the Robert Wood Johnson Foundation, articulated this challenge:

> Leaders in health administration set the tone for the delivery of health services. At a time when health care organizations face enormous financial and competitive pressures, it is especially important for leaders and managers to safeguard and reaffirm the organization's continuing commitment to health care's mission and highest ideals. A critical component of strengthening management and leadership capacity is addressing the ethical challenges they face and underscoring the institutional values that lie at the heart of their work. (Schroeder, 2001, p. 1)

However, attention to the competency movement subsequent to the 2001 National Summit has largely obscured any efforts to address the challenge of safeguarding healthcare's "institutional values" and "highest ideals."

We present a current version of the rationale for the distinctive nature of healthcare management, taking into account changes over the past two decades in information technology, science, public policy, and demography.

Consider five different characteristics of the healthcare delivery sector that suggest that the sector requires a management profession of its own. These include: (1) a scorecard that includes measurable public goals, unlike those applied to other businesses; (2) non-profit or public governance for a majority of the industry's organizations, which requires that institutional assets must be used to serve specific populations within the constraints of a charitable or community mission; (3) recognition that the data and evidence now available will dramatically improve the public display of the contributions being made by different interventions, including community and public policy interventions, to improve health; (4) a very high level of teamwork at both the consumer and organizational level to be successful; and (5) a set of values that ensures transparency, input, and integrity at a time when the public is increasingly concerned about accountability of traditional American institutions.

An organizational scorecard aligned with public goals

Most businesses will measure their successes primarily by financial metrics. This is not a surprise and is understandable whether the company is privately held or publicly traded. Strong earnings, balance sheets, and growth are all closely followed and rewarded by owners and investors. The scorecards for many of the organizations in healthcare delivery use many of the same measures of success. However, if the public vision for healthcare aspires to provide access to affordable care and, increasingly, to improve the health of the population being served, the scorecard the public expects to be used can be at odds with traditional business scorecards.

To whom should healthcare organizational leaders respond? Bondholders expect strong balance sheets, market strength, and growth to ensure their bonds are risk-free. Even boards of trustees frequently revert to a set of financial metrics that gives them comfort in assessing their organization's competitive position in the market. However, what about the public being served? If organizations open their doors widely to provide access to those who may not have the ability to pay, and if organizations go beyond treating illness and invest in the health of a population with no business model to support the investment, will they weaken their competitive position? Will those holding business-focused scorecards penalize their efforts? If we do move to

a population health system that is supported by responsibility for capitated payments for a population being served, the foundation will be laid for a new scorecard. Most believe that the transition to such a system should be pursued, but it will take time, leaving a mixed set of incentives in place for many years.

Even without transition to a new payment system, events will occur that will beg for leadership that looks beyond its organization's economic walls to support community-wide efforts. A recent example was the Ebola outbreak to which many leaders – but not all – stepped forward to organize the necessary preparations. It took time, money, and thoughtful leadership. Hurricanes and wildfires have required similar responses. Leaders who can cross the public and private sectors to act on behalf of the community stand out. These scenarios require following a management compass that points beyond the bottom line of the organization they lead to the collective good of the people they serve. The national vision, translated into local metrics, will at times need to take precedent over individual organizational success.

Non-profit/public ownership and governance

A large majority of hospitals and health systems operate either as private non-profit (approximately 60% of the total) or public (approximately 20% of the total) entities, as do some payers and many social and public health agencies. Non-profit status requires adherence to a charitable mission to use assets in ways that are consistent with the articles of incorporation. Non-profits are governed by boards to provide assurances that the principles are followed. One of the provisions of the Affordable Care Act requires institutional community health needs assessments that include specific goals and milestones against which they can be evaluated. It is an accountability for non-profits that helps highlight the outwardly looking management perspective that must serve the greater good. Disparities in health in one's community, for example, will be difficult to overlook as both the accountability and data available to measure progress will be increasingly available. In most businesses, success is measured by the ability to continue to attract consumers and meet the financial expectations associated with selling services. It is not that this straightforward measure of success is not applicable in healthcare, but it is that these results must be within the context of a broader accountability beyond the baseline expectations. For public organizations, the responsibilities to the community are even more obvious. Elected representatives of the public on governing boards are expected to promote the health of their constituents across a broad geographic area.

Even if a healthcare provider is for-profit and not subject to the charitable obligations through ownership, there is a strong argument that social responsibility, and responsibility to local communities, are necessary components of the strategy of the contemporary for-profit corporation (Porter & Kramer, 2011; Kaplan, Serafeim, & Tugendhat, 2018). In the healthcare delivery sector, for-profit organizations must provide for access to their services such as the Emergency Department, without requiring the consumer to demonstrate the ability to pay. In addition, because most providers receive over half of their money from Medicare and Medicaid, those governmental payers have their own guidelines that require compliance that may be more directly responsive to the needs of the providers' communities. A large number of sole community, for-profit hospitals serve rural communities where they are extraordinarily intertwined with and committed to the health of the entire community. They are linchpins of the community's health as well as its economic well-being.

Big data in a digital world

The development and use of technology to spread messages and data throughout the world is touching every aspect of our lives. Healthcare is no different. Every tool used to diagnose and treat patients has embedded technology that captures and connects results to electronic health records and beyond. The information is also captured real time, dramatically reducing the time required to gather information critical to decision-making. Looking beyond clinical diagnosis and treatment, data relating to population health have also grown exponentially. Disparities in the health of populations down to a zip code level are being documented. The reasons for the disparities, much due to social determinants, are also becoming better understood. This all leads to being able to direct investments more precisely to affect the burden of illness and life expectancy itself. The data give us not only information relevant to the direct health care services being provided, but can begin to account for what other members of the healthcare system's "ecosystem" may contribute. Evidence-based guidelines for population health interventions are being improved and widely disseminated (CDC, 2017; University of Wisconsin Population Health Institute, 2017b). As noted previously, health services hold a minority position in affecting health when compared with the combined influence of other social determinants such as education, jobs, and nutrition. This emerging understanding is simply one other way for health leaders to understand that their job in their organization involves making sure that the sum of the parts, of which they are but one, is greater than the whole.

High level of teamwork, within and outside the organization

Teamwork seems to be the mantra for success in many businesses, so why is it even more important for healthcare delivery? First, within the organization, the delivery of healthcare calls for an unprecedented level of coordination among the caregivers. The coordination is essential first for safety reasons, whether it is a pre-surgical huddle, rounding on the floors, or critical and timely discharge planning. Teamwork around key processes such as appointment scheduling, prior authorizations, and communication every step of the way, separates mediocrity from high-level performance. Developing individuals to be comfortable with and supportive of the value of teamwork is not easy without leadership attending to its importance.

Second, teamwork among organizations is critical, particularly in addressing population health. Assuring a coordinated experience for patients means working with multiple organizations that may be under the same corporate umbrella, loosely affiliated, or completely independent – and perhaps even a competitor. Addressing social determinants means working with a wide variety of community partners. Leaders need to understand and work with many stakeholders who may not hold any accountability to them, or even be from competing organizations. Identifying who these individuals and organizations are, communicating efficiently and effectively, and being an enabler versus a barrier is something that requires constant attention and practice. Modeling of the collaborative behavior needed goes a long way to creating the professional culture needed for widespread success.

Values-driven leadership

Values are the foundation on which leadership competencies must sit. All businesses require solid values, but healthcare organizations, which put real lives at stake, are bound to a higher set of values than others are. Empathy for the patient, client, or consumer takes on added significance.

In fact, empathy for the community is needed as well. Can the leader listen to all the voices, hear the nuances that require sensitive and targeted efforts to diverse individuals and populations that do not benefit uniformly from the same interventions? Some businesses permit segmenting of customers and targeting a niche population or providing a niche service. Most healthcare organizations, if serving the greater good, cannot leave individuals or communities behind. They need to embrace diversity and be inclusive to be successful. It starts with knowing and appreciating the characteristics of those being served, but needs to be mirrored with a values-driven workforce reflective of those being served.

One cannot think of too many businesses where traditional values around inclusiveness, integrity, transparency, and accountability are more important. Traditional organizations that once enjoyed very high credibility are being challenged. Banks, universities, police departments, and governmental agencies are under pressure to demonstrate how their traditional goals, structures, and values are creating the outcomes people expect at a cost they can afford. Healthcare is no different. Leaders will need to double down on providing the leadership needed to ensure the work being pursued is beyond reproach, and their errors are transparently communicated along with a culture that supports continuous improvement in what they do.

Affirming the distinctive nature of healthcare management

An oath for healthcare management

One way to help distinguish the healthcare management profession is to embrace a Hippocratic Oath of our own. The Hippocratic Oath is often formally endorsed by physicians entering practice. It establishes a high bar for ethical behavior. Wouldn't such an oath make sense for healthcare management? Isn't healthcare management even more responsible than the separate clinical professions to make sure that their collective effort is deployed in a way that benefits the greater good? If healthcare management is not a key leader in this collaborative effort, who is?

Several of the behaviors consistent with the distinctive nature of healthcare management could be summarized in a powerful statement that would be pledged by new graduates and widely publicized and modeled by those in leadership roles. The oath would not be a broad ethical code such as the ACHE Code of Ethics. Instead, the oath would emphasize the unique characteristics of healthcare management relative to generic management, and would seek a balance between the profession's traditional attention to clinical services and the growing awareness of the importance of community programs and public policy. It would also be aspirational and idealistic, both to attract new entrants who are so motivated and to reinforce idealism in practicing managers. A draft of such an oath is given in Table 1. The oath speaks to leadership within one's organization, community, and profession.

Table 1

Oath for healthcare management

As a healthcare management professional dedicated to enhancing the health and well-being of individuals and communities, I pledge to ...
Within my organization
1 Strive to provide access to affordable health care to all individuals and populations I serve.
2 Provide exceptional health care that eliminates preventable errors and provides comforting and welcoming services whenever and wherever they are most needed.
3 Model and facilitate collaboration among the health professions and team-based services.
4 Support a diverse and inclusive workforce and work environment essential to meeting the needs of the people being served.
Within my community
5 Partner with organizations outside of my own to coordinate care and address the social determinants of health.
6 Sacrifice an organizational priority to meet a greater community need, when called for.
7 Advocate for public policy consistent with the service mission of healthcare delivery.
Within my profession
8 Give back to my profession by volunteering my time, talent, or resources, in support of preparing the next generation of healthcare managers and leaders.

Implementation of the oath could be informed by recent movements within the business education community in support of an MBA student oath initiated by business school students (Anderson & Escher, 2010; "MBA Oath," n.d.) and within the healthcare community in support of the Charter on Professionalism for Health Care Organizations, initiated by a number of healthcare delivery professionals, with healthcare management notably absent (Egener et al., 2017).

Consequences for educators

To distinguish healthcare management as a profession means distancing "professional" healthcare management programs from "less professional" programs. This is because many educational programs will choose to remain

responsive to employer organizations that need not treat healthcare delivery as distinctive, and where generic management is viewed as an appropriate framework. These include programs that largely service non-delivery segments of healthcare, such as consulting and supply chain management. Many MBA programs devoted to healthcare delivery are directed at business opportunities in the start-up digital world or product lines that are targeted at a wealthy population. Such programs do not benefit from the more holistic community lens that a leader must embrace if the program goal is consistent with national, public expectations. A more exclusive definition of the field is consistent with arguments made by Mick (2004), Smith (2004), and others in response to suggestions to broaden the definition of the field (Begun & Kaissi, 2004).

We also would expect educational programs that recognize the distinctive nature of healthcare to have curriculum content consistent with the oath. Programs would actively promote the distinctive nature of healthcare management in their curriculum and extracurricular opportunities. Currently, accredited graduate programs are required in their curriculum to facilitate development of (1) knowledge of the health-sector and healthcare management; (2) competencies in communication and interpersonal effectiveness; (3) competencies in critical thinking, analysis, and problem solving; (4) competencies in management and leadership, and (5) competencies in professionalism and ethics. These requirements are so general as to be of little use in distinguishing healthcare management from generic management. More pointedly, a forward-looking, distinctive curriculum would include strong coverage of knowledge about public policy and the competency of policy advocacy. The curriculum would cover developing, assessing, and using the evidence base on programs that address social determinants, as well as community health assessment. Competencies for developing and leading multi-sector collaborations would be included. Zismer (2013) provides a list of similar "public health" content translated to the competency level.

Regarding the communitarian values promoted by the profession, we suggest that programs assess values in the student admissions process, as well as promoting community service values in coursework and extracurricular activities. Many programs currently review evidence of service activities of applicants, for example, as a reflection of their values.

Consequences for practitioners

The commitment to a distinctive profession needs not only to be screened for, taught, and reinforced in educational programs, but reinforced throughout a career. We expect that practitioners committed to a distinctive profession

would articulate the values in a healthcare management oath in the organizations in which they work. They would also be partners to academic programs in recruiting students and in working with those programs.

Affirming the distinctive nature of healthcare management also would help clarify the scorecard by which practitioners should be judged. Leaders of healthcare delivery organizations are constantly torn by what "scorecard" is used to measure their performance. The rating agencies want higher market share, volume increases, more days cash on hand, etc. To some extent, so does the governing board, but the board also values high rankings in reputational surveys, as well as quality and exceptional service. As for improving the health of the population, the scorecard is very difficult to create, assess, and reward for higher performance. A recent systematic review of definitions of "high-performing healthcare delivery systems" concluded no such universal definition yet exists (Ahluwalia, Damberg, Silverman, Motala, & Shekelle, 2017; Pronovost, 2017). As with our field's competency models, with a heterogeneity of definitions of performance, the risk always is that we pick the one that makes us look best locally, rather than the one that challenges us to strive collectively toward better outcomes universally. Inclusion of community health indicators in the scorecard of healthcare delivery organizations would assist them in moving more rapidly to partner with appropriate organizations to move the needle on such indicators.

Conclusion

Evidence on the relative benefits of clinical and population health interventions, value-based payment reform, digitalization, and interprofessional team-based care are among the many developments that lead to a reconsideration of the attributes that can uniquely define the healthcare management profession. An oath for healthcare management would make clear that we are not just in a business that happens to deliver healthcare, but instead are improving health through organizations that happen to run as businesses. If we can gain a consensus around the distinctive nature of healthcare management, it will differentiate our educational programs from those that lack this mission-based focus. Such changes would help to increase the legitimacy of the profession in the eyes of the public and would help attract a diverse and "best and brightest" student population to a career of consequence, further realizing the intentions of the 2001 National Summit.

References

Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. Chicago, IL: University of Chicago Press.

Ahluwalia, S. C, Damberg, C. L., Silverman, M., Motala, A., & Shekelle, P. G. (2017). What defines a high-performing health care delivery system: A systematic review. *The Joint Commission Journal on Quality and Patient Safety, 43*, 450-459.

Anderson, M., & Escher, P. (2010). *The MBA oath: Setting a higher standard for business leaders*. New York, NY: Penguin Group.

Appleyard, D., Lofton, K., & Greene, B. (2001). Synthesis of breakout session reports. *Journal of Health Administration Education, 19(Special Issue)*, 187-200.

Baker, G. R., & Wakefield, D. (2001). Domains and core competencies for effective evidence-based practice - Quality improvement. *Journal of Health Administration Education, 19(Special Issue)*, 177-185.

Begun, J. W., & Kaissi, A. (2004). Definition and scope of health services administration. *Journal of Health Administration Education, 21*(2), 227-240.

Begun, J. W., & Lippincott, R. C. (1993). *Strategic adaptation in the health professions: Meeting the challenges of change*. San Francisco, CA: Jossey-Bass.

Begun, J. W., & Malcolm. J. K. (2014). *Leading public health: A competency framework*. New York, NY: Springer Publishing.

Calhoun, I. G., Vincent, E. T., Baker, G. R., Butler, P. W., Sinioris, M. E., & Chen, S. L. (2004). Competency identification and modeling in healthcare leadership. *Journal of Health Administration Education, 21*(4), 419-440.

Centers for Disease Control and Prevention (CDC). (2017). The Community Guide. Retrieved from https://www.thecommunityguide.org/

Chaiken, M., Porter, R. D., & Schick, I. (2001). Core competencies and ethics. *Journal of Health Administration Education, 19*(Special Issue), 149-157.

Counte, M. A., & Newman, J. F. (2001). Essential competencies in human resource management. *Journal of Health Administration Education, 19* (Special Issue), 167-172.

Dalston, J. (2001). The agenda for the future. *Journal of Health Administration Education, 19*(Special Issue), 201-209.

Dreachslin, J. L., & Agho, A. Domains and core competencies for effective evidence-based practice in diversity leadership. *Journal of Health Administration Education, 19*(Special Issue), 131-148.

Egener, B. E., Mason, D. J., McDonald, W. J., Okun, S., Gaines, M. E., Fleming, D. A., Rosof, B. M., Gullen, D., & Andresen, M. (2017). The charter on professionalism for health care organizations. *Academic Medicine, 92*, 1091-1099.

Frieden, T. R. (2015). The future of public health. *New England Journal of Medicine, 373*(18), 1748-1754.

Friedman, E. (2001). The health care executive as a singular presence. *Journal of Health Administration Education, 19*(Special Issue), 69-80.

Friedman, L., & McCaughrin, W. C. (2001). Outcome competencies for organizational behavior and theory. *Journal of Health Administration Education, 19*(Special Issue), 173-176.

Freidson, E. (2001). *Professionalism: The third logic*. Chicago, IL: University of Chicago Press.

Garman, A. N., & Johnson, M. P. (2006). Leadership competencies: An introduction. *Journal of Healthcare Management, 51*, 13-17.

Garman, A., & Scribner, L. (2011). Leading for quality in healthcare: Development and validation of a competency model. *Journal of Healthcare Management, 56*, 373-382.

Gellmon, S. B. (2004). Stakeholder satisfaction with the accreditation process. *Journal of Health Administration Education, 21*(2), 241-268.

Grady, R. (2001). The mandate and challenge of increasing diversity in health care management. *Journal of Health Administration Education, 19* (Special Issue), 81-92.

Griffith, J. (2001). Report of the National Summit on the Future of Education and Practice in Health Management and Policy. *Journal of Health Administration Education, 19*(Special Issue), 5-18.

Griffith, J. R., & White K. R. (2005). The revolution in hospital management. *Journal of Healthcare Management, 50*, 170-189.

Kaplan, R. S., Serafeim, G., & Tugendhat, E. (2018). Inclusive growth: Profitable strategies for tackling poverty and inequality. *Harvard Business Review, 96*(1), 127-133.

Khurana, R. (2007). *From higher aims to hired hands: The social transformation of American business schools and the unfulfilled promise of management as a profession*. Princeton, NJ: Princeton University Press.

Kindig, D. A. (2010, June 7). Obstacles to population health policy: Is anyone accountable? [Blog post]. Retrieved from http://www.improvingpopulationhealth.org/blog/2010/06/obstacles-to-population-health-policy-i-is-anyone-accountable.html.

Luke, R. D., & Begun, J. W. (1987). Industry distinctiveness: Implications for strategic management in health care organizations. *Journal of Health Administration Education, 5*(3), 387-405.

Marmot, M., & Allen, J. J. (2014). Social determinants of health equity. *American Journal of Public Health, 104*(S4), S517-S519.

Mauer, R. T., & Grazier, K. (2001). Development of core competencies in health care finance. *Journal of Health Administration Education, 19* (Special Issue), 159-165.

MBA Oath (n.d). Retrieved from www.mbaoath.org/mba-oath-legacy-version/

Mick, S. S. (2004). Must we broaden the definition of health services administration? A response to the Final Report of the Blue Ribbon Task Force. *Journal of Health Administration Education, 21*(2), 173-177.

National Summit on the Future of Education and Practice in Health Management and Policy. (2001). [Brochure]. Orlando, Florida, February 8-9.

Norman, J. (2016, December 19). Americans Rate Healthcare Providers High on Honesty, Ethics. Retrieved from http://news.gallup.com/poll/200057/americans-rate-healthcare-providers-high-honesty-ethics.aspx

Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism – and unleash a wave of innovation and growth. *Harvard Business Review, 89*(1-2), 1-17.

Pronovost, P. J. (2017). High-performing health care delivery systems: High performance toward what purpose? *The Joint Commission Journal on Quality and Patient Safety, 43*, 448-449.

Schewchuk, R. M., O'Connor, S. J., & Fine, D. J. (2005). Building an understanding of the competencies needed for health administration practice. *Journal of Healthcare Management, 50*, 32-47.

Schroeder, S. A. (2001). Foreword. *Journal of Health Administration Education, 19*(Special Issue), 1-2.

Smith, D. G. (2004). Blue ribbon kudos. *Journal of Health Administration Education, 21*(2), 179-183.

Stefl, M. E. (2008). Common competencies for all healthcare managers: The Healthcare Leadership Alliance model. *Journal of Healthcare Management, 53*, 360-373.

Susskind, R., & Susskind, D. (2016). *The future of the professions: How technology will transform the work of human experts*. Oxford, UK: Oxford University Press.

University of Wisconsin Population Health Institute. (2017a). County health rankings and roadmaps: What and why we rank. Retrieved from http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank

University of Wisconsin Population Health Institute. (2017b). What works for health. Retrieved from http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health

Warden, G. L., & Griffith, J. R. (2001). Ensuring management excellence in the health care system. *Journal of Health Administration Education, 19*(Special Issue), 19-32.

Welton, W. E. (2004). Managing today's complex healthcare business enterprise: Reflections on distinctive requirements of healthcare management education. *Journal of Health Administration Education, 21*(4), 391-418.

White, K. R., & Griffith, J. R. (2016). *The well-managed healthcare organization*, 8th ed. Chicago, IL: Health Administration Press.

Zismer, D. K. (2013). An argument for the integration of healthcare management with public health practice. *Journal of Healthcare Management, 58*, 253-257.

Global Efforts to Professionalize the Healthcare Management Workforce: The Role of Competencies

S Robert Hernandez, DrPH, Stephen J. O'Connor, PhD, FACHE, & Katherine A. Meese, MPH

Abstract

Global work is underway to professionalize the healthcare management workforce. A major tenet of these efforts has been the need for identification of competencies essential for effective leadership of healthcare delivery organizations as well as advocacy for their use in education and training programs for healthcare leaders. This article explores the role that professional associations, the academic community, and other groups such as the International Hospital Federation are playing in leading this important work. Initiatives to improve the competencies of current healthcare executives in numerous settings are identified. A brief overview of research conducted on management competencies in North America, Europe, and Australia is provided. Future initiatives will establish professional associations in regions where these groups do not exist. International or global accreditation for healthcare management education programs is being explored. Future research is contemplated to support these efforts.

Please address correspondence to: S. Robert Hernandez, DrPH, School of Health Professions, University of Alabama at Birmingham, 556 SHP, 1720 2nd Avenue South, Birmingham AL 35294-0113; Phone: (205) 934-1665; Email: hernande@uab.edu

Introduction

There is a growing body of empirical evidence that effective leadership and management are important to the success of healthcare organizations. There has also been a push from healthcare management professional organizations in the United States to identify common competencies needed by healthcare managers and others in healthcare leadership roles (American College of Healthcare Executives, 2017; National Center for Healthcare Leadership, 2017). In addition, the Commission on Accreditation of Healthcare Management Education (CAHME) requires that accredited graduate programs in North America adopt a set of competencies that aligns with the Program's mission and types of jobs graduates enter (CAHME, 2017). Despite these emerging efforts and evidence, many countries have failed to institutionalize the development of management practice and leadership competence in their healthcare systems. Healthcare leaders in these countries are often chosen because of familial or political connections, in-group membership, clinical experience, or seniority. Formal healthcare management education is often not available, encouraged, or required in these settings.

The International Hospital Federation (IHF), an international not-for-profit, non-governmental membership organization of hospitals and healthcare organizations, is leading an effort to advocate for the professionalization of the healthcare management workforce globally as a means to improve the quality of care provided and the effectiveness of health systems. This effort is critical because political leaders in many countries do not believe that the professionalization of the healthcare management field is important or necessary. To improve this situation, the IHF has developed an international framework for collaboration with healthcare leaders and professional associations and has agreed on a dictionary of core competencies healthcare leaders should possess (IHF, 2015). Additionally, the IHF has extended that collaboration to the academic community in order to expand the empirical base of support for the professionalization of the healthcare management workforce globally.

The purpose of this paper is to describe the history of efforts to identify and use healthcare management competencies (HMC) to improve the management and leadership of healthcare organizations among professional associations. The focus will be first on the domestic activities in the United States and then on global work in this area. The role of academia in advancing this initiative will be discussed and future directions identified.

Work in the United States

A large group of policy makers, practitioners, and academicians gathered to assess the current state and readiness of leaders in the field of healthcare management at the 2001 National Summit on the Future of Education and Practice in Health Management and Policy, funded by the Robert Wood Johnson Foundation. One of the concerns arising from the Summit was whether today's healthcare executives and leaders were being adequately prepared in academic programs to lead in an ever-changing and increasingly complex environment. Part of this concern arose from the perception that there were not enough ready candidates to assume the leadership roles needed by U.S. healthcare organizations. This conference played a major role in driving changes in healthcare management accreditation and spurred an interest in competency-based education (Griffth, 2001; Kovner, 2000; Richardson, 2001; Stefl, 2008).

While there were competency models developed by individual research teams (Campbell, Lomperis, Gillespie, & Arrington, 2006; Clement et al., 2010; Dye & Garman, 2006; Garman & Scribner, 2011; Garman, Tyler, Darnall, & Lerner, 2004; Kazley et al., 2016; Ross, Wenzel, & Mitlyng, 2002; Shewchuk, O'Connor, Fine, & Tyler, 2005; Shewchuk, O Connor, & Fine, 2006), a number of US-based professional associations commissioned the development of competency models or directories. The National Center for Healthcare Leadership took an empirical approach to develop an inter-professional competency model called the Health Leadership Competency Model (HLCM). This model was designed for use in healthcare management, as well as leadership roles in nursing and medicine and across career stages and levels. The process included a review of existing research both inside and outside of the healthcare industry, behavioral event interviewing, psychometric testing, and benchmarking. The model contains 26 competencies across three domains: transformation, execution, and people (Calhoun et al., 2008). A collaborative effort by six US-based healthcare management professional associations was undertaken to develop the Healthcare Leadership Alliance (HLA) competency directory using existing literature and expert opinions from professionals in each association representing roles such as hospital administration, medical practice administration, nursing administration, healthcare financial management, and healthcare information management. This process yielded 300 competencies across five domains: leadership; communication and relationship management; professionalism; knowledge of the healthcare system; and business skills and knowledge (Stefl, 2008). Researchers developed another competency model in collaboration with the National Association for Healthcare Quality to be used for executives to assess their competency in quality improvement.

Through an expert panel, survey, and factor analysis, a competency model with six domains across three levels was developed: fosters positive change, communicating, organizational awareness, self-management, future focus, and performance improvement (Garman & Scribner, 2011).

International exploration of healthcare management competencies

Just as researchers and academic programs in the United States have examined HMC, so have researchers outside the United States in places such as Australia (Liang, Howard, Koh, & Leggat, 2013; Liang, Leggat, Howard, & Koh, 2013), Canada (Lieff et al., 2013); Iran (Pourhosseini, Ardalan, & Mehrolhassani, 2015); The Netherlands (Berkenbosch et al., 2013; Berkenbosch, Brouns, Heyligers, & Busari, 2011); Sub-Saharan Africa (Curry, Taylor, Chen, & Bradley, 2012), and the United Kingdom (Hamlin, 2002). Another group from universities in five European countries worked to develop a consensus model for public health leadership (Czabanowska et al., 2013). The most extensive international effort to date to establish competency frameworks has been initiated by IHF in its creation of a Global Consortium for Healthcare Management Professionalization in 2012 that was comprised of 18 professional and academic groups (International Hospital Federation, 2017).

The Global Consortium recognized that competent management of healthcare organizations is critical for efficient use of healthcare resources and for improvement in patient care outcomes. They identified two barriers to competent management: lack of adequate management training for healthcare leaders and the fact that healthcare management is not a recognized profession in all countries. Critical for development of educational programs for managers and professionalization is the identification of management competencies these individuals must possess. The Consortium worked from 2013 to 2015 to develop a Global Competency Directory derived from those in the Healthcare Leadership Alliance (HLA) Competency Directory discussed earlier. While the Global Directory was comprised of the same five domains as those identified by HLA, 80 competencies were selected for inclusion in the Directory. These items were chosen for their salience across numerous global health systems.

The development of the Global Directory was announced at the International Hospital Federation World Congress in Chicago in October 2015 (International Hospital Federation, 2017). Lucy Nugent, COO of Tallaght Hospital and Vice President of the Health Management Institute of Ireland, noted that the European Association of Hospital Managers was encouraging the use of the Global Healthcare Leadership Competency Directory by hospital

executives to assess their developmental needs. They also were working to collaborate across Europe and beyond to influence European Union-wide legislation and regulation to facilitate professionalization of the healthcare management workforce through adoption of a competency framework for formal recognition of the profession and for educational programs.

Dr. Reynaldo Holder of the Pan American Health Association noted that Ministers of Health in that region complained about management inefficiencies and poor management skills of healthcare leaders (International Hospital Federation, 2017). He continued that there was a recognized need for increased professionalism in healthcare management. He noted that there is work underway to formulate a framework for pre- and post-graduate training for healthcare managers that could be coupled with continuing education that might include certification/accreditation mechanisms for these professionals. He described actions initiated in Chile, Costa Rica and Jamaica to make this a reality.

Representatives from 13 universities and the IHF met in Paris in June during the European Academy of Management 2016 Annual Meeting to discuss the value of competencies for the professionalization of healthcare management and the use of competencies for the healthcare management education, as well as to share some research findings on HMC. Eric de Roodenbeke, CEO of IHF, shared the extensive work that a number of organizations had done in compiling the Global Directory. The consensus from the meeting was while independent efforts had been completed to identify and measure competencies, more work was needed to categorize common themes among these findings and to determine the relationship from competencies to important organizational outcomes. A Global Healthcare Management Competency Research Task Force with 27 individuals from eleven countries was formed to develop a comprehensive listing of the research completed on HMC and determine priorities for research on the relationship from HMC to organizational outcomes. It was decided that the five domains designated in the IHF Global Directory would serve as a starting point for comparing the various models that researchers had created.

To support this effort, a search of electronic databases was conducted using various combinations of the following terms: Healthcare, Leadership, Management, Competency/Competencies, Effectiveness, Professionalization, and Global. The search yielded 254 non-duplicate references for initial review. Articles were excluded if the work was not empirical, competencies were not the focus, it was not related to healthcare, was not peer reviewed, or was only focused on training and development. In all, 36 articles remained and 11 additional articles were identified from input from members of the Global Task Force, resulting in selection of 47 articles.

Abstracts and full texts of the articles were reviewed to identify study population, study design, competency framework used, key findings for overall competence of managers and leaders, and implications for performance. Relevant findings generally fell into three main categories. The first was competency identification and model development, in which the authors sought to identify which competencies were needed. The second category was competency assessment, in which authors sought to evaluate the actual competence of a specific healthcare management population. The final category involved findings pertaining to the relationship between competence and performance. This final area yielded few empirical findings.

Shewchuk and colleagues (2006) had noted a decade earlier that the emerging competency models and frameworks were appearing to "converge." That is, they bore a general resemblance to each other, suggesting "that basic health management competencies have already been largely determined" (Shewchuk et al., 2006). In a similar fashion, several of the models identified in the electronic search were mapped onto the Global Directory (Table1) to determine the extent to which they shared common attributes.

The Global Task Force felt that research would be further advanced by convening another meeting of individuals interested in discussing future directions for exploring research on management competencies and organizational outcomes. Researchers and practitioners attending the European Academy of Management 2017 Annual Meeting in Glasgow were convened to determine if it was possible to identify a shared research agenda to advance the research supporting this initiative. The University of Alabama at Birmingham hosted the half-day workshop with academics and practitioners participating in a structured, facilitated process for identifying a shared research agenda. Individuals from eight countries affiliated with fourteen organizations were involved in these discussions.

This group identified 45 topics that should be researched to understand better the relationship between healthcare managers' competencies and healthcare performance. Priority was assigned to two of these topics. One was the need to identify the impact of management competencies on patient care clinical outcomes. The second was to identify competencies needed to adapt to future challenges.

The rationale for the importance of this first topic is that while there are a number of outcomes that might be studied (e.g., financial performance, operations efficiency, human resource activities), the highest priority should be given to patient care. It was not believed that all 80 competencies would have a direct effect on patient care. The group felt it was important to determine which of the competencies were most influential on this critical area. Additionally, it would be difficult to develop a study that examined the relationship of all the management competency areas to clinical performance.

Table 1: Competency models and domains

Model	Competency Domains				
IHF Global Directory	Leadership	Communications & Relationship Management	Professional & Social Responsibility	Health and Healthcare Environment	Business Competencies
MCAP Howard, Liang, Leggat, & Karimi, (2018)	Leading people and the organization	Interpersonal, communication qualities and relationship management	Professionalism	Demonstrated knowledge of healthcare environment and the organization	Evidence Informed Decision Making Operations, Administration & Resource Management
	Enabling and Managing Change		Self-management and resilience		
Czabanowska, et al., (2013)	Systems Thinking	Leadership and communication	Emotional intelligence & leadership in team-based organizations	Political leadership	Political leadership
	Collaborative leadership: building and leading interdisciplinary teams		Ethics and professionalism		Leading Change
	Leading change				
	Leadership, organizational learning and development				

Table 1, *cont.*

Model	Competency Domains				
IHF Global Directory	Leadership	Communications & Relationship Management	Professional & Social Responsibility	Health and Healthcare Environment	Business Competencies
HLA	Leadership	Communications and Relationship Management	Professionalism	Knowledge of the Healthcare Environment	Business Skills and Knowledge
NCHL	Transformation	People	People	Transformation	Execution
CanMeds			Manage their practice and career effectively	Participate in activities that contribute to the effectiveness of their healthcare organizations and systems	Allocate finite healthcare resources appropriately
NHS	Leading with Care	Engaging the team			
	Sharing the Vision	Influencing for results	Connecting to our service		Evaluating information
	Inspiring shared purpose	Holding to account			
		Developing capability			

Table 1, *cont.*

Model	Competency Domains				
IHF Global Directory	Leadership	Communications & Relationship Management	Professional & Social Responsibility	Health and Healthcare Environment	Business Competencies
Shewchuck, O'Connor & Fine (2005, 2006)		Medical and physician relationships	Political/legal/ethical concerns	Political/legal/ethical concerns	Financial and economic issues
			Patient and consumer focus		Healthcare operations management
Garman & Scribner	Fosters Positive Change				
	Self-management	Communicating		Organizational awareness	Performance improvement
	Future focus				

Global application of competencies for personal assessment and development

IHF's Global Healthcare and Competency Directory is a framework to create tools that can be used by managers to assess their own individual levels of competency attainment on the various skills, knowledge, abilities, behaviors, attitudes, and personal characteristics specified within the Directory's five broad competency domains (Leadership, Communication and Relationship Management, Professional and Social Responsibility, Health and Healthcare Environment, and Business). Such an assessment can broaden an individual's understanding of what constitutes healthcare management and highlight areas where further individual competency development may be warranted.

In addition to its use as an individual assessment tool, the IHF Global Competency Directory has also been used as a framework for strategically identifying and developing training and educational initiatives used within the healthcare academic and management practice communities around the world. The Australasian College of Health Service Management (ACHSM) conducted a review of their own competency framework against the IHF Global Directory and several other existing competency models. This activity resulted in the creation of the ACHSM Master Health Service Management Competency Framework (Australasian College of Health Service Management, 2016). This framework uses the same five competency domains embodied within the IHF Global Directory with 85 associated competency statements (8 more than the IHF Global Competency Directory and 10 more than the previous ACHSM Competency Framework). In addition, the Framework will be embedded within key ACHSM programs such as Mentoring, Health Management Internship, and Fellowship programs, and will be utilized as a means to regularly assess and identify Continuing Professional Development programs (Fong, 2016).

The Catalan Healthcare Providers Association (Unió Catalana d'Hospitals) through its training organization in Spain has been instrumental in stimulating awareness of the IHF Competencies, both as a means for enhancing the professionalization of healthcare management in that region, and as a basis for healthcare management educational content delivered through training programs and graduate and postgraduate university degree programs. Moreover, the Catalan College of Healthcare Management (Societat Catalana de Gestió Sanitària) is working to incorporate the IHF Competencies as a basis for a healthcare management practicum, for hospital-specific training for future healthcare managers, and for a fellowship program (Riera, 2016).

The Royal College of Surgeons in Ireland (RCSI) Institute of Leadership is the principal supplier of professional healthcare management and leader-

ship education in Ireland (Royal College of Surgeons in Ireland, 2018). Based in Dublin, Dubai, and Bahrain, the RCSI Institute of Leadership employs the IHF Competencies to inform their educational offerings that include graduate degrees, postgraduate diplomas, and short courses.

The IHF Competencies have been used to develop curriculum and training sessions by the Loma Linda University School of Public Health for a healthcare leadership certificate designed for leaders in 14 Mexican and Central American hospitals. This certificate program was planned and coordinated with Adventist Healthcare Services InterAmerica (AHSIA), Univeridad de Montemorelos, Adventist Health International, and Loma Linda University (Silverman, 2017). Initial results of the training showed progress on strategic plan development and action plans; significant personal development; practical application of human resource management principles; deeper understanding of healthcare leadership and management issues; and increased collaboration across the 14 hospitals (Silverman and Blethen, 2017).

Szydlowski and Colleagues (2017) examined whether the IHF competencies could be used as a basis for supporting management and development activities for participants (government representatives, investors, managers, and operators) in hospital public private partnerships (PPP) from Mexico, Kenya, Republic of Georgia, Czech Republic, and Slovakia. They developed, tested, and administered a survey questionnaire to uncover those management areas where people working within PPPs were encountering problems making the partnerships work. These could be problems with operations, financing, workforce, policy, or related areas. They then mapped these areas to knowledge, skill, and behavior statements that could define the specific management learning necessary to address the problems. They found that the IHF Competency Directory fulfilled this need and prescriptively suggests what specific education is needed. The next step is ongoing research to identify educational venues best suited to deliver needed educational experiences related to the competencies. This may be through formal, academic classroom education or through more informal, organizational development or corporate-sponsored approaches (West, 2018). Overall, the researchers found that the IHF competency model offered "a solid framework for developing training and education modules for global health managers to be effective in leading PPP" (Szydlowski et al., 2017, pp. 20-21).

Improve/establish healthcare management associations

The International Hospital Federation is promoting the development of healthcare management associations (HMA) in countries or regions of the world that do not have such associations or where existing associations need help in

improving their services. These organizations are important for improving the foundational management competencies so that healthcare leaders will be able to improve health and quality outcomes for consumers and the health system. The most logical approach to this initiative is for mature health management professional associations to support and partner with fledgling professional associations in developing countries. The Healthcare Management Strategic Interest Group (SIG) of the International Hospital Federation is supporting this effort and is identifying which countries have HMAs or have structures which could support the professionalization agenda and/or an HMA.

This SIG has identified a number of steps that are required to back this effort. One activity is to support the development of a digital library for materials such as how do you form an association, what basic learning and teaching materials should be available, and related items. As previously mentioned, it is important to encourage twinning of mature and developing health associations for collaboration, assistance with governance, business plans and doing consultation with government. Universities can also play a role in providing educational modules and learning materials for these fledging associations. The identification of global mentors through global fellowships/exchange programs holds possibilities as consultants to the associations.

Competency-based global healthcare management accreditation

Competency-based education has become a required and fundamental aspect of the curricula of CAHME-accredited graduate programs in healthcare management and will likely play an equally important role as CAHME-accreditation begins to move beyond the confines of the United States and Canada. In fact, CAHME has a new emphasis on global accreditation and has created a Global Advisory Council which will be recruiting and training Global Fellows and pairing CAHME-accredited programs with international healthcare management programs seeking accreditation (West & Stanowski, 2017). Although accredited programs "may choose to create and validate their own competency model based on their mission or adapt a commonly used competency model (NCHL, HLA, SLU, etc.). CAHME does not prescribe a specific number of competencies, but the competency model must be aligned with the Program's mission" (Commission on Accreditation of Healthcare Management Education b, 2017, p. 41). We suspect that most international programs pursuing accreditation will choose the IHF Competency Framework or some variant as it relates to their mission. There is limited initial evidence demonstrating a link between measured IHF competencies within a student and the level of managerial performance or organizational effectiveness at some future point on that student's career trajectory. However, the methods used

by IHF in developing the Global Competency Directory produce the current best level of competency consensus given the limited evidence establishing longitudinal causal relationships. Relatedly, the Australasian College of Health Service Management (ACHSM) – the healthcare management professional association for Australasia (Australia, New Zealand, Hong Kong) – will begin utilizing the ACHSM Master Competency Framework (based on the IHF Global Competencies) in the accrediting process for university programs in healthcare management. ACHMS presently accredits 11 healthcare management in Australasian universities (Fong, 2016).

Future research challenges and recommendations

Because of the differences in competency models across countries, international comparison of healthcare management competencies should be conducted. Just as some elements of desirable leadership are culturally contingent and cannot necessarily be translated across cultures (Dorfman, Javidan, Hanges, Dastmalchian, & House, 2012), environmental and cultural differences across countries may both moderate the relationships between competencies and behavior, and also between behavior and outcomes.

As noted earlier, additional research is also needed on the relationship between specific management competencies and organizational performance. The models that were reviewed contained numerous dimensions. Some of the domains may have a direct influence on clinical outcomes and some may not. For example, leadership competencies such as holding others accountable or building effective multidisciplinary teams may result in better performance by clinicians. Conversely, being competent in budget development and monitoring may result in better financial outcomes but have little direct influence on clinical performance. Analysis is required to determine which competencies result in improved clinical outcomes and which competencies result in more efficient service delivery. Identifying these relationships will be beneficial since that evidence can be used to persuade ministers of health that investment in healthcare management education and training to improve competencies will benefit the populations they serve.

Lastly, information should be gathered on performance outcomes using standard measures across countries and organization types. These performance indicators may include individual performance measures such as promotion, team performance measures such as turnover or efficiency, and organizational-level measures such as financial performance, clinical performance, and patient satisfaction.

These research initiatives need to be undertaken with a partnership between academic and the practice communities. Determining the relationships

between competencies and performance requires access to hospital systems' clinical and managerial data. Additionally, the practice community can help academics design educational interventions that will be attractive to healthcare executives. The important challenges the healthcare community faces must be built on a strong dialogue among all involved groups.

References

American College of Healthcare Executives ACHE (2017). ACHE Healthcare Executive 2017 Competencies Assessment Tool. Retrieved from http://www.ache.org/

Australasian College of Health Service Management (ACHSM) (2016). Master Health Service Management Competency Framework. Retrieved from https://achsm.org.au/Documents/Education/Competency%20framework/2016_competency_framework_A4_full_brochure.pdf

Berkenbosch, L., Bax, M., Scherpbier, A., Heyligers, I., Muijtjens, A. M. M., & Busari, J. O. (2013). How Dutch medical specialists perceive the competencies and training needs of medical residents in healthcare management. *Med Teach, 35*(4), e1090-e1102.

Berkenbosch, L., Brouns, J. W., Heyligers, I., & Busari, J. O. (2011). How Dutch medical residents perceive their competency as manager in the revised postgraduate medical curriculum. *Postgraduate Medical Journal, 87*(1032), 680-687.

Calhoun, J. G. P., Dollett, L., Sinioris, M. E., Wainio, J. A., Butler, P. W., Griffith, J. R. F., . . . Rice, T. F. (2008). Development of an Interprofessional Competency Model for Healthcare Leadership/PRACTITIONER APPLICATION. *Journal of Healthcare Management, 53*(6), 375-389; discussion 390-371.

Campbell, C. R., Lomperis, A. M., Gillespie, K. N., & Arrington, B. (2006). Competency-based healthcare management education: the Saint Louis University experience. *Journal of Health Administration Education, 23*(2), 135-168.

Commission on Accreditation of Healthcare Management Education (CAHME). (2017). 2017 CAHME Eligibility Requirements and Accreditation Criteria. Retrieved from https://www.cahme.org/

Commission on Accreditation of Healthcare Management Education (CAHME) b. (2017). Self-Study Handbook For Graduate Programs In Healthcare Management Education. Retrieved from https://cahme.org/healthcare-management-education-accreditation/?s=self-study+handbook

Clement, D. G., Hall, R. S., O'Connor, S. J., Qu, H., Stefl, M. E., & White, A. W. (2010). Competency development and validation: A collaborative approach among four graduate programs. *Journal of Health Administration Education, 27*(3), 151-173.

Curry, L., Taylor, L., Chen, P. G., & Bradley, E. (2012). Experiences of leadership in health care in sub-Saharan Africa. *Human Resources Health, 10*, 33.

Czabanowska, K., Smith, T., Könings, K. D., Sumskas, L., Otok, R., Bjegovic-Mikanovic, V., & Brand, H. (2013). In search for a public health leadership competency framework to support leadership curriculum–a consensus study. *The European Journal of Public Health*, ckt158.

Dorfman, P., Javidan, M., Hanges, P., Dastmalchian, A., & House, R. (2012). GLOBE: A twenty year journey into the intriguing world of culture and leadership. *Journal of World Business, 47*(4), 504-518.

Dye, C., & Garman, A. (2006). *Exceptional leadership*. Chicago: Health.

Fong, N. (2016). Australia. Presented at the IHF 40th World Hospital Congress. Durban, South Africa. Retrieved from https://www.ihf-fih.org/download_doc_file.php?doc=91bb1ca6b8a4daa2d3024cf7e9a67bd8

Garman, A., & Scribner, L. (2011). Leading for quality in healthcare: development and validation of a competency model. *Journal of Healthcare Management, 56*(6), 373-384.

Garman, A., Tyler, J., Darnall, J., & Lerner, W. (2004). Development and Validation of a 360-degree-feedback Instrument for Healthcare Administrators. *Journal of Healthcare Management, 49*(5), 307-321; discussion 321-302.

Griffth, J. R. (2001). Report of the National Summit on the Future of Education and Practice in Health Management and Policy. *Journal of Health Administration Education, Special Issue*, 5-18.

Hamlin, R. G. (2002). A study and comparative analysis of managerial and leadership effectiveness in the National Health Service: An empirical factor analytic study within an NHS Trust hospital. *Health Services Management Research, 15*(4), 245-263.

Howard, P., Liang, Z., Leggat, S., & Karimi, L. (2018). Validation of a management comptetency assessment tool for health service managers. *Journal of Health Organization and Management, 32*(1), 113-134.

International Hospital Federation. (2015). Leadership Competencies for Healthcare Services Managers. Retrieved from https://www.ache.org/newclub/resource/Leadership_Competencies_Healthcare_Services_Managers.pdf

International Hospital Federation. (2017). International Hospital Federation Website. Retrieved from https://www.ihf-fih.org/

Kazley, A. S., Schumacher, E. J., Dellifraine, J., Clement, D., Hall, R., O'Connor, S., . . . Stefl, M. (2016). Competency Development and Validation: An Update of the Collaborative Leadership Model. J*ournal of Health Administration Education, 33*(1), 73-93.

Kovner, A. (2000). The future of health care management education: an evidence-based approach. *The Journal of Health Administration Education, Special Issue,* 107-116.

Liang, Z., Howard, P., Koh, L., & Leggat, S. (2013). Competency requirements for middle and senior managers in community health services. *Australian Journal of Primary Health, 19*(3), 256-263.

Liang, Z., Leggat, S., Howard, P., & Koh, L. (2013). What makes a hospital manager competent at the middle and senior levels? *Australian Health Review, 37*(5), 566-573.

Lieff, S., Banack, J. G., Baker, L., Martimianakis, M. A., Verma, S., Whiteside, C., & Reeves, S. (2013). Understanding the needs of department chairs in academic medicine. *Academic Medicine, 88*(7), 960-966.

National Center for Health Care Leadership (NCHL). (2017) NCHL Health Leadership Competency Model. Retrieved from http://www.nchl.org/static.asp?path=2852,3238

Pourhosseini, S. S., Ardalan, A., & Mehrolhassani, M. H. (2015). Key Aspects of Providing Healthcare Services in Disaster Response Stage. *Iranian Journal of Public Health, 44*(1), 111-118.

Richardson, M. (2001). The Future of Education and Practice in Health Management Policy: Proceedings from the National Summit. *The Journal of Health Administration Education, Special No*. 1-209

Riera, A. (2016). A Global Need for the Professionalization of Healthcare Management. Presented at the IHF 40th World Hospital Congress. Durban, South Africa. Retrieved from https://www.ihf-fih.org/download_doc_file.php?doc=91bb1ca6b8a4daa2d3024cf7e9a67bd8

Royal College of Surgeons in Ireland. (2018). RCSI Institute of Leadership. Retrieved from http://www.rcsi.ie/institute_of_leadership

Ross, A., Wenzel, F. J., & Mitlyng, J. W. (2002). *Leadership for the future: Core competencies in healthcare.* Health Administration Press.

Shewchuk, R. M., O'Connor, S. J., Fine, D. J., & Tyler, J. L. (2005). Building an Understanding of the Competencies Needed for Health Administration Practice. J*ournal of Healthcare Management, 50*(1), 32-47; discussion 48.

Shewchuk, R. M., O Connor, S. J., & Fine, D. J. (2006). Bridging the gap: Academic and practitioner perspectives to identify early career competencies needed in healthcare management. *Journal of Health Administration Education, 23* (4), 366.

Silverman, M. & Blethen, E. (2017) Case Study: Global Healthcare Competency Model as a Framework for the International Certificate in Healthcare Leadership. Presented at the 41st IHF World Hospital Congress. Tapei, Taiwan. Retrieved from https://www.ihf-fih.org/download_doc_file.php?doc=661cb5ec978b2181d25cfeb60469a8df

Stefl, M. E. (2008). Common competencies for all healthcare managers: the Healthcare Leadership Alliance model. J*ournal of Healthcare Management, 53*(6), 360-373; discussion 374.

Szydlowski, S., Ramirez, B., Costello, M., West, D., Ramirez, C., Belendez, A., & Miller, W. (2017). Using International Hospital Federation Leadership Competencies for Educating Participants in Healthcare Public-Private Partnerships. Paper presented at EURAM June 2017, Glasgow, Scotland.

West, D. (2018). Personal interview. 2 February 2018.

West, D. & Stanowski, A. (2017). Commission on Accreditation of Healthcare Management Education: Global Accreditation In Health Management Education Concept Document.

Original Research

Competency-Based Education in Undergraduate Programs Certified by the Association of University Programs in Health Administration

Leigh W. Cellucci, PhD, Carol Molinari, PhD, & Jenyqua Young

Abstract

The purpose of this paper is to examine how undergraduate programs in healthcare management certified by the Association of University Programs in Health Administration (AUPHA) have transitioned to a competency-based curriculum and assessment. Although the term competency had not been adopted prior to 2013, we found that Business Skills, Communication, Professionalism, and Knowledge of the Healthcare Environment were the most commonly noted content areas for all years reviewed (2011-16). For the 2011 and 2012 reports, relationship management and teamwork were listed by 19% and 13% respectively by programs. This increased substantially post-2012 (46% and 35%), indicating a greater emphasis on interpersonal competencies. Another major finding was the dramatic rise (doubling) in using preceptor evaluations to assess students' competencies. Additionally, there was a sizable increase (2.4 times) related to the use of a comprehensive exit examination for programs post-2013 compared to pre-2013. As assessment becomes more important for program review, there is need for programs to learn about and share assessment tools so programs may measure personal and professional competencies, and use that feedback for program improvement.

Please address correspondence to: Leigh W Cellucci, PhD, Health Services and Information Management, East Carolina University, 600 Moye Blvd., Mail Stop 668, Greenville, NC 27858
Phone: (252) 744-6072; Email: celluccie@ecu.edu

Introduction

Professional educational programs are developing and evaluating competencies (knowledge, skills, and abilities) in courses and curricula to better prepare student graduates to assume key professional roles and behaviors. This competency-based approach has been endorsed by graduate professional accrediting bodies to ensure that their graduates are capable of performing the complex and changing work in today's competitive and evolving healthcare industry. Following the lead of graduate programs, competency-based education in healthcare management undergraduate programs became a requirement for those standing for AUPHA certification in 2013. Programs were expected to select competencies that align with their mission, goals, objectives, and outcomes, and to demonstrate how the competencies relate to the program's structure and curriculum (AUPHA, 2015). Examining undergraduate programs under AUPHA review over the period 2011-2016 provides an informative snapshot to understand ways in which undergraduate programs were including competencies into their program and curriculum.

The purpose of this paper is to examine whether and how AUPHA-certified undergraduate programs in healthcare management have transitioned to a competency-based curriculum and assessment. We begin with providing a rationale for competency-based education, especially at the undergraduate level. Then, we present findings from our examination of preliminary evidence in the self-study reports from 2011-2016 to better understand how programs were transitioning towards competency-based structure and curricula that included the following:

- list of the selected program competencies with desired outcomes stated;
- identification of a conceptual framework or model noted to select program competencies; and
- description of how the program measured its outcomes.

The time period chosen for examination was 2011-2016. This provided a natural timeline given the 2013 change (competency-based) in AUPHA program certification criteria. This timeline enabled us to assess preliminary evidence related to the inclusion of competencies in the self-study reports and to discuss implications from our analysis to inform undergraduate programs seeking to make or enhance their transition towards competency-based education.

Competency-based education

The rationale for competency-based education (CBE) in healthcare administration rests upon the response to changes that had occurred in the healthcare field. Clinical programs (medicine, nursing) first recognized the need for com-

petency mastery and developed programmatic changes designed to prepare providers with requisite skills and knowledge to diagnose and treat complex health conditions. The Institute of Management (IOM) Summit in 2002 was focused on addressing health professions education, which recommended clinical programs develop a core set of competencies centered on patient-care, interdisciplinary teams, outcomes-based practice, quality improvement, and informatics (Greiner & Knebel, 2003).

Similar to clinical programs, healthcare management had also become more complex. Given the rapidly changing health care market and regulatory environments, health administration programs saw the need for healthcare managers and executives to have requisite managerial capabilities to manage the delivery by providing quality care with fewer resources.

Competency-based education (CBE) involves developing curricula based on roles and behaviors that graduates will be expected to assume in their professional jobs (Westera, 2001). In 2002, a working report was developed by the National Center for Educational Statistics (NCES) that provided four points to define competency and respective characteristics (Jones & Voorhees, 2002): (a) competency is a combination of skills, knowledge and abilities to perform a task; (b) competencies can be learned from education and experience; (c) competencies are often the result of learning experiences that integrate knowledge, skills, and abilities that enable the learner to perform specific tasks; and (d) assessment of competencies is critical so to demonstrate competencies.

Around the new millennium, educational programs in healthcare management were transitioning towards a competency-based curriculum. This change was driven by practitioners demanding that health management programs provide graduates with knowledge and experiential learning to develop necessary professional competencies required in the current work environment. In particular, health managers and leaders were increasingly expected to possess managerial and leadership competencies that include setting a vision for excellence and then creating a culture that will execute this vision. This reflects a broad set of competencies that include "technical" managerial skills coupled with "soft" people skills.

In 1999, the American College of Healthcare Executives (ACHE) identified trends and predicting changes in the profession. As the healthcare industry became both more competitive and regulated, ACHE examined necessary competencies for health managers to perform their job successfully through formation of the Health Leadership Alliance (HLA). The HLA was a consortium of professional healthcare associations that identified five clusters, or domains, of competencies to prepare healthcare managers (Stefl, 2008). These include knowledge of healthcare environment; business skills and knowledge; com-

munication and relationship management; professionalism; and leadership. ACHE has adopted this model as well; the ACHE Competency Assessment Tool elaborates upon the model proposed by the HLA (ACHE, n.d.). Additionally, the National Center for Healthcare Leadership (NCHL) created a competency model comprised of 26 competencies that included three clusters or domains of transformation, execution, and people. Both of these models came to be developed by practitioners, and the adoption of these models in healthcare management academic programs reflected the strong connection between practitioners and academic programs in the health professions.

A key point to note is that this development of competences in healthcare management had been focused on graduate academic programs in which graduate students are prepared for middle to upper management and leadership positions. Casciani (2012) reviewed these ACHE and HLA competencies and adopted them to better reflect the entry to middle management roles typically assumed by students completing an undergraduate program in Health Administration. The main difference identified in the ACHE competencies is that undergraduates are unlikely to lead organizational change. Instead, undergraduates are likely to "lead and manage others and demonstrate effective teamwork skills" (Casciani, 2012, p. 166).

Griffiths (2007) notes that there was no standardization of knowledge/skill-based content between the ACHE, HLA, and NCHL models. This allowed each program to select and develop those competencies that best align with its educational mission, goals, and objectives, as well as tailor its assessment process as it implemented and evaluated selected competencies.

Other efforts to examine how health management education programs could best respond to industry changes included the Blue Ribbon Task Force, created by the National Center for Healthcare Leadership (NCHL), and the Accrediting Commission on Education for Health Services Administration (ACEHSA) in 2002 (Leatt et al., 2004). The Task Force was formed to ensure that "health services education accreditation is relevant and responsive" to the changing industry and made two recommendations regarding the integration of competencies into the curriculum – identification of core competencies for graduates and incorporation of the core competencies into the accreditation criteria (Leatt et al., 2004, p. 121).

These efforts resulted in the Commission on Accreditation Healthcare Management Education (CAHME) requiring accredited graduate programs to adopt a competency-based curriculum starting in 2008. While it was not until 2013 that the undergraduate programs followed the graduate programs lead regarding the incorporation of competencies as certification criteria, some undergraduate programs took the initiative to begin developing a list of com-

petency domains and measurement of outcomes in their AUPHA-certification reports.

Methods

We employed content analysis on 42 of the 44 undergraduate certification review reports submitted to certification or re-certification review during the years 2011-2013 and 2015-2016. The only condition we held regarding selection criteria of programs was that programs reviewed had received certification or re-certification during 2011 through 2013 and 2015 through 2016 (the reports were not available for 2014). Two reports were excluded because of this criterion as they withdrew from the review process after submitting their program report.

We chose the years 2011 through 2016 as each certified program entered the AUPHA recertification process every six years, and we wanted to capture one cycle of review for all programs interested in AUPHA re-certification. This period of 2011-2016 is important because it covers the time before (2011-2013) and after (2015-2016) AUPHA criteria changed to require programs to identify and assess competencies in the description of their program structure (mission, goals, objectives, and outcomes) and curriculum. This time framework captures the extent to which undergraduate programs under AUPHA review were including competencies into their program and curriculum before and after the criteria changed in 2013.

An important distinction to note relates to programs that apply for their initial AUPHA certification. Initial AUPHA program certification covers a three-year cycle, in contrast to six-year cycle for re-certification. After receiving initial certification, newly certified programs are reviewed again in three years for re-certification. In this study, there were two programs that received initial certification and thus were in this timeframe twice. Both reports remained in the analysis as the study was based upon reports, not specific programs. AUPHA granted us access to these reports with the understanding that all program identities would remain confidential.

For the content analysis, we searched and counted the term "competency," "competencies," or "competence" throughout each report and then read the self-studies to find areas within the reports that would have addressed program competencies (e.g., program structure, curriculum, and assessment) but did not employ the term. As AUPHA certification criteria required programs to incorporate competencies into their program beginning in 2013, we read each program's curriculum and assessment sections for the 2011 and 2012 reports to identify if programs were actually discussing competencies, but using different terms to address the observable and measurable knowledge and skills their students were acquiring from program actions.

Further, we read all reports to identify if competency models had been identified (e.g., ACHE, NCHL, etc.). Last, we read the assessment section in each report to identify which competency evaluation tools were used to assess student achievement and mastery.

Results

List of selected program competencies with desired outcomes stated

The following findings relate to the use of the term "competency" and domains identified by program. For 2011 and 2012, a total of 16 program review reports were submitted and were certified or re-certified. Only one of the programs used the term "competency." Six other programs used the term "goals," which corresponded with domains used for competency discussion. As would be expected, all 26 of 2012 reports included the term "competency" with the domains of Business Skills, Communication, Professionalism, and Knowledge of the Healthcare Environment being most commonly noted (see Table 1).

Table 1

Undergraduate domains identified in program review reports submitted, 2011-2012 (n=16), and 2013-2016 (n=26)

Domains	2011 & 2012 (n)	2013, 2014, & 2016 (n)
Business Skills	63% (10)	81% (21)
Communication	63% (10)	77% (20)
Professionalism	38% (10)	77% (20)
Knowledge of the Healthcare Environment	44% (7)	73% (19)
Relationship Management	19% (3)	46% (12)
Leadership	38% (6)	42% (11)
Teamwork	13% (2)	35% (9)

Also, more programs began to emphasize interpersonal competencies in the post-2012 reports as more programs included the domains of relationship management and teamwork. In the 2011 and 2012 reports, three programs included relationship management, while twelve program reports included it in the 2013, 2015, and 2016 reports. Similarly for teamwork, in 2011-2012, only two programs included the domain. In the post-2013, 2015 and 2016 reports, the number of programs that included this teamwork domain increased to nine. For the 2011 and 2012 reports, relationship management and teamwork were listed by 19% and 13% of programs, respectively.

Identification of a conceptual framework or model use to select program competencies

Some program reports identified the conceptual frameworks upon which they had based their competency selection. For the 2011 and 2012 reports, just one listed ACHE's model while five noted this in the 2013, 2015, and 2016 reports. Moreover, two additional reports post-2012 referred to both ACHE and HLA as influential in their design.

Description of how the program measured its outcomes

The following findings relate to various assessment tools used by programs as discussed in their self-study reports. All programs indicated that they relied upon Internship preceptor evaluations, alumni surveys, and senior exit surveys as the top-three most commonly employed tools for evaluating student achievement or mastery of goals (pre-2013) or competencies (post-2012). One program (post-2012) included an assessment by a college assessment committee and another (also post-2012) identified university program review (Table 2).

Table 2

Undergraduate assessment tools identified to measure student mastery, 2011-2012 (*n*=16), and 2013-2016 (*n*=26)

Assessment tools	2011 & 2012	2013, 2014, & 2015
Preceptor Evaluations	38% (6)	77% (20)
Alumni Surveys	50% (8)	46% (12)
Senior Exit Surverys	56% (9)	42% (11)
Comprehensive Exit Exam	13% (2)	31% (8)
Other (College or University Review)	NR	8% (2)

Prior to 2013, two program reports reported the capstone course as an assessment tool while one reported this post-2012. Regarding the post-2012 reports, three programs listed student surveys, but did not identify if the respondents were only seniors or students from all class levels, and one program report included that a department suggestion box was an evaluation method.

Implications and conclusions

Prior to AUPHA's requirement that programs include incorporation of competencies as certification criteria, some undergraduate programs took the initiative to identify goals and assess them. One program pre-2013 included the term

"competency" and this program also had a Master's of Health Administration program in its department. It may be speculated that the presence of a graduate program spurred earlier adoption of the term. Nonetheless, whether the term "goal" or "competency" was included, there was clear activity of assessment to determine student mastery.

To elaborate, a competency may be students' mastering the creation of a marketing plan that would be noted under the domain "Business Skills and Knowledge." This domain was discussed in 10 of the 16 programs, even though only 1 used the term "competency" associated with (to follow along with the example) student mastery of creating a marketing plan; the other 9 programs used other terms (e.g., "goal") to measure student achievement via creating a marketing plan. Thus, even though the word "competency" had not yet entered the lexicon for program review reports, program activities showed evidence that their actions were moving toward outcome-based learning.

Nine programs (56% of the reports filed pre-2013), listed senior exit surveys as the most commonly employed method to evaluate mastery and eight of the programs included alumni surveys. In all, 20 programs (77% of the reported filed post-2012) listed preceptor evaluations as the most commonly used measure, followed by alumni surveys that were listed by 12 reports. The shift from self-assessment only to a mixture of both external evaluation and self-assessment indicates movement toward multi-perspectives for measurement of student mastery. Moreover, two reports (post-2012) included assessment activities (the university program review and college assessment committee) that were internal to the college or university but external to the program. This finding may be indicative of an emerging trend of an evaluation framework that includes both external evaluation as well as self-reporting for assessment activities.

A significant implication from this study is the apparent need for assessment training and the sharing of assessment tools used among programs. For example, there was not a single assessment tool that was identified in all 26 post-2012 reports. Moreover, the most common tool employed (preceptor evaluations) was reported by 20 programs (77%). Given that all undergraduate programs require an internship experience of at least 120 hours, and each intern has a preceptor, it seems that the implementation of a preceptor evaluation may pose fewer constraints than other potential methods. Moreover, the evaluation by an outside professional in the healthcare industry may offer discerning advice regarding student performance. Perhaps training conducted by program and internship directors that employ this assessment tool can be provided to program and internship directors seeking help with developing preceptor assessment tools. Such training may help programs with survey

design and analysis that can provide useful preceptor feedback for program improvement.

Also, eight (pre-2013) program reports indicated that programs relied on alumni surveys for assessment. Post-2012 reports did show some growth in the use of this evaluation tool as 12 reports showed the programs had employed this method. Alumni feedback may be a valuable addition for programs as faculty members assess their curriculum. For example, once a student has graduated and is working in the industry, their opinions regarding whether or not they were prepared for effective teamwork, for example, may be insightful for programs as they decide how to implement team-based work into the curriculum. And, as introduced earlier, training on how programs located or kept up with their alumni (especially via social media) and what questions they asked in the surveys may be helpful for other AUPHA programs as they could exchange ideas and hone their assessment techniques.

Senior or exit surveys were listed in nine of the pre-2013 program reports and two more program reports listed them in post-2012 reports. Employing this tool could have insightful feedback for programs, particularly if coupled with alumni surveys to measure what seniors still in the program thought and what their counterparts who are alumni have actually experienced. Training related to developing appropriate questions and ways to encourage student response rates may be helpful for other AUPHA programs as they develop and improve their assessment techniques.

Review of program reports indicated an increase in programs implementing a comprehensive exit exam (from two pre-2013 to eight post-2012). This tool allows for comparison of student performance on a year-to-year basis and could potentially indicate if changes made to the curriculum and student experiences had positive impact on student performance. Moreover, in June 2017, the AUPHA Undergraduate Program Committee recommended to the AUPHA Board of Directors to strategize regarding an AUPHA-directed comprehensive exit exam so that programs may have a benchmark to compare student and program performance. Currently, AUPHA staff is moving forward with this recommendation (Glandon, 2017).

Finally, this study suggests the need for a more robust approach to training on assessment. Given AUPHA's mission to foster excellence and innovation in health management, policy education, and scholarship (AUPHA, n.d.), it follows that AUPHA activities such as annual meetings, the AUPHA Undergraduate Workshop (held every two years), Teaching Tips and Tools articles published in the *Journal of Health Administration Education*, and discussion board conversations on the AUPHA website network offer relevant and useful venues to exchange ideas related to suitable assessment methods and tools

to evaluate student and program performance. Finally, collaboration among AUPHA members regarding competency development and assessment may create a more structured approach to student and program evaluation.

Limitations

A few limitations for this study should be noted. First, the missing data for 2014 did not allow us to include program review report analysis. Thus, the findings do not represent all programs reviewed in the AUPHA six-year review cycle. Second, we limited our study to the submitted review reports and did not compare their submitted reports with the corresponding review of the reports submitted by the AUPHA panel review teams that assessed the programs. An examination of programs' ratings by panel review teams may be an important arena for future study as this type of review can provide programs with specific strategies related to aligning competencies and assessing them across the curriculum to promote systematic feedback for improving programs.

References

ACHE. (2016). ACHE competency assess tool. Retrieved from www.ache.org.

AUPHA (N.D.). Who we are. Retrieved from www.aupha.org.

AUPHA. (2015). Criteria for AUPHA undergraduate program certification. Retrieved from www.aupha.org.

Casciani, S. (2012). The development of a set of program competencies for an undergraduate healthcare administration program. *Journal of Health Administration Education, 29*(2), 163-171.

Glandon, G. (2017). Telephone interview, December 12.

Greiner, A. & Knebel, E.(2003). Health professions education: A bridge to quality. Washington, DC: National Academies Press.

Griffiths, J. (2007). Improving preparation for senior management in healthcare. *Journal of Health Administration Education, 24*(1), 11-32.

Jones, E., & Voorhees, R. (2002). *Defining and assessing learning: Exploring competency-based initiatives, NCES 2002-159. Report for the council of national postsecondary education cooperative working group on com petency-based initiatives in postsecondary education*. Retrieved from https://files.eric.ed.gov/fulltext/ED473245.pdf.

Leatt, P., Grady, R., Begun, J.W., Hernandez, R., Hilberman, D., Leach, D., ... Sinioris, M.E.(2004). The final report of the blue ribbon task force on accreditation. *Journal of Health Administration Education, 21*(2), 121-166.

Stefl, M. E., & Bontempo, C. A. (2008). Common competencies for all healthcare managers: the healthcare leadership alliance model. *Journal of Healthcare Management, 53*(6), 360-374.

Westera, W. (2001). Competencies in education: A confusion of Tongues. *Journal of Curriculum Studies, 33*(1), 75-88.

Developing Professionalism in Healthcare Management Programs: An Examination of Accreditation Outcomes

Julie Agris, PhD, JD, LLM, Eric Brichto, JD, Michael Meacham, JD, MPH, & Chris Louis, PhD, MHA

Abstract

Professionalism and Ethics is a domain of multiple competencies required of healthcare managers and therefore, healthcare management programs. The benefits of behaving as a professional and ethical healthcare manager are numerous. Healthcare delivered in a professional and ethical manner is likely to be higher quality and result in greater patient satisfaction. Simultaneously, professional and ethical behavior builds recognition of healthcare management as a distinct "profession." Currently, the Commission on Accreditation of Healthcare Management Education (CAHME) program addresses competency attainment related to Professionalism and Ethics using a number of non-systematic approaches. While flexibility is a certain benefit of the CAHME accreditation process, some standardization in the Professionalism and Ethics domain would serve the profession well. Without an agreed upon definition or set of minimum standards for Professionalism and Ethics, it is difficult to uniformly assess competency attainment in this critical area. A standardized definition or guideline is an essential starting point in our effort to meaningfully contribute to the attainment of Professionalism and Ethics competencies. This study illustrates the way in which programs are meeting accreditation requirements with varied approaches and makes recommendations to move the field toward a deeper understanding competencies within the Professionalism and Ethics domain.

Please address correspondence to: Chris Louis, PhD, MHA, Boston University, Health Law, Policy & Management, 715 Albany Street, Boston, MA 02118
Phone: (617) 414-1353; Email: louisc@bu.edu

Introduction

Cultivating professional and ethical graduates remains an ongoing challenge for healthcare management educators. In the era of competency-based education, integrating Professionalism and Ethics into the very fabric that binds graduate healthcare management programs is the primary vehicle for transforming student behavior and has been the subject of increasing emphasis. However, these distinct but interrelated concepts suffer from a lack of clarity in their definitions and applications within the context of healthcare management (Wu et al., 2015), which has been tied to a multitude of non-systematic educational practices. A recent study by Meacham, Thompson, and Hall (2017) found that programs address issues of professionalism in many different ways including the development of courses, dedicated effort to preparing résumés and cover letters, seminars, and practice-based internships. Similarly, topics related to ethics and ethical decision making have been integrated into healthcare management programs primarily through the use of case studies and practicums.

Prior research on competency-based education targeting the development of professionalism in healthcare management is scarce. The preponderance of prior literature on professionalism describes current applications of professional development (Meacham, 2015), competency model development (Rissi, 2015), and the importance of competency attainment for graduate students (Stefl, 2008). Likewise, there is a paucity of extant literature on ethics in healthcare management education. In one of the only recent papers published on this topic, Manglesdorf (2014) found that relationships between competencies and growth in ethical decision making exist.

The Commission on Accreditation of Healthcare Management Education (CAHME) interjected itself into this conversation about Professionalism and Ethics with its 2013 accreditation standards (CAHME, 2014). These standards placed a new emphasis on the attainment of competencies among master's-level students and were centered on the following four domains: (a) III.A.3 the program curriculum will develop students' competencies in communications and interpersonal effectiveness; (b) III.A.4 the program curriculum will develop students' competencies in critical thinking, analysis, and problem solving; (c) III.A.5 the program curriculum will develop students' competencies in management and leadership; and (d) III.A.6 the program curriculum will develop students' competencies in Professionalism and Ethics (CAHME, 2014). To assess these competencies, programs seeking CAHME accreditation complete a Self Study document consisting of a series of questions about the program that is reviewed during the accreditation process.

In this study, we explore the fourth competency domain (Criterion III.A.6) which addresses the development of students' competencies in Professional-

ism and Ethics. We use qualitative evidence from CAHME Self Study documents to better understand whether and how CAHME-accredited programs are achieving compliance with this criterion. We find that very few programs have had findings in this domain since the implementation of the 2013 accreditation standards.

Methods

Data

Our dataset was derived from CAHME Self Study documents submitted between January 2013 and Spring 2017. The data was drawn from Self Study submissions by 62 CAHME-accredited programs, which represents 100% of programs required to submit information during this time period. It also reflects 82% of the total CAHME-accredited programs. The data was pulled from hardcopy records and electronic files housed in CAHME's online accreditation management system, eAccreditation.

Data analysis

The analytic process began by examining program responses to Criterion III.A.6: *The program curriculum will develop students' competencies in Professionalism and Ethics*. Programs responded to Criterion III.A.6 by providing information on the two sub-criteria: III.A.3-6.1, *Describe how the competencies identified in III.A.3-6 are addressed by the program's set of competencies*; and Criterion III.A.3-6.2, *Explain where these competencies are developed in the required curriculum and program activities* (CAHME, 2014). Open coding, whereby "the interpretive process by which data are broken down analytically," (Strauss & Corbin, 1990, p.423) was initially performed independently by two of the study's co-authors. In the rare instances where a program chose to reference their curriculum map or chart, that file was reviewed in order to code the program data. Twelve of the same CAHME programs were coded by both coders and a discussion followed to establish a similar set of first-order codes that would be applied to the remaining 50 programs. To ensure validity with the coding process, an independent coder analyzed the same 12 initial CAHME programs and similar results were found. Two additional meetings of the two coders were held to discuss the learnings from the coding of the remaining 50 programs and to understand whether new ideas were found. Each coder prepared an analytic memorandum that began with the 12 jointly-coded programs and was finalized when all program data was coded. We also coded for the number of programs that "partially met" or "did not meet" the competencies in III.3.A.6, and for program and site visit characteristics such as Self Study year, accreditation period, type of degree program, and geographic region.

In the second phase of our analysis, we used across-case analysis (Ayers et al., 2003) to determine whether certain themes emerged across all data as a result of the initial open coding exercise. This process involved discussion between both coders and was supplemented by iterative use of the data and literature on each topic we identified. We also returned to the data to identify specific quotations that exemplified each theme and the conceptual story they told.

Results

Table 1 provides program and site visit characteristics on the CAHME programs completing a Self Study from spring 2013 to spring 2017. A total of 62 programs completed a Self Study during this period. In all, 27% of CAHME programs had a site visit during 2016, which is more than any other year. A total of 71% of programs completing a Self Study were approved for a seven-year reaccreditation, while only 27% achieved a three-year initial accreditation or reaccreditation. One program was not accredited upon inspection. Nearly two thirds (63%) were Master of Health Administration (MHA) programs, while Master of Business Administration (MBA) programs represented 18% of the sample. Three (5%) Master of Public Health (MPH) programs were accredited during this time, as were four (6%) dual-degree programs. Programs also varied slightly by geographic region. Nearly a quarter (24%) were from the Southeast region, whereas the Midwest (21%) and Northeast (18%) also had a number of programs submit a Self Study during this time period.

Table 1

Program and site visit characteristics of CAHME programs completing Self Study (*n*=62)

Program and site visit characteristics	# of progams	% of programs
Self Study year		
2013	14	23%
2014	13	21%
2015	13	21%
2016	13	21%
2017 (spring only)	5	8%
Accreditation period		
3-year (initial or reaccreditation)	17	27%
7-year (reaccreditation only)	44	71%
Program not accredited	1	2%

Table 1, *cont.*

Type of degree program		
MHA	39	63%
MBA	11	18%
MPH	3	5%
MS	3	5%
MBA/MHA	2	3%
MHA/MPH	2	3%
MHSA	1	2%
MPA	1	2%
Geographic region[1]		
Southeast	15	24%
Midwest	13	21%
Northeast	11	18%
Southwest	10	16%
West	3	5%
Other	3	5%

[1]Geographic Regions: (1) Northeast–Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Washington, D. C.; (2) Southeast–Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; (3) Midwest–Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; (4) Southwest– Arizona New Mexico Oklahoma Texas; (5) West– Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming; (6) Other– Canada, Puerto Rico, Saint Thomas. (Note that CAHME does not recognize any formal regional structure, so these regions were based primarily on comparable size and geographic location.)

Our findings indicate that since programs began having site visits under the 2013 Criteria for Accreditation, only three programs have received criterion-related findings on III.A.6. In the first case, a determination was made by the site visit team – and the program acknowledged – that the program's efforts toward developing student competencies in Professionalism and Ethics were drastically underdeveloped in comparison to the other three competency domains (III.A.3, III.A.4, and III.A.5). In the second case, the program in question was found to have inadequate coverage of ethics. Specifically, the program was required to "ensure adequate coverage of ethics, to include ethi-

cal frameworks for decision-making, in the curriculum" (CAHME Records). The third program did not provide a sufficient level of detail able to discern if and how standards related to Professionalism and Ethics were covered in their curriculum. In the sections that follow, we present the thematic findings from our analysis.

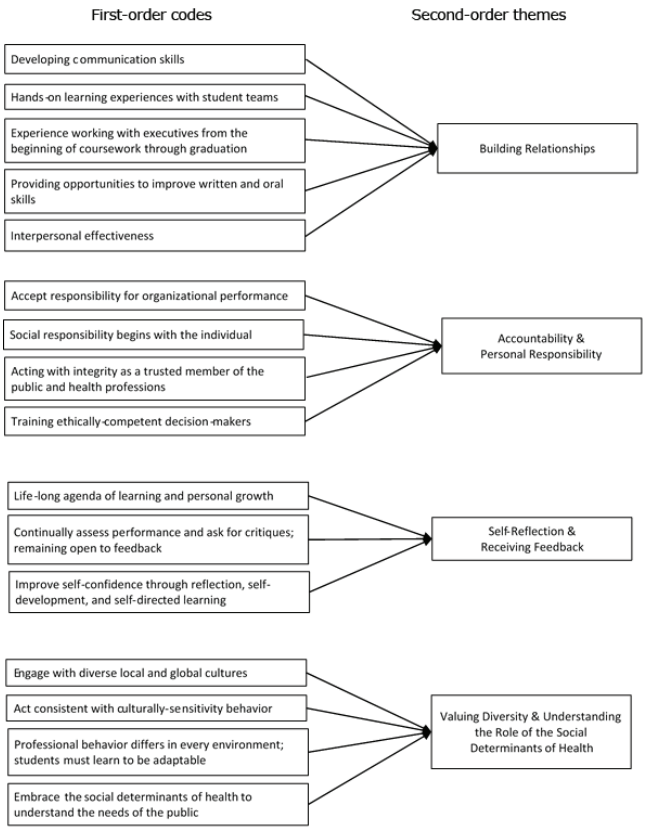
Emergent themes

Figure 1 depicts the first-order codes and second-order themes relating to Professionalism and Ethics that emerged from our analysis of the CAHME program data. Sixteen first-order codes emerged from our open-coding process. Our iterative analysis process of these codes resulted in four second-order themes: (a) building relationships; (b) accountability and personal responsibility; (c) self-reflection and receiving feedback; and (d) valuing diversity and understanding the role of the social determinants of health. The first-order codes represented by the building relationships theme each relate to areas CAHME programs are focusing on in the context of helping students improve their relational capacities (i.e., developing communication skills; hands-on learning experiences with student teams; experience working with executives from the beginning of coursework through graduation; providing opportunities to improve written and oral skills; and interpersonal effectiveness). The second theme, accountability and personal responsibility, corresponds primarily to how CAHME programs are instilling ownership and a broader sense of management responsibility for society in their students and is reflected by: accept responsibility for organizational performance; social responsibility begins with the individual; acting with integrity as a trusted member of the public and health professions; and training ethically-competent decision-makers. The three first-order codes represented in the self-reflection and receiving feedback theme each relate to how CAHME programs are embedding opportunities for students think about their growth and embrace observations from others (i.e., life-long agenda of learning and personal growth; continually assess performance and ask for critiques; remaining open to feedback; and improve self-confidence through reflection, self-development, and self-directed learning). A final set of first-order codes relate to embracing different cultures and understanding community needs and are represented by the valuing diversity and understanding the role of the social determinants of health theme (i.e., engage with diverse local and global cultures; act consistent with culturally-sensitive behavior; professional behavior differs in every environment; students must learn to be adaptable; and embrace the social determinants of health to understand the needs of the public).

In the section that follows, we further analyze these data by the four themes and provide quotations and additional context around what CAHME programs are doing.

Figure 1

Emergent themes: building relationships, accountability & personal responsibility, self-reflection & receiving feedback, and valuing diversity and understanding the role of the social determinants of health



Professionalism and Ethics content coverage in CAHME-accredited Healthcare Management programs

Building relationships

The most commonly referenced theme found across programs in their effort to build competency in Professionalism and Ethics is to improve students' capacity for establishing and building long-lasting relationships. Providing opportunities for students to cultivate relationships with individuals at various levels of an organization (as well as externally) were frequently considered as CAHME programs developed their curricula. Several programs began by using student-to-student interactions (e.g., team projects and participation in student-led organizations) as a way to foster relationships. These fundamental experiences were then enhanced through formal mentorship programs, and other opportunities to engage with program faculty and external community leaders. For example, one program exemplified this by reporting that "students have the option to participate in a formal mentorship program in which students are paired with healthcare executives from the local healthcare community. During this one-year engagement, students are exposed to the life of a healthcare professional and have the opportunity to develop their own competency in professionalism." This process augments their human resources course that spends a number of sessions led by a former healthcare executive focused specifically on establishing and developing relationships.

CAHME programs emphasized how communication and collaboration are important aspects of how healthcare leaders effectively build relationships. Programs provided a variety of perspectives on how they embedded these beliefs into their curricula, with specific school-based (not externally-facing) opportunities for students to practice relationship building. One program highlighted that "communication skills are key elements in the development and expression of professionalism..." Many programs articulated how they implemented specific curriculum elements to develop students' written and oral communication skills. For example, one program stated that, "Starting in the first program module, students are offered guidance on their written and oral communication...and are expected to demonstrate both oral and written communication skills as part of their integrated project." Another program used case competitions as a vehicle for the development of these competencies and stated that they "strongly encourage students to participate in case competitions." This experiential learning opportunity allows students to develop a consulting-style presentation and sharpen their persuasive communication skills while presenting to a panel of senior healthcare executives. Similarly, programs used case studies in various courses to provide students

with real-world examples as to how healthcare organizations dealt with difficult situations, and used their communication and decision-making skills to build relationships and overcome adversity.

Programs frequently viewed the development of collaboration abilities as a process that began at the outset of coursework. These programs implemented core courses that established frameworks for collaboration and provided basic team activities which then broadened into more experiential learning to facilitate growth and competency attainment in this area. One program clearly articulated the desired result of this process by saying that students are "expected to be able to collaborate and develop positive relationships with peers, subordinates, and superiors." Another program described their desired outcome, reporting that by the end of their program, they expect students to be able to "respond and engage collaboratively with diverse local and global cultures." These examples speak directly to the importance many programs placed on working collaboratively across diverse groups of healthcare workers with various backgrounds and skill sets, and how they provided opportunities for students to gain competence in these areas.

Accountability & personal responsibility

The development of competency in accountability and personal responsibility is a common theme among programs addressing Professionalism and Ethics. In response to programmatic assessments that identified deficits in healthcare management professionals' willingness to be accountable for his or her actions, several programs have implemented specific elements of the curricula to bolster this capability. More specifically, these programs aim to facilitate students' ability to take responsibility for their own actions, regardless of whether the action is a success or failure. For example, one program built in development opportunities for accountability in their second-year group project, while another stated that "accountability...refers to setting performance standards for oneself and others, and monitoring performance and addressing problems as they occur."

Other programs have taken this a step further and have begun to instill a culture of accountability for organizational performance and social responsibility in their students. One program exemplified this by reporting that their program competency for accountability "addresses the need for health services administrators to act with integrity, demonstrate an achievement orientation, and accept responsibility/accountability for organizational performance." This is done through group projects and field-based learning opportunities such as internships. Moreover, another program reported how they "influence ethical practices; apply ethical concepts/principles, including...social responsibility and

disclosure; and analyze and apply application of moral and ethical principles relating to healthcare." They stated that they built in individual and group case-based learning activities into a number of courses. Collectively, these examples show a multilevel focus employed by several CAHME programs that can help develop a broader perspective for students in the areas of personal and social responsibility and accountability.

Self-reflection & receiving feedback

Analysis of the Self Study data revealed the common theme of self-reflection, suggesting that students were frequently engaged in self-assessment and reflection on their progress. Programs expected students to develop a better understanding of themselves, including their strengths and weaknesses, in order to identify areas for improvement and growth. Some programs incorporated course assignments that required students to reflect on their semester working in teams and individually. For example, one program described how one of their foundational courses "includes reflective assignments in which students apply class concepts to consider their own management strengths and opportunities for continued development." Another program described how they felt the self-reflection process at their institution would lead to a "lifelong agenda of learning and personal growth." CAHME programs frequently stated that self-reflection was part of the process of student self-discovery, a critical part of understanding the type of leader one currently is and has the potential to become.

Our data also revealed that part of the self-reflection process involved receiving feedback. Some programs have built in assignments and assessment methods to understand students' openness to feedback. For example, some programs required formal mid-point and post-internship performance evaluations from preceptors and the program's internship supervisor. This process allowed for the student to learn what their development opportunities were from an applied setting and how they could improve on those weaknesses. This process naturally coincided with goal setting, which many programs implemented on a student, cohort, and program level. Programs commonly expected students to set and refine personal goals. One program summarized the combination of these activities into their introductory professional development seminar: "From a professional development perspective, we take an improvement-oriented approach that encourages self-reflection and goal-setting." Many programs believed that these activities were the cornerstone of student self-actualization and growing self-confidence. In summary, one program may have said it best: "Professionalism and ethical decision-making are both dependent upon the ability to think critically and to engage in self-

reflection about one's own actions as well as the shared values and ethics which underlie health service delivery."

Valuing diversity & understanding the role of the social determinants of health

Our analysis revealed that the importance of diversity and understanding the impacts of social determinants are integral parts of the Professionalism and Ethics competency. We reviewed data suggesting that a number of programs had incorporated topics into their curricula such as culturally-sensitive behavior (by managers) and understanding culturally-diverse populations. Moreover, one program described their curriculum by reporting that they value "the role of socioeconomic, environmental, cultural, and other population-level determinants of health on the health status and health care of individuals and populations." Building on this focus area, this program's leadership course aims to "assess the health status of populations by using publicly-available data (e.g., public health surveillance data, vital statistics, registries, surveys, electronic health records, and health plan claims data)."

The data suggests that that this dimension of Professionalism and Ethics requires sensitivity of students to sense and know their environment in order to understand its needs. Specifically, this reflects an ability to adapt to what is "professionally-appropriate" depending on the region, setting (e.g., type of organization), and organizational culture. For example, while programs sought to teach students how to dress, act, and work collaboratively, they instilled in them that to be successful in a new organizational role, they must adapt to the organizational and cultural norms that mirror the environment. A student's ability to read this environment quickly and correctly will likely play a role in this individual's career path and growth.

These themes suggest that many graduate programs are thinking deeply about competencies that contribute to the development of Professionalism and Ethics, albeit in a variety of ways. These are also the central themes that could create the foundation for a broader conversation among healthcare management educators that build consensus around the optimal competencies needed in developing students and meeting the aims inherent in the Professionalism and Ethics domain. Moreover, this evidence-base provides a rational place to start thinking about a definition or minimum standard for the 'Professionalism and Ethics' domain.

Discussion

The U.S. healthcare system is in the midst of rapid change and uncertainty, making the need for leaders who act professionally and with high ethical standards paramount. Inherent in this need is a foundational assumption that

managing healthcare organizations in a professional and ethical manner will contribute to more satisfying and higher quality patient care, protect healthcare organizations from fraud, and advance community and societal needs. Our findings suggest that healthcare management programs acknowledge this need and the importance of facilitating competence in Professionalism and Ethics. However, achieving the competencies within this domain with any level of uniformity continues to present challenges across the healthcare management field.

Based on this lack of uniformity in curriculum structure, course offerings, and program organization, heightened scrutiny of competency attainment from accrediting bodies appears imminent. This includes competencies focused on the Professionalism and Ethics domain. As assessment methods for competency attainment in this area continue to evolve, healthcare management educators should consider leading a movement where competencies in Professionalism and Ethics are integrated into more elements of each programs' curricula. Our data supports this movement given that very few programs are able to offer a course that comprehensively addresses both Professionalism and Ethics. To better understand how such a movement can most effectively be approached, healthcare management educators must understand the perspectives of key industry stakeholders on Professionalism and Ethics.

Healthcare management education includes the worlds of ACHE's recommended knowledge areas, CAHME's competency domains, and program-specific competency models. These program-specific competency models are often derived from one of the nationally-recognized models such as the National Center for Health Leadership (NCHL), or the Healthcare Leadership Alliance (HLA) model. The guidance from ACHE, CAHME, NCHL, and HLA is synergistic, but is not entirely synchronized. Therefore, moving the healthcare management education field toward a more tangible understanding of the meaning of Professionalism and Ethics would provide extraordinarily helpful guidance for programs. In our current state, terms such as "professionalism," "professional development," "professional identity formation," "ethical behavior," and "ethics" are often used interchangeably when attempting to define and analyze the Professionalism and Ethics domain, although they have different conceptual and practical meanings. To further complicate matters, each of these important terms has various definitions between and among health professions. Thus, it is not a simple solution to look to our clinical colleagues for guidance in solving this conundrum.

Various disciplines in the health professions such as medicine have devoted significant time, thought. and attention to the development of a definition of "professionalism." For example, The Charter on Professionalism for Health

Care Organizations ("The Charter") represents an aspirational outline of institutional behaviors that would be beneficial for patients and employees. The Charter outlines four critical domains including patient partnerships, organizational culture, community partnerships, and operations and business practices which should be addressed to effectively care for patients, maintain a healthy workforce, and improve the health of populations (Egener et al., 2017). While The Charter provides beneficial guidance for the continuing discussion of a uniform definition of "professionalism," there is no agreed-upon definition, learning objectives, or optimal assessment methods among thought leaders in this area.

When examining CAHME-accredited programs' Self Study data, it has become evident that, while a definition of professionalism for healthcare managers would incorporate similar elements of professionalism in medicine (such as respect for others or being truthful), our healthcare management definition of professionalism would be distinct. It not only has to incorporate all of the elements of a healthcare manager, but it also must incorporate the understanding of professionalism as understood by the health professionals with whom we serve. In other words, the fact that a healthcare manager does not necessarily treat patients directly does not preclude a healthcare manager from being competent in their ability to view and understand professionalism through the lens of a healthcare provider to ensure our ability to support them in our mutual goals of providing high-quality care, engaging patients, having fiscal responsibility, and improving the health of specific at-risk populations and communities.

Despite the lack of clear definition of Professionalism and Ethics in healthcare management education, graduate programs are currently required not only to facilitate competency attainment in this domain, but to demonstrate the manner in which this goal is accomplished. Although programs expend significant effort to comply with this mandate, the way in which programs achieve this requirement varies greatly and attainment appears to be quite subjective. However, CAHME has recently updated its accreditation standards and it will be looking more closely – and possibly differently – at this domain in future accreditation cycles.

To assist graduate health management education programs in their pursuit of successfully facilitating student competency attainment in the Professionalism and Ethics domain, it would be helpful to be able to define the respective competencies more clearly. At the inception of this domain, CAHME included Professionalism and Ethics references in accreditation requirements, but left the specific definition to the health management education field to establish. After grappling with this challenge, the field then asked CAHME to provide a

more specific definition to facilitate implementation of the requirement. With this request, CAHME identified six competencies as examples to demonstrate competency attainment in the 'Professionalism and Ethics' domain. These example competencies are helpful in clarifying some expectations, however, the healthcare management education field would also benefit from a standardized definition of these competencies (CAHME Committee Member, Interview 2017).

To establish a definition of the Professionalism and Ethics domain and the competencies that exist within, we believe that seeking collaborative guidance from ACHE, CAHME, and NCHL is an important step. They have thought extensively about these issues. Specifically, ACHE has implemented 10 core knowledge areas that are extensively covered in the ACHE Board of Governors Examination (BOG). The knowledge areas include: Healthcare (18%), Management (15%), Human Resources (11%), Business (10%), Finance (10%), Quality and Performance Improvement (10%), Professionalism and Ethics (8%), Laws and Regulations (8%), Governance and Organizational Structure (5%), and Healthcare Technology and Information Management (5%). ACHE also distinctly identifies Professionalism and Ethics as an area of importance for competency development in healthcare managers and leaders. In its description of 'Professionalism and Ethics' the ACHE defines this as:

> The area focuses on the development, monitoring and maintenance of procedures to ensure the needs of professional staff are met. Ethics includes identifying, monitoring and disseminating codes of professional conduct, understanding the implications of ethical decisions, providing procedures to monitor standards of behavior within the organization, and determining, maintaining and monitoring accountability procedures. (Reference Manual for the American College of Healthcare Executives, Board of Governors Examination in Healthcare Management)

This definition is similar to – but not a carbon copy of – CAHME's Professionalism and Ethics suggestions. CAHME identifies four overarching competency domains and one knowledge area that must be incorporated into each graduate program's competency model and curriculum. The knowledge area, not surprisingly, is identified by CAHME as Healthcare system and Healthcare Management knowledge. The four competency domains are as follows: (1) Communication and Interpersonal Effectiveness; (2) Critical Thinking, Analysis and Problem Solving; (3) Management and Leadership; and (4) Professionalism and Ethics. CAHME provides further guidance on the definition of Professionalism and Ethics in its Fall 2013 and Fall 2017 Criteria Program Review Worksheet:

> Professionalism and Ethics: should include competencies that relate to upholding high professional and ethical standards. The following are examples of the kinds of competencies that may fall into this domain: Accountability, Acting with Integrity, Achievement Orientation, Ethical decision-making, Professionalism, (Life-long learning) and Self-Confidence. (CAHME, 2013 Criteria Program Review Worksheet; CAHME, 2017 Criteria Program Review Worksheet [adds "Life-long learning])

Acknowledging the similar aims between the ACHE and CAHME descriptions of Professionalism and Ethics and the potential guidance provided by the NCHL competency model, provides a good place to start in our attempt to collectively define the Professionalism and Ethics competency. Another important step should include a discussion as to whether Professionalism and Ethics should remain as a single domain. Arguably, the two are conceptually distinct and should be learned and assessed separately.

Once a definition or minimum standard has been established, assessment methods will follow. As our data suggests, performance on team-based case learning simulations, field-based learning opportunities, and reflective writing assignments are all examples of educational opportunities that could be the object of competency attainment. However, assessment methods with an objective, quantitative component may also be needed in order to provide a benchmark that does not currently exist in any uniform manner. Many traditional assessment methods in the Professionalism and Ethics competency areas are subjective, and thus more difficult to grade. The addition of a more objective assessment method could contribute to the holistic review of everything a program is doing to promote competency attainment in Professionalism and Ethics. Further, the addition of a more tangible assessment method will give CAHME something more concrete to evaluate in its review of competency attainment. Future research is needed to determine whether and which metrics and assessment methods would best serve discerning competency attainment and the profession as a whole given the diverse missions and goals of healthcare management education programs.

Limitations

A few study limitations should be noted. First, the study data available for analysis is self-reported and small in number. Responses primarily reflect the views of program directors and faculty of individual graduate healthcare management programs. However, our sample consists of all healthcare management programs submitting Self Study materials during the study time period. Second, specific comments made by the site visit team during the program's

site visit were not available for analysis. We also did not have access to the program's verbatim comments during the site visit further describing their Self Study document content and explaining their submission information. These data points would have been helpful when analyzing the accreditation process of a graduate program that did not have enough Self Study narrative data to achieve a "met" on Criterion III.A.6, but information collected during the site visit was sufficient and significant enough to satisfy the requirements of site visitors.

Conclusion

Gaining competence in Professionalism and Ethics remains a central focus for the healthcare management field. Improvements in this area will enhance the stature of healthcare management as a profession. Moreover, professional and ethical healthcare managers are more likely to support a culture where the delivery of higher quality, more satisfying care can exist for patients. Without agreement on a definition or minimum standard for Professionalism and Ethics, it will be difficult to advance the field. Once a definition or minimum standard is in place, healthcare management educators can more effectively and synergistically identify key learning objectives, link those learning objectives to competencies in courses and other activities, engage healthcare leaders in applying the new standards, and more objectively prepare students to lead healthcare organizations.

References

ACHE (2017, December 8). American College of Healthcare Executives Board of Governors Examination Reference Manual. Retrieved from https://www.ache.org/mbership/credentialing/EXAM/ReferenceManual/BOGExamReferenceManual.pdf

Ayers, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research, 13*(6), 871-883.

CAHME (2017, November 21). CAHME Eligibility Requirements. Retrieved from: http://cahme.net/files/criteria_for_accreditation.pdf

CAHME (2017, December 8). Program Directors Information. Retrieved from https://cahme.org/healthcare-management-education-accreditation/university-programs/

Egener, B. E., Mason, D. J., McDonald, W. J., Okun, S., Gaines, M. E., Fleming, D. A., Rosof, B. M., Gullen, D., & Andresen, M. (2017). The Charter on Professionalism for Health Care Organizations. *Academic Medicine, 92*(8), 1091-1099.

Manglesdorf, A. (2014). Competency-based curriculum, outcomes and leader development: Applications to a graduate program in health administration. *Journal of Health Administration Education, 31* (2), 111-133.

Meacham, M. R. (2015). *From backpack to briefcase*. Boston, MA: Cengage Learning.

Meacham, M.R., Thompson, J. M., & Hall, R. A. (2017). Professional Development of Healthcare Management Students: A Survey of Programs. *Journal of Health Administration Education, 34* (1), 49-61(13).

Rissi, J. W. (2015). Preparing competent health management graduates in an era of health system reform. *Journal of Health Administration Education, 32* (1), 79-101.

Stefl, M. (2008). Common competencies for all healthcare managers: The Healthcare Leadership Alliance Model. *Journal of Healthcare Management, 53* (6), 360-374.

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage Publications, Inc.

Wu, W., Martin, B.C., & Ni, C. A systematic review of competency-based education effort in the health professions: Seeking order out of chaos. *Handbook on research on competency-based education in university settings*. Ed, Rasmussen, K., Northrup, P., & Colson, R. Hershey, PA: IGI Global, 2017. 352-378.

Using technology to bolster student engagement while validating course curricula: A case study of two graduate health management programs

Elizaveta Walker, MPH, and Sherril B. Gelmon, DrPH

Abstract

The successful administration of a competency-based curriculum is dependent on the quality of the assessment practices used to track competency development and demonstration. Practices that foster and sustain student engagement are critical to implementing robust competency-based assessment. This case study of the successful implementation of competency-based assessment in two related graduate health management programs identifies four such practices: (a) providing assessment opportunities at multiple intervals throughout the graduate program; (b) implementing assessment technologies to collect responses through contemporary channels (mobile-friendly assessments and computer-based evaluations); (c) utilizing student feedback to improve future assessment cycles; and (d) linking competency attainment with coursework taken to validate and improve program curricula. The fourth practice had a twofold rationale: to provide data to faculty advisors for course recommendations to improve specific competency attainment, and to provide evidence of validation of curricula in both programs. Findings from two assessment cycles demonstrate these practices and a discussion of limitations and recommendations for future application is provided. Additionally, recognizing the institutional context within which graduate health management programs operate and designing assessment programs to parallel such contexts may be useful. In this case study, the context is an urban comprehensive university with many nontraditionally aged students.

Please address correspondence to: Elizaveta Walker, MPH, OHSU-PSU School of Public Health, 3181 SW Sam Jackson Park Rd., Mailcode: L454, Portland, OR 97239
Phone: (503) 494-3962; Email: walkeliz@ohsu.edu

Introduction

The successful administration of a competency-based curriculum is highly dependent on the quality of the assessment practices used to track competency development and demonstration (Schneider, 2013). Competency assessment in health management programs has been well documented previously (e.g., Rissi, Wallace & Gelmon, 2015; Rissi & Gelmon, 2014), demonstrating that assessments can provide evidence to gauge competency attainment, demonstrate student growth, and indicate opportunities for program improvement. This feedback can be used to validate, modify, and evolve the curriculum over time (Clement, Hall, O'Connor, Qu, Stefl & White, 2010). However, these forms of evidence require valid and reliable information from students on an ongoing basis. As a result, practices that foster and sustain student engagement become critical to implementing robust competency-based assessment (Carini, Kuh, & Klein, 2006). This case study of the successful implementation of competency-based assessment in two related graduate health management programs identifies four such practices: (a) providing assessment opportunities at multiple intervals throughout the graduate program; (b) implementing various assessment technologies to collect responses through contemporary channels (mobile-friendly assessments and computer-based evaluations); (c) utilizing student feedback to continually improve future assessment cycles; and (d) linking competency attainment with coursework taken to validate and improve program curricula. This fourth practice has a twofold rationale. The primary purpose is to provide data that will help faculty advisors determine which courses students are consistently linking to a particular competency; this offers the potential to enhance personalized guidance for students as advisors can recommend program courses identified by alumni to improve competency development. The secondary purpose is to provide evidence to support validation of curricula in both programs, by providing additional information on student perceptions of course content related to specific competencies.

Finally, recognizing the institutional context within which graduate health management programs operate and designing assessment programs to parallel such contexts may be useful. In this case study, the context is a large urban comprehensive university with many nontraditionally aged students – half of the overall student population is aged 25 and older, with nearly 24% aged 30 and older. The urban context is also of particular importance, requiring daily commute for most students. Finally, 62% of all students are enrolled part-time. The demographics of the two graduate programs discussed in this article mirror overall university enrollment.

The two graduate health management programs discussed in this case study are the Master of Public Health in Health Management and Policy (MPH:HMP), now located in the OHSU-PSU School of Public Health, and the Health Administration concentration of the Master of Public Administration (MPA:HA) in Portland State University's College of Urban and Public Affairs (where the MPH:HMP resided until 2016). The two programs are accredited together by the Commission of Accreditation of Healthcare Management Education (CAHME) and the practices discussed in this case study were developed in response to CAHME's assessment and evaluation accreditation criteria (III.C1-3) (CAHME, 2013). The development and implementation of the competency model that enabled this case study is detailed by Rissi and Gelmon (2014).

The role of technology in assessment

The growing ubiquity and utilization of technology in virtually all domains of academe signals the expanding terrain of investment for graduate education (Kalman, 2016; Hernandez & Shewchuk, 2012). Well-designed assessments are associated with substantive competency attainment (Black & Wiliam, 2009). To this end, technology can either facilitate or hinder educational goals based on its assessment design and implementation (Laurillard, 2013). From administering automated quarterly assessments to linking coursework to providing a forum for feedback between students and program administration, the degree to which programs utilize technology can transform the assessment process. The role that technology played in each practice of this case study will be illustrated.

An advantage of using technology such as online assessments is the diversity of channels through which students may complete assessments (Ferenchik & Solomon, 2013). Students who can access rubrics and evaluations through mobile phones or computers (as opposed to paper evaluations) are more likely to engage with and complete an assessment (Venkatesh, Croteau, & Rabah, 2014). Another advantage lies in the resource effectiveness (time, cost, etc.) of transitioning from paper to electronic assessments (Abu-Al-Aish & Love, 2013). Aside from the startup energy required to build an assessment survey, the maintenance requirements of ongoing assessment programs are minimal compared to other techniques of collecting data (Wright, 2005). Finally, online assessments may enable a degree of on-demand testing in which students receive a window of time and can complete assessments at their leisure (Sha, Looi, Chen, & Zhang, 2012). This may act as a stimulus for reflection and students may provide more thoughtful feedback in their assessments (Mann, Gordon, & MacLeod, 2009).

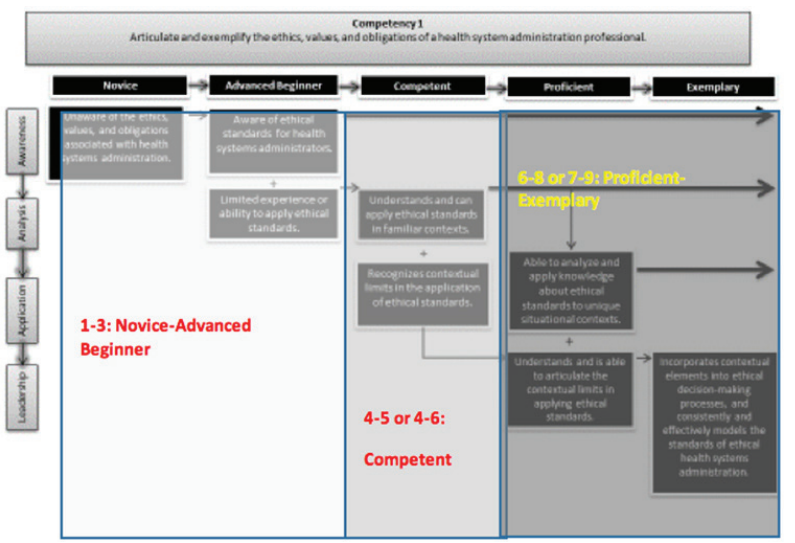
In the setting described in this case study, the need to change assessment software between two assessment cycles was identified given frustrations expressed by students and barriers to accessing data, which demonstrates the role that technology can play in establishing, administering, and analyzing data for competency-based assessment. The lessons learned regarding the role of technology illuminate a discussion of how technology can either benefit or severely undermine the assessment process.

Methods

This case study reports on the assessment practices and results from two assessment cycles (AYs 2015-16 and 2016-17) for both the MPH:HMP and MPA:HA programs. The programs use a common set of 10 competencies, which are tracked to each course. (Rissi and Gelmon [2014] provide an expanded discussion of development of these competencies.) Each competency has been mapped into a rubric (see Supplemental Figures 1-10) that illustrates progression along two dimensions: knowledge and professional development (Dreyfus & Dreyfus, 1986; Sandberg & Kecskes, 2017). As they progress through the program, students should advance from Novice/Beginner stages to Proficient/Exemplary status for each competency (Figure 1), even though they may begin at different stages given prior work experience and education.

Figure 1

The Competency rubric: progression from Novice/Beginner to Proficient/Exemplary



At the end of each academic quarter (fall, winter, spring), students were asked to self-assess their level of mastery for each of the 10 competencies, as well as to identify courses taken that aided in a particular competency's development. Quarterly self-assessments by students facilitate competency measurement for program reporting and provide personalized feedback for students and advisors for course planning. The self-assessments used a nine-point scale (eight-point scale for Competency 1) of structured values that students selected to represent their standing. These values ranged from novice to exemplary on a spectrum. By completing these assessments, students and their advisors could monitor progress of competency attainment and plan future course selections to ensure mastery in the 10 areas of professional development and to address underdeveloped competency domains.

Components of the assessment

Assessments were collected quarterly from active students in both programs. In AY 2015-16, students accessed the assessment via portfolio software that the university had purchased and had identified as a potentially flexible software for the assessments. In AY 2016-17, a web-based survey was managed using Qualtrics, a survey software program. In both years, the survey included four components and was estimated to take approximately 10 minutes to complete. Students were asked to: (a) provide identifying information and number of program credits completed to date; (b) self-assess perceived attainment for each of the 10 competencies; (c) select the courses that aided in achieving each competency score; and (d) provide any comments or suggestions in a free-text comment box.

Assessment timeline

The assessment was distributed in Week 8 (of 11) of each academic quarter via an individual email with an embedded link that took the student directly to the beginning of the assessment. The embedded links were personalized for completion verification. Force control settings were enabled to prevent students from advancing to the next survey segment without answering the required questions. This was done to minimize partially submitted and incomplete entries. All quarterly assessments were configured to be accessible through either mobile or desktop computer interfaces. This practice acknowledged the demanding schedules of graduate students and utilized prior student feedback to enhance the assessment's ease of use.

The assessment was "live" for the last two weeks of every term, with a due date of Friday of the last week of the academic term. The assessment remained opened until one week after the term ended to accommodate late

respondents. Reminders were sent to all non-responders two weeks before, one week before, day of, and one week after the survey due date. The three-week window for assessment completion enabled the option for early submission or post-term completion. Those who had not responded to the assessment reminders within the three-week window received a personalized email to facilitate completion. Further non-response triggered advisor-coordinated follow-up via email, which usually generated additional responses.

Tracking competencies with coursework

Students were asked to select all applicable courses that aided in attainment of a new level of any particular competency; they were provided with a list of all MPH:HMP and MPA:HA core and commonly taken elective courses. Two free-text options were included for each competency to allow for the capture of other courses. This practice had the twofold rationale, as described in the introduction, of validating curricula as well as providing data that would help faculty advisors determine which courses students were consistently linking to a particular competency.

Findings

While very detailed reports of findings by competency and by various student groups have been developed for internal use, the findings presented here have been selected to help highlight the assessment practices, their findings, and implications for future application in other programs and contexts. Detailed reports and additional examples of reporting are available by contacting the second author.

Response rates

In 2015-16, the total response rate was 73% (Tables 1a & 1b). In 2016-17, this response rate increased to 81%. The number of partial and incomplete assessments decreased from six in 2015-16 to three for the 2016-17 assessment cycle. As compared with the 2015-16 cycle, the 8% net increase in participation may be explained by the change in software, which was well-received by students and streamlined survey flow and error detection for program administration. The increase in response rates, as well as diminished partial entries, speaks to the role that technology can play in competency-based assessment; after several cycles of competency-based assessment utilizing a software optimized for portfolio use, a transition to a software that specializes in surveys demonstrated enhanced student engagement: 34% of student feedback in the free-text comment box of the assessment contained positive feedback related

to the software transition, most notably citing enhanced ease-of-use. Four respondents expressed frustration over the transition, citing innovation fatigue – a limitation discussed in a later section of this study. It will require several additional assessment cycles to determine if response rates will continue to increase or stabilize over time.

Table 1a

Response rates for MPH:HMP and MPA:HA, 2015-2016

Program	Sent Survey	Completed Survey*	% Completed
Fall 2015			
MPH:HMP	51	42 (41)	82%
MPA:HA	22	15	68%
Total	73	57	78%
Winter 2016			
MPH:HMP	50	34 (31)	68%
MPA:HA	21	15	71%
Total	71	49	69%
Spring 2016			
MPH:HMP	46	32 (30)	70%
MPA:HA	19	15	79%
Total	65	47	72%
Total 2015-16			
MPH:HA	147	108 (102)	73%
MPA:HA	62	45	73%
Total	209	153	73%

*Numbers in parentheses are surveys used for data analysis; 6 assessments excluded from analysis

Table 1b

Response rates for MPH:HMP and MPA:HA, 2016-2017

Program	Sent Survey	Completed Survey*	% Completed
Fall 2016			
MPH:HMP	-	-	-
MPA:HA	-	-	-
Total	-	-	-
Winter 2017			
MPH:HMP	27	25	93%
MPA:HA	17	16	94%
Total	44	41	93%
Spring 2017			
MPH:HMP	31	26 (23)	74%
MPA:HA	16	9	56%
Total	47	32	68%
Total 2016-17			
MPH:HA	58	51 (48)	83%
MPA:HA	33	25	76%
Total	91	73	81%

*Numbers in parentheses are surveys used for data analysis; 3 assessments excluded from analysis

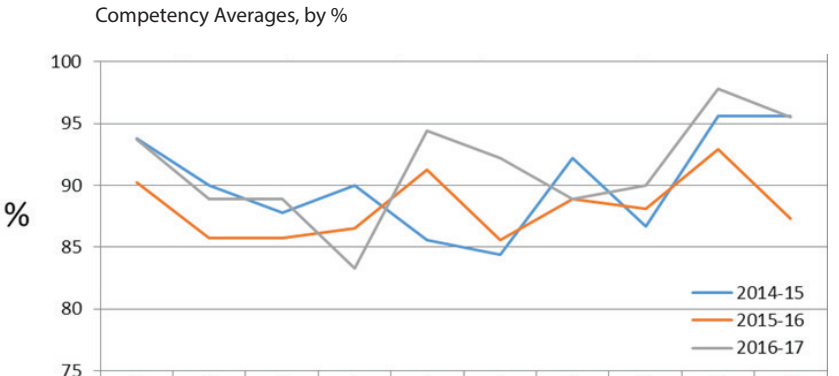
Average competency scores

Conducting assessments over multiple years enables programs to develop data that offers opportunities for comparisons by year, by competency, by progress through the program of study, and by whatever other metrics might be relevant to the program. Figure 2 presents one visualization of such data, showing three years' worth of results by competency. The raw scores have been converted to percentages to facilitate comparison across differing scales. This sort of graph can be used to identify which competencies are consistently being scored high or low by students, and also enables faculty to identify what might be large variations from year to year. Such variation would then highlight an opportunity to examine the evidence more closely, seeking to understand what it is about the students, the courses, or the competencies themselves that are leading to such results. If the number of students was

large enough, similar graphs could be created for subgroups of students (i.e., those in the early stage of their program or those in the part of the program). A caution in looking at a graph such as this is to not draw conclusions about the apparent variation without extensive analysis of the data presented and knowledge of context, timing, response rates, and other factors that could skew the interpretation of the results.

Figure 2

Average competency scores by year (%)



	1	2	3	4	5	6	7	8	9	10
2014-15	93.8	90	87.8	90	85.6	84.4	92.2	86.7	95.6	95.6
2015-16	90.2	85.7	85.7	86.5	91.3	85.6	88.9	88.1	92.9	87.3
2016-17	93.7	88.9	88.9	83.3	94.4	92.2	88.9	90	97.8	95.5

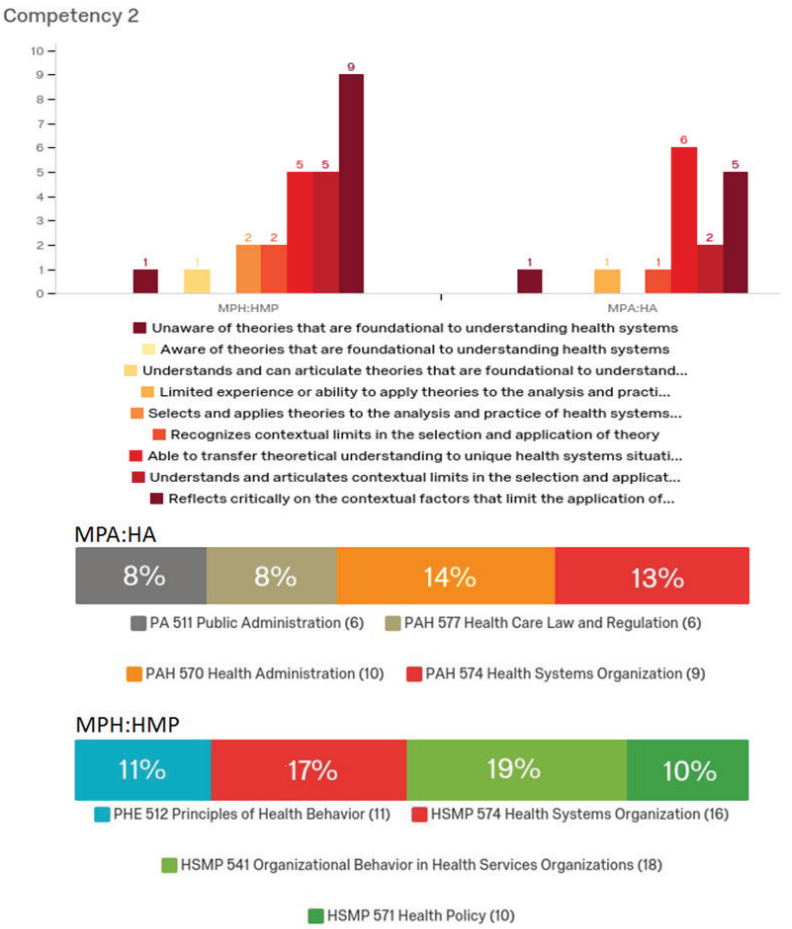
Commonly linked courses

As discussed previously, students are asked to identify specific courses they have taken that have helped them attain the level of competency they self-report. In general, students identify courses taken in the quarter when the assessment is completed. A cumulative reflective assessment is administered for the entire program in conjunction with the culminating field experience—a full description of that is detailed in Rissi and Gelmon (2014) and beyond the scope of this study. One of the challenges has been to determine how best to illustrate and communicate the results in order to view results for both programs and identify the specific courses cited; presenting frequency tables for dozens of courses seemed neither informative nor easily navigable. After multiple iterations of reporting, the most useful presentation to date is a graphic using vertical side-by-side bar charts for competency attainment and a horizontal cumulative bar chart for courses. Figure 3 presents an example,

illustrating student responses for Competency 2: Identify and apply relevant theories and frameworks to the practice of health services leadership, management and policy.

Figure 3

Illustration of course and competency linkages



Analyzing course linkages with specific competencies enables program administration to identify commonly-cited courses to gauge competency development as well as the degree of overlap among courses offered. In all, 10 of 26 listed course options (including two free-text options) were consistently linked to all 10 competencies in both programs. Eight of ten of these courses were established core coursework for the MPH:HMP program, validating that the core course curriculum in this program is sufficient to drive mastery in competency attainment in all 10 competencies. Alternatively, only four of these ten courses were core coursework of the MPA:HA, indicating that use of electives was necessary for MPA:HA students to develop mastery in all 10 competencies. The differences among the two closely related programs would require closer examination to sufficiently understand this nuance.

Another important finding was the identification of three "super linked" courses, being consistently linked to 9 of the 10 competencies: Health Systems Organization, Health Policy, and Program Evaluation and Management in Health Services. Interestingly, while the first two courses are requirements for both programs, the third course is an elective offered by the MPH:HMP program. This novel finding may provide evidence for an argument to incorporate this course into the core coursework required for the MPH:HMP as well as the MPA:HA. Such a finding, while primarily useful for the internal institution and programs' administration, demonstrates the usefulness of this practice in other institutions seeking to validate core and elective curricula; alternatively, this practice may also be of use when determining which courses, if any, are not driving competency development via student feedback.

Discussion

Multiple opportunities for assessment

Student engagement can be operationalized as "participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measureable outcomes" (Kuh, Kinzie, Buckley, Bridges & Hayek, 2006). For this case study, this definition was extended to include the participation of students in completing their respective program's competency assessments. Response rates of assessments are validated measures that can serve as a proxy for gauging student engagement (Fan & Yan, 2010). In addition, this measure can be used to inform variation in responses and opportunities for improvement, such as a need for greater preparation of students, modifying assessment schedules, or probing reasons behind selective participation by students (Kubin & Fogg, 2010).

For the 2015-16 and 2016-17 assessment cycles, student engagement as measured through response rates demonstrated an upward trend of respondents completing quarterly assessments. The practice of requiring quarterly assessments, as opposed to annual or end-of-year evaluations, presents three advantages. First, as respondents complete multiple assessments throughout the academic year, the evaluation may serve as a means for student reflection and/or may illustrate program shortcomings that would otherwise be too subtle to capture during annual or end-of-year assessments. Second, this practice also permits advisors and faculty to be more informed when providing student feedback and guidance, offering a richer picture of student strengths and opportunities for improvement. Finally, requiring multiple intervals of assessment may aid in establishing expectations for incoming students that engagement and compliance with program assessments are components of their graduate education. Future assessment cycles will reveal if the trajectory from the 2015-16 and 2016-17 data continues. Additionally, larger class sizes may confer greater statistical power to enable inferential testing.

Acting on student feedback

Providing a forum within assessments to offer suggestions and concerns regarding assessment design is an invaluable resource, as implementation of student feedback in assessment design is correlated with higher response rates (Sheldon, Robbins, & Kung, 2006). In both assessment cycles, student feedback was a popular function – from suggestions, praises, and frustrations, the assessment managers could implement many (if not most) of the suggestions for improvement, and this practice may explain the higher response rate for the latter assessment cycle.

Perhaps the most fundamental change in response to student feedback was the decision to transition to different survey software. Two years of experience with a portfolio software that the university had adopted and deemed appropriate for this sort of assessment had resulted in considerable frustration by both students and assessment managers, in view of multiple software design issues that ultimately were determined to be incompatible with the goals of the competency assessment. The switch from the portfolio software, which was rather cumbersome for these assessments but is very effective for its intended uses, to survey software (i.e., Qualtrics) occurred during fall term of the 2016-2017 cycle; this term was omitted from subsequent analyses given this transition, however, the increases in responses may be a result of the switch to a more user-friendly technology.

Institutional context

Both the MPH:HMP and MPA:HA graduate health management programs are situated within an institution that is characteristically urban and non-traditional in student composition. There is growing awareness that competency-based curricula should mirror practice settings (Gosling & Mintzberg, 2004; Pfeffer, 2009) to sufficiently prepare graduate students for evolving workplace settings, a sentiment addressed at the 2001 National Summit on the Future of Education and Practice in Health Management and Policy (Calhoun, Vincent, Baker, Butler, Sinioris, & Chen, 2004). Consideration of institutional contexts when designing competency-based assessments has been cited as an under-explored relationship (Heywood, 2000), although this may be changing with the proliferation of competency-based mandates, especially among health professions and related specialized accreditors (Rissi & Gelmon, 2014; Batalden, Leach, Swing, Dreyfus, & Dreyfus, 2002).

For the MPH:HMP and MPA:HA graduate programs, the impetus to design the competency-based assessments to be mobile-friendly with flexible ranges for completion reflected the institutional context and the characteristics of the student population, a non-traditionally aged commuter population that has a substantial number of part-time enrollees. Additionally, asking respondents for the number of credits completed at the time of each assessment enabled program administration to continuously gauge the distribution of full- and part-time students. This metric provided greater clarity to program administration regarding student progression through their program of study, and enabled identification of cohorts of students on the basis of credits-earned instead of by matriculation year (given variable speed of progression based upon full- or part-time study).

Limitations

This case study considered practices that have been implemented in two graduate healthcare programs to capture mastery of competencies. Within the realm of competency-based education, it is an evolving challenge to both accurately measure progress as well as construct assessments that measure the intended objectives. Despite continued improvement in response rates, logistics, and workflow, there remain a number of limitations to accurately assessing and reporting on competency attainment.

Linear analysis for multidimensional rubrics

The competency rubrics are structured two dimensionally: each matrix captures levels of learning progressing from Novice to Exemplary (horizontal axis), while measuring gradients of professional development from Awareness to

Leadership (vertical axis). However, the data analyses were created linearly by assigning a number to each level of competency to facilitate scoring. Consequently, there may be some lost subtleties as someone moves laterally and 'skips' a competency stage.

Innovation and assessment fatigue

Despite a positive response to the software transition in the 2016-17 cycle, innovation fatigue may have hampered responses among well-advanced students. In particular, students who were introduced to quarterly competency assessment during their tenure in the program, instead of at matriculation, exhibited lower response rates than those who were introduced to the competency assessment as an established practice upon matriculation (45% compared to 86%, respectively). Additionally, it will require several more assessment cycles to determine if quarterly assessments eventually exhibit assessment fatigue from students, particularly among part-time enrollees exposed to more assessments over time.

Human error

Due to both human and technological error, some data were incomplete and those surveys were excluded (6 surveys for 2015-16; 3 surveys for 2016-17 cycle) from subsequent analyses.

Underpowered comparisons

Due to the small number of students surveyed for the MPA:HA program, inter-program comparisons are limited. This was the case for both assessment cycles. Comparisons between programs are presently underpowered.

Recommendations

The experience described here leads to a number of recommendations for other programs experimenting with methods of competency assessment. First, the competency assessment process is only useful if it provides good evidence for both student self-reflection, as well as student advising and program improvement. However, one can only generate good evidence if the students participate. Thus, responding to student feedback and making just-in-time improvements will demonstrate responsiveness to student concerns, and may ultimately help to increase student buy-in and bolster response rates.

Second, while the use of the competency rubrics (or "maps") is very helpful, a simple linear scoring system may hide some of the subtleties of competency progression. Using a more complex mapping that simultane-

ously recognizes the linear and horizontal progression through the rubrics, as described by Sandberg and Kecskes (2017), may provide more accurate scoring of competency development.

Third, experimentation with different software programs to find user- and designer-friendly platforms that can easily generate relevant, meaningful, and timely results should be encouraged. Programs should then report their learning to help advance others. Ideally, some software developer(s) will design new software programs that will help educators to track, measure, and report competency attainment and help programs respond to accreditation mandates.

Fourth, attending to the institutional context and nuances of the student population when designing competency-based assessment (and implementing feedback) has been valuable for these two programs and may be a worthwhile lens to adopt for other programs' assessment design. In this case study, recognition of the substantial part-time population informed the need to track cohorts based on the number of credits completed, as opposed to matriculation year. This enabled program administration to track both competency development in a more meaningful way, as well as appropriately group students for internal reporting. Additionally, in response to the urban location of the institution and large commuter population, mobile-friendly assessments were introduced for enhanced convenience to students; for the most recent assessment cycle, mobile (as opposed to desktop or laptop) submissions accounted for 76% of all entries. Designing competency-based assessment to meet the needs of an institution's student population can result in enhanced ease-of-use for students as well as higher response rates for program reporting.

Conclusion

As stated in the Introduction, the successful administration of a competency-based curriculum is dependent on the quality of the assessment practices used to track competency development and demonstration. The lessons learned from our case study revealed that assessment (and the technologies used) is not only useful for validation of competency-based education, but also for making the necessary changes to curricula and teaching practices based on the findings. Competency-based curricula and related assessment strategies have become central to many professional education programs and are clearly the current strategy for graduate health management education programs. While no one model will meet the needs of all programs, given the differences in mission, focus, and context that exist (even among the CAHME-accredited programs), each program needs to articulate the model that is best suited for them and then determine how to conduct competency assessments in order

to produce meaningful evidence that can guide student progress, faculty advising, and program assessment. The experiences reported here describe some of the challenges of using technology that, while intended to enhance participation, may have created barriers to responses. Utilization of designer- and user-friendly software (available at little or no cost to students) will help to encourage students to participate in the assessment process, provide better and more robust evidence to the program, and demonstrate the value of the commitment to competency-based education.

Refereces

Abu-Al-Aish, A., & Love, S. (2013). Factors influencing students' acceptance of m-learning: An investigation in higher education. *The International Review of Research in Open and Distributed Learning, 14*(5), 82-107.

Batalden, P., Leach, D., Swing, S., Dreyfus, H., & Dreyfus, S. (2002). General competencies and accreditation in graduate medical education. *Health Affairs, 21*(5), 103-111.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(1), 5-31.

Commission on Accreditation of Healthcare Management Education (CAHME). (2013). Fall 2013 Criteria for Accreditation. Retrieved from http://cahme.net/files/criteria_for_accreditation.pdf

Calhoun, J. G., Vincent, E. T., Baker, G. R., Butler, P. W., Sinioris, M. E., & Chen, S. L. (2004). Competency identification and modeling in healthcare leadership. *Journal of Health Administration Education, 21*(4), 419-440.

Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education, 47*(1), 1-32.

Clement, D. G., Hall, R. S., O'Connor, S. J., Qu, H., Stefl, M. E., & White, A. W. (2010). Competency development and validation: A collaborative approach among four graduate programs. *Journal of Health Administration Education, 27*(3), 151-173.

Dreyfus, H. L., & Dreyfus, S. E. (1986). *Mind Over Machine*. New York: Free Press.

Fan, W., & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior, 26*(2), 132-139.

Ferenchick, G. S., & Solomon, D. (2013). Using cloud-based mobile technology for assessment of competencies among medical students. *PeerJ, 1*, e164.

Gosling, J., & Mintzberg, H. (2004). The education of practicing managers. *MIT Sloan Management Review, 45*(4), 19-22.

Heywood, J. (2000). *Assessment in higher education: Student learning, teaching, programmes and institutions (Vol. 56)*. Jessica Kingsley Publishers.

Hernandez, S. R., & Shewchuk, R. M. (2012). Selected Methods for Improving Health Administration Education. *The Journal of Health Administration Education, 29*(4).

Kalman, Y. M. (2016). Cutting through the hype: evaluating the innovative potential of new educational technologies through business model analysis. *Open Learning: The Journal of Open, Distance and E-Learning, 31*(1), 64-75.

Kubin, L., & Fogg, N. (2010). Back-to-basics boot camp: An innovative approach to competency assessment. *Journal of Pediatric Nursing, 25*(1), 28-32.

Kuh, G. D., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature (Vol. 8)*. Washington, DC: National Postsecondary Education Cooperative.

Laurillard, D. (2013). *Rethinking university teaching: A conversational framework for the effective use of learning technologies*. Routledge.

Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: a systematic review. *Advances in Health Sciences Education, 14*(4), 595-621.

Pfeffer, J. (2009). Renaissance and renewal in management studies: Relevance regained. *European Management Review, 6*(3), 141-148.

Rissi, J. J., & Gelmon, S. B. (2014). Development, implementation, and assessment of a competency model for a graduate public affairs program in health administration. *Journal of Public Affairs Education, 20*(3), 335-352.

Rissi, J. J., Wallace, N. T., & Gelmon, S. B. (2015). Preparing competent health management graduates in an era of health system reform. *Journal of Health Administration Education, 32*(1), 79-101.

Sandberg, B., & Kecskes, K. (2017). Rubrics as a Foundation for Assessing Student Competencies: One Public Administration Program's Creative Exercise. *Journal of Public Affairs Education, 23*(1), 637-652.

Schneider, C. G. (2013). Holding Courses Accountable for Competencies Central to the Degree. Liberal Education, 99(1), n1-12.

Sha, L., Looi, C. K., Chen, W., & Zhang, B. H. (2012). Understanding mobile learning from the perspective of self-regulated learning. *Journal of Computer Assisted Learning, 28*(4), 366-378.

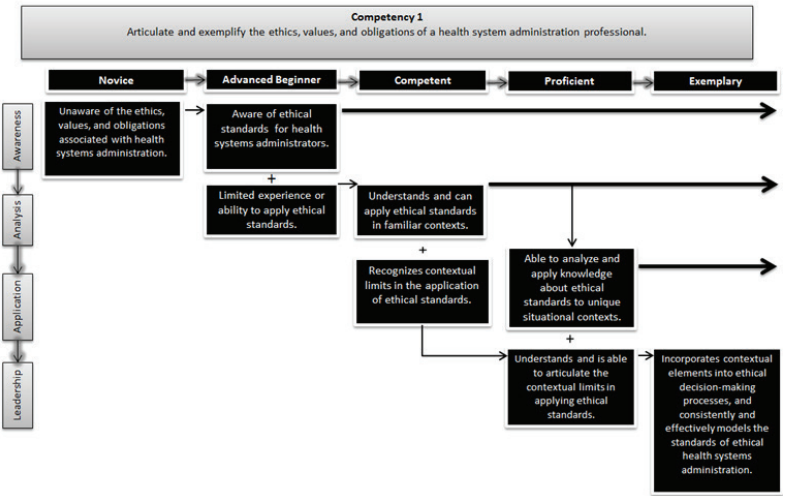
Sheldon, B., Robbins, L. I., & Kung, S. (2006). Online resources for assessment and evaluation. *Academic Psychiatry, 30*(6), 498-504.

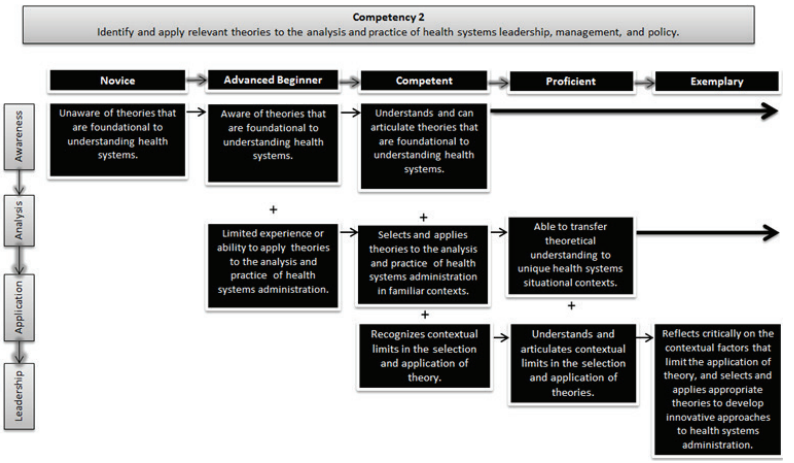
Venkatesh, V., Croteau, A. M., & Rabah, J. (2014). Perceptions of effectiveness of instructional uses of technology in higher education in an era of Web 2.0. *In System Sciences, 2014, 47*, 110-119.

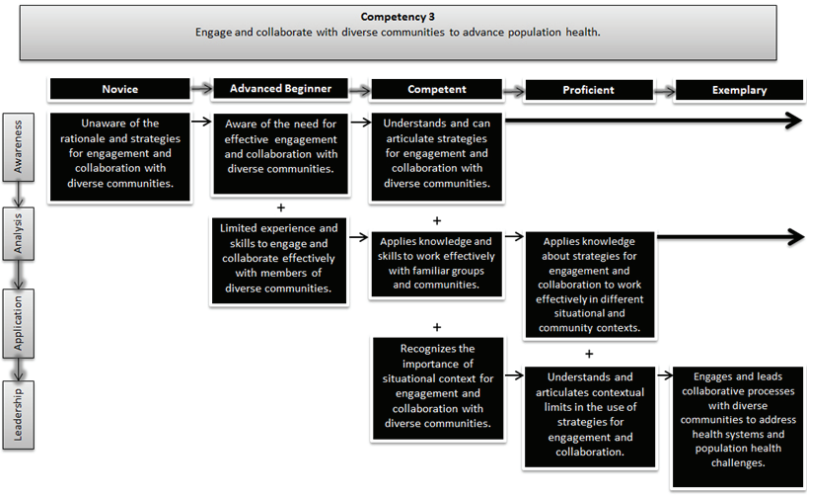
Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication, 10*(3), 00-06.

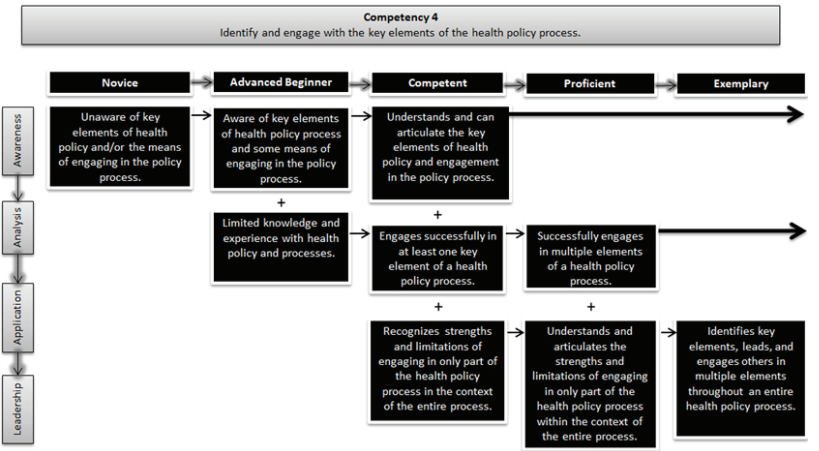
Appendix: Supplemental Figures 1–10

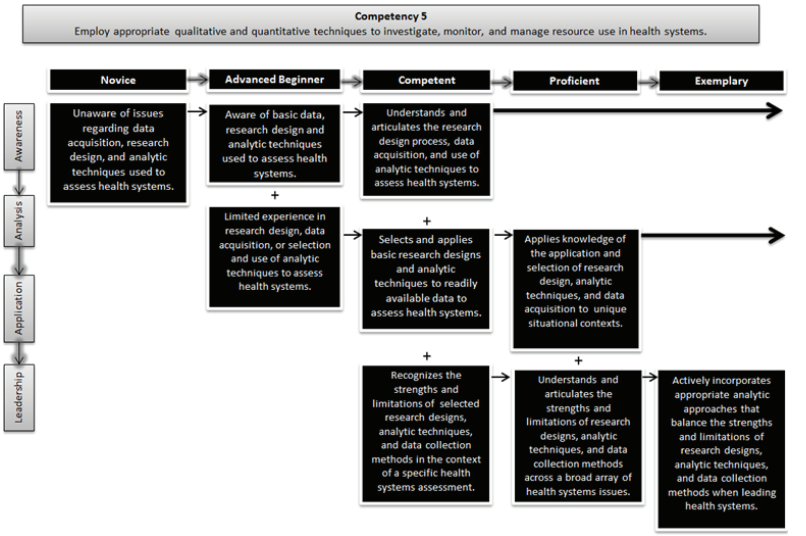
The 10 MPH:HMP/MPA:HA Competency Rubrics

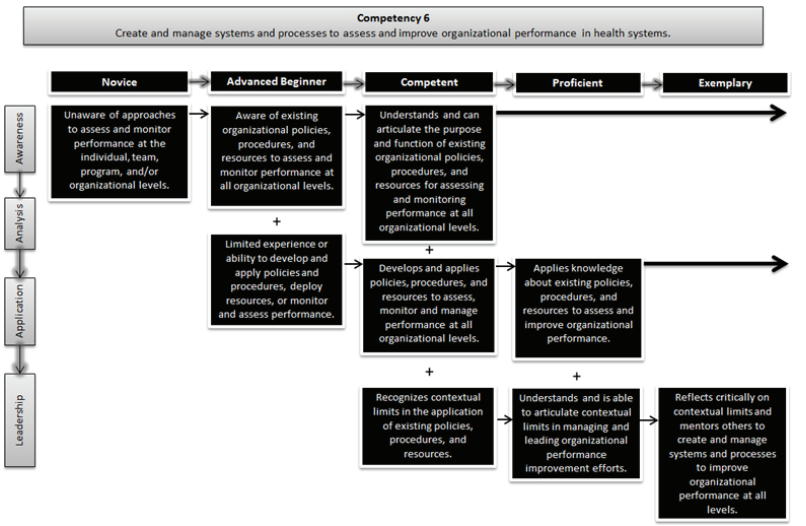


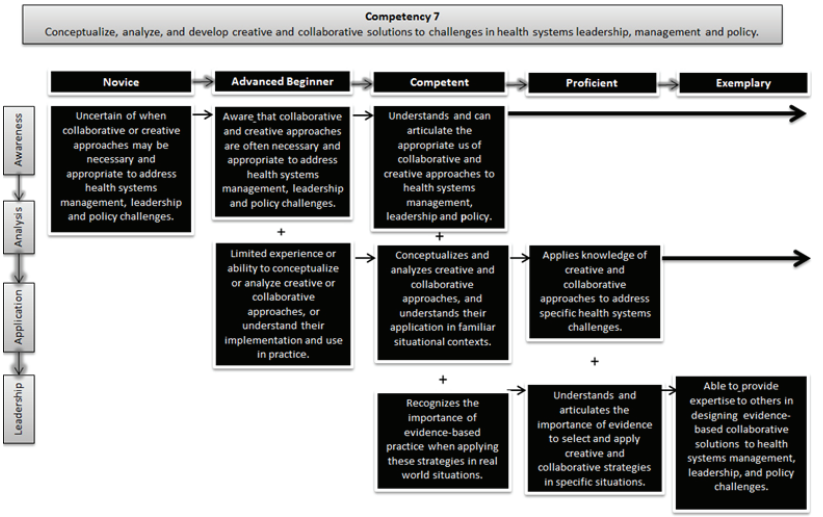


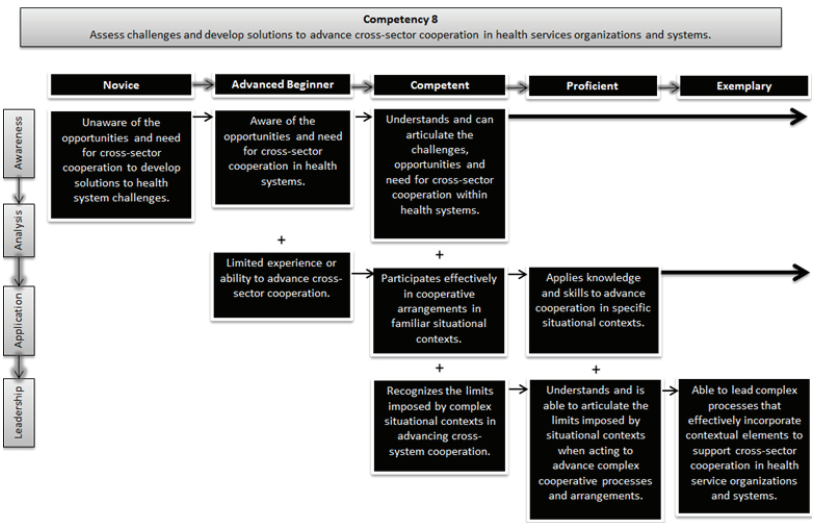


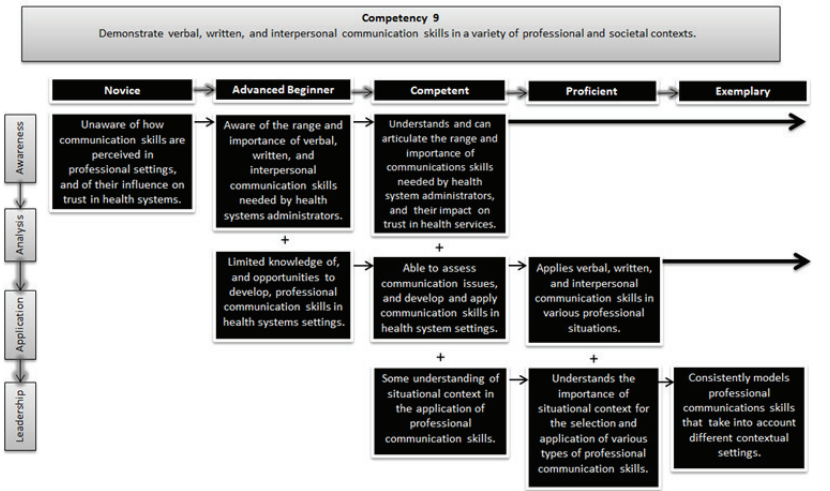


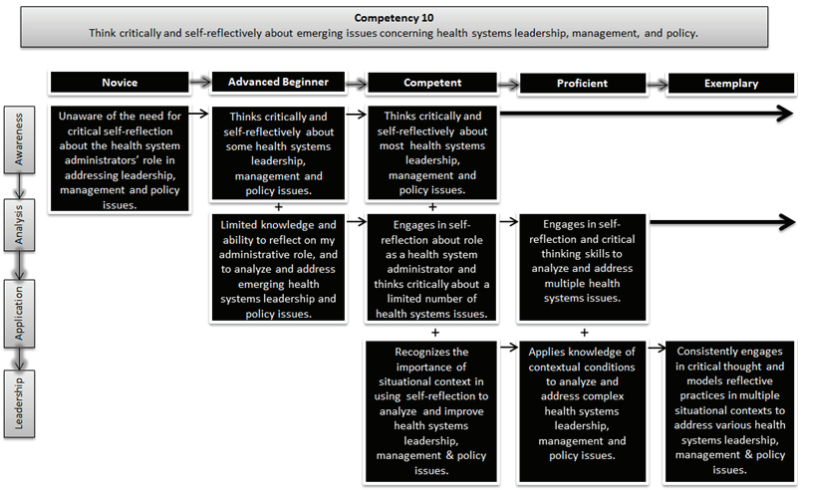












Exploring Hospital CEOs' Perceptions of Health Administration Graduates' Leadership Competencies

John W. Fick, EdD, FACHE, Lihua Dishman, DBA, Katherine Adler, DHA, FACHE, Letha Williams, PhD, FACHE

Abstract

Hospital Chief Executive Officers (CEOs) across the United States continue to view personnel shortages among their top five concerns, while confronting challenges to provide the best care at lower costs in a shift to a value-based payment environment. This paradigm presents health administration programs opportunities to develop their students' industry-sought leadership competencies. To fill a gap in current empirical understanding, this cross-sectional mixed-methods study explored how U.S. hospital CEOs, who were credentialed as a Fellow of the American College of Healthcare Executives (FACHE), perceived health administration graduates' leadership competencies upon job entry, and investigated which of the competencies were most sought-after by the industry. With a target population comprising all FACHE-credentialed U.S. hospital CEOs, 46 of them across seven demographic characteristics (Gender, Age, Education, FACHE Years, Position Years, Hospital Location, and Geographic Region) constituted the final study sample. Quantitative and qualitative data were collected and analyzed, resulting in empirical evidence to answer the study's two research questions. Specifically, hospital CEOs viewed health administration graduates upon job entry as meeting needs in Information Seeking, Professionalism, and Achievement Orientation competencies, but not meeting needs in several of the competencies: Self Development, Analytical Thinking, Organizational Awareness, Accountability, Change Leadership, and Interpersonal Understanding.

Please address correspondence to: John W. Fick, EdD, A T Still University, 1078 Paddock Dr., South Lyon, MI 48178, Phone: (734) 674-8153, Email: JFick@atsu.edu

Introduction

The collective knowledge base of U.S. healthcare organizations' leadership affected organizational success (McAlearney, 2010). Specific leadership competencies were identified as necessary skills for proficient collaboration and communication, improved outcomes from health research programs, production of quality data, and sophisticated and timely scientific productivity (Davidson, Azziz, Morrison, Rocha, & Braun, 2012). Yet, extant literature offers limited empirical understanding relative to how U.S. hospital Chief Executive Officers (CEOs) perceive health administration graduates' leadership competencies upon job entry, and which health leadership competencies of health administration graduates are the most important to these CEOs.

The purpose of this study was two-fold. First, the study examined U.S. hospital CEOs' perceptions of health administration graduates' leadership competencies upon job entry. These CEOs were Fellows of the American College of Healthcare Executives (FACHE). Second, the study investigated the health leadership competencies that were the most important to U.S. hospital CEOs who were FACHE-credentialed.

The study aimed to answer two research questions. First, what are FACHE-credentialed U.S. hospital CEOs' perceptions of health administration graduates' leadership competencies upon job entry? Second, which health leadership competencies of health administration graduates are the most important to FACHE-credentialed U.S. hospital CEOs?

Summary of key terms

The National Center for Healthcare Leadership (NCHL) (2006) has established a broad scope of 26 competencies expected of healthcare leaders. Educating and developing future healthcare leaders, many health administration programs have adopted this established set of leadership competencies. Table 1 lists the 26 competencies. Among the 26 competencies listed are Self Development, Information Seeking, Analytical Thinking, Organizational Awareness, and Accountability. Definitions for each of these competencies can be found on the website of the National Center for Healthcare Leadership (NCHL).

Table 1

NHCL 26 Competencies expected of healthcare leaders

NCHL Competency	Abbreviation
Achievement Orientation	AO
Analytical Thinking	AT
Community Orientation	CO
Financial Skills	FS
Information Seeking	IS
Innovative Thinking	IT
Strategic Orientation	SO
Accountability	AC
Change Leadership	CL
Collaboration	COL
Communication	COM
Impact and Influence	II
Information Technology Management	ITM
Initiative	IN
Organizational Awareness	OA
Performance Measurement	PEM
Process Management and Organizational Design	PM
Project Management	PRM
Human Resources Management	HRM
Interpersonal Understanding	IU
Professionalism	PR
Relationship Building	RB
Self Confidence	SC
Self Development	SD
Talent Development	TD
Team Leadership	TL

NOTE: The NCHL Health Leadership Competency Model's (2006) 26 competencies are listed in the same sequence as presented in the survey instrument.

Review of related literature

Graduate programs in health administration have existed for decades. The University of Chicago formed the first graduate program in health administration in 1934 (Association of University Programs in Health Administration [AUPHA], 2018). Since then, improvements in program curricula have occurred over time. Nearly 70 years later, Mecklenburg (2001) challenged the industry of health management educators and practitioners to "achieve new excellence in graduate education that focuses on the market needs of those buying the product" (p. 8).

As a result, Garman and Johnson (2006) introduced leadership competencies for health management education and presented a summary of seven competency models to address the aforementioned challenge. In the context of healthcare management, leadership is about inspiring others to achieve individual and organizational excellence, engaging all stakeholders to create a shared vision, and navigating through changes successfully to attain strategic goals and high performance of their organizations (Cliff, 2012). Leadership competencies are defined as "characteristics of employees with behavioral implications that are thought to be associated with successful performance of their job" (Garman & Johnson, 2006, p. 14).

Additionally, Garman and Johnson (2006) presented an overview of three general competency models. First, the competency model created by Ross, Wenzel, and Mitlyng (2002) comprises 24 competencies in four clusters. Second, the competency model developed by the National Center for Healthcare Leadership (2004) comprises 26 competencies in three clusters. Finally, the competency model developed by the Healthcare Leadership Alliance (2005) comprises 300 competencies in five clusters.

In a subsequent study by Calhoun et al. (2009), the authors identified four categories of competency based on NCHL competencies: (1) baseline, (2) distinguishing, (3) recommended, and (4) other. Baseline competencies are defined in this study as competencies that both the outstanding and typical performers in their early-career stage demonstrate in a role or job. These NCHL competencies are as follows: (a) Analytical Thinking, (b) Human Resource Management, (c) Information Seeking, (d) Innovative Thinking, and (e) Interpersonal Understanding.

Some graduate health management programs have adopted a set of applicable competencies. For example, Friedman and Frogner (2010) focused on 27 competencies on the basis of those adopted by their graduate health management program at George Washington University. Specifically, the top five competencies that healthcare leaders considered early careerists to be "very competent" included: (1) writing skills (19.7%); (2) presentation skills

(19.5%); (3) contemporary healthcare trends and issues (16.0%); (4) information and technology management (14.7%); and (5) financial management (11.4%). Most recently, Giles (2016) identified in a recent study top 10 leadership competencies, including the top 5: has high ethical and moral standards; provides goals and objectives with loose guidelines/direction; clearly communicates expectations; has the flexibility to change opinions; and is committed to my ongoing training. The top 10 leadership competencies were further grouped into five themes. The themes were strong ethics and safety, self-organizing, efficient learning, nurtures growth, and connection and belonging.

This review centered on theoretical and empirical literature pertaining to understanding the study's main theses. As identified from peer-reviewed literature and industry-authoritative sources, the National Center for Healthcare Leadership (NCHL) (2012) has established a broad scope of 26 competencies expected of healthcare leaders. It is important to point out that the industry-authoritative sources are considered as grey literature. According to the American Psychological Association (2010), grey research refers to those technical and research reports that often consist of original research and are part of a body of literature but may or may not be peer reviewed. This literature review informed the development of the study's research question as stated in a preceding section.

Research methodology

This cross-sectional observational study used a mixed-method approach. The study period was 2015. The unit of analysis was U.S. hospital CEOs. A survey instrument (refer to Appendix A) was developed to collect the demographic data of the respondents, quantitative data, and qualitative data. Descriptive statistical methods were used to analyze demographic data, quantitative data, and qualitative data. Moreover, inferential statistical methods were used to analyze demographic data and quantitative data. Finally, thematic analysis method was used to analyze qualitative data.

Population and sample

The target population of this cross-sectional observational study was comprised of United States hospital CEOs who were board certified in healthcare management and Fellows of the American College of Healthcare Executives (FACHE). The final sample was comprised of 46 FACHE-credentialed U.S. hospital CEOs. The CEOs were across seven demographic characteristics: gender, age, education (graduate degree type), FACHE years (number of years as a FACHE), position years (number of years in current position), hospital location, and geographic region.

Data collection and analysis

In addition to demographic data of the FACHE-credentialed U.S. hospital CEOs, both quantitative and qualitative data were collected using a survey instrument (refer to Appendix A).

Quantitative data related to the hospital CEOs' perception of health administration graduates' leadership competencies (as measured by the 26 competencies in the NCHL Health Leadership Competency Model) upon job entry. The hospital CEOs' perception was measured using a five-point Likert scale. Qualitative data were narratives that the hospital CEOs provided as related to health administration graduates' leadership competencies upon job entry.

Both quantitative and qualitative data were analyzed. Relative to quantitative data analyses, both frequency and relative frequency of the sample distributions were examined across the seven demographic characteristics of the FACHE-credentialed U.S. hospital CEOs: gender, age, education (graduate degree type), FACHE years (number of years as a FACHE), position years (number of years in current position), hospital location, and geographic region. Chi-square tests were performed to determine equality of frequency distributions. Moreover, mean and standard deviation of the overall health leadership competency (HLC) and the 26 NCHL competencies were individually evaluated across the seven demographic characteristics of the FACHE-credentialed U.S. hospital CEOs. Univariate analyses of variance (one-way ANOVA tests) were completed to analyze differences in mean scores. Finally, Tukey's honestly significant difference (HSD) analyses (also known as Tukey's post-hoc analyses) were conducted to determine groupings of hospital CEOs. It is important to note that Tukey's HSD method was used because it is a rather conservative post-hoc comparison, as Abdi and Williams (2010) pointed out.

Relative to qualitative data analyses, a thematic analysis was completed. Qualitative data of FACHE-credentialed U.S. hospital CEOs' perception of health administration graduates upon job entry were coded according to the 26 competencies in the NCHL's Health Leadership Competency Model. A frequency distribution of the coding results was determined. The competencies were then ranked in a descending order on the basis of the results from the frequency distribution analysis. Finally, top ranked competencies that matter the most to the sample hospital CEOs were identified, then mapped to the three themes of the Health Leadership Competency Model.

Results

Table 2 reports both descriptive statistics comprised of frequency analyses and inferential statistics comprised of chi-square tests for distributions used to describe the demographic characteristics of the study's sample. First, the table reports frequency and relative frequency that were determined for each of the seven demographic characteristics: gender, age, education (graduate degree type), FACHE years (number of years as a FACHE), position years (number of years in current position), hospital location, and geographic region. Second, the table reports the results of chi-square tests performed to determine equality of distribution by gender, age, education (graduate degree type), FACHE years, position years, hospital location, and geographic region.

Specifically, Table 2 reports that of the respondents, 87% were male and 13% were female; 20% were 50 years old or younger (2.17%, 10.87%, and 6.52%); 80% were over 50 years old; and 83% earned a graduate degree in healthcare management or with a concentration in healthcare management. Furthermore, 53% (4.35%, 28.26%, 13.04%, and 6.52%) of the respondents had been a FACHE for fewer than 15 years, while 47% had been a FACHE for 15 years or longer. In all, 94% (34.78%, 34.78%, 15.22%, and 8.70%) of respondents had been in the current position for 20 or fewer years, while 6% had been in the current position for more than 20 years. In terms of Hospital Locations, 15% of the respondents were CEOs of urban hospitals, 26% were CEOs of suburban hospitals, and 59% were CEOs of rural hospitals. In terms of geographic regions, 9% of respondents were CEOs of hospitals in the Northeast region, 20% were CEOs of hospitals in the Souththeast region, 52% were CEOs of hospitals in the Midwest region, 15% were CEOs of hospitals in the Southwest region, and 4% were CEOs of hospitals in the West region. Additionally, the results of chi-square tests performed to determine the equality of distribution were all statistically significant, at $p < 0.001$ for gender, age, education (graduate degree type), position years, and geographic region, and at $p < 0.05$ for FACHE years and hospital location.

In summary, the FACHE-credentialed hospital CEOs in the final sample were disproportionately male, over 50 years old, earned a graduate degree in healthcare management (or with a concentration in healthcare management), and had been in their current position for 20 or fewer years. More than half of the sample CEOs had been a FACHE for fewer than 15 years, were from rural hospitals, and were from hospitals located in the Midwest region of the United States.

Table 2

Surveyed CEO demographic characteristics (*n*=46)

Characteristic	*n*	%
Gender		
Male (Coded 1)	40**	86.96
Female (Coded 2)	6	13.04
Age (in years)[1]		
36-40	1**	2.17
41-45	5	10.87
46-50	3	6.52
51-55	6	13.04
56-60	18	39.13
61-65	10	21.74
66-70	3	6.52
Education (graduate degree or concentration in HCM)[2]		
Yes (Coded 11)	38**	82.61
No (Coded 12)	8	17.39
FACHE years (number of years as a FACHE)[3]		
3-6	2*	4.35
6-9	13	28.26
9-12	6	13.04
12-15	3	6.52
15-18	5	10.87
18-21	9	19.57
21-24 (including lifetime member)	8	17.39
Postion years (number of years in position)		
1-5	16**	34.78
6-10	16	34.78
11-15	7	15.22
16-20	4	8.70
21-25	1	2.17
26-30	1	2.17
Over 30 years	1	2.17

Table 2, *cont*.

Hospital location		
Urban (Coded 101)	7*	15.22
Suburban (Coded 102)	12	26.09
Rural (Coded 103)	27	58.70
Geographic region		
Northeast (Coded 1001)	4**	8.70
Southeast (Coded 1002)	9	19.57
Midwest (Coded 1003)	24	52.17
Southwest (Coded 1004)	7	15.22
West (Coded 1005)	2	4.35

NOTE: [1]Frequency classes were structured on the basis of the age reported by the survey respondents who were aged between 36 and 70 Years. [2]HCM = Healthcare Management. [3]All survey respondents were FACHE credentialed for 3 years or longer. Each sample frequency is expressed as % of the total respondents ($n = 46$) and sum of frequencies may not equal 100% because of rounding errors. $^{**}p < 0.001$ chi-square test for equality of distribution. $^{*}p < 0.05$ chi-square test for equality of distribution.

Intercorrelation analyses

Table 3 reports the intercorrelations of the 26 NCHL competencies (refer to Table 1) and the overall (weighted average) health leadership competency (HLC). The correlation analyses were to help educators of health administration programs understand the association between HLC and 26 individual competencies, as well as the association among the 26 individual competencies. Results indicated which individual competencies had a greater association with the HLC and with one another, which may provide insights to the educators when they develop health administration programs' learning objectives and assess the programs' learning outcomes. Several descriptive findings emerged from the correlation analyses.

First, at $p < 0.05$, the overall health leadership competency was significantly positively correlated with Relationship Building (RB), Communication (COM), Team Leadership (TL), Professionalism (PR), Self Confidence (SC), Impact and Influence (II), Information Seeking (IS), and Process Management and Organizational Design (PM) (Pearson's correlation coefficient > 0.70). Second, at $p < 0.05$, Information Seeking (IS) was significantly positively correlated with Interpersonal Understanding (IU), Professionalism (PR), and Community

Orientation (CO) (Pearson's correlation coefficient > 0.50). Third, at $p < 0.05$, Information Seeking (IS) was significantly positively correlated with Innovative Thinking (IT), Team Leadership (TL), Performance Measurement (PEM), Collaboration (COL), and Relationship Building (Pearson's correlation coefficient > 0.50). Fourth, at $p < 0.05$, Analytical Thinking (AT) was significantly positively correlated with Relationship Building, Performance Measurement, and Communication (Pearson's correlation coefficient > 0.50). Finally, Organizational Awareness had the greatest statistically significant positive correlation with Talent Development (TD), Communication had the greatest statistically significant positive correlation with Relationship Building, and Financial Skills had the greatest statistically significant positive correlation with Initiative (IN).

Descriptive statistics

Tables 4.1-4.4 report the results of descriptive statistics, one-way ANOVA tests, and Tukey's post-hoc analyses. Specifically, mean and standard deviation (SD) of the overall weighted health leadership competency (HLC) and the 26 competencies in the NCHL Health Leadership Competency Model were examined individually across the seven demographic characteristics of sample hospital CEOs. Additionally, a separate one-way ANOVA test was performed to evaluate the significance of HLC and the 26 competencies individually across the same demographic indicators. Finally, Tukey's post-hoc analyses were completed to determine groupings of hospital CEOs.

As shown in Tables 4.1-4.4, sample CEOs as a whole scored HLC and the 26 individual competencies of health administration graduates upon job entry below 4.00 (on a 1-5 scale). Of the 26 competencies, these CEOs scored Information Seeking (mean = 3.98) and Information Technology Management (mean = 3.98) the highest, Performance Measurement (mean = 3.87) and Professionalism (mean = 3.87) second, and Self Confidence (mean = 3.78) third.

In terms of gender, male and female CEOs in the final sample scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. Male CEOs scored Information Seeking (mean = 3.93) and Information Technology Management (mean = 3.93) the highest, followed by Professionalism (mean = 3.85) and Performance Measurement (mean = 3.83). Female CEOs scored Information Seeking (mean = 4.33) and Information Technology Management (mean = 4.33) the highest, followed by Collaboration (mean = 4.17) and Performance Measurement (mean = 4.17), as well as Achievement Orientation (mean = 4.00), Communication (mean = 4.00), Professionalism (mean = 4.00), and Relationship Building (mean = 4.00). Male and female CEOs separately scored Information Seeking and Information Technology Management the highest.

Table 3

Intercorrelations between NCHL Competencies

Comp	HLC	AO	AT	CO	FS	IS	IT	SO	AC	CL	COL	COM	II	ITM	IN	OA	PEM	PM	PEM	HRM	IU	PR	RB	SC	SD	TD
AO	0.64	1.00																								
AT	0.60	0.49	1.00																							
CO	0.69	0.40	0.34	1.00																						
FS	0.44	0.40	0.29	0.16	1.00																					
IS	0.70	0.48	0.35	0.57	0.02	1.00																				
IT	0.67	0.39	0.41	0.46	0.08**	0.57	1.00																			
SO	0.65	0.47	0.48	0.38	0.32	0.39	0.35	1.00																		
AC	0.63	0.35	0.28**	0.60	0.17**	0.45	0.37	0.37	1.00																	
CL	0.59	0.33	0.37	0.26**	0.34	0.22**	0.32	0.62	0.38	1.00																
COL	0.41	0.37	0.29	0.21**	-0.07**	0.54	0.36	0.19**	0.16**	0.08**	1.00															
COM	0.78	0.35	0.51	0.47	0.23**	0.50	0.65	0.51	0.54	0.47	0.24**	1.00														
II	0.71	0.42	0.38	0.49	0.27**	0.35	0.35	0.37	0.45	0.44	0.26**	0.60	1.00													
ITM	0.44	0.38	0.18**	0.23**	0.34	0.54	0.48	0.09**	0.10**	-0.03**	0.32	0.25**	0.25**	1.00												
IN	0.67	0.37	0.46	0.35	0.50	0.36	0.39	0.39	0.30	0.32	0.10**	0.51	0.43	0.28**	1.00											
OA	0.53	0.28**	0.39	0.17**	0.26**	0.00ns	0.30	0.54	0.29**	0.53	0.03**	0.49	0.63	-0.11**	0.36**	1.00										
PEM	0.68	0.43	0.54	0.40	0.28**	0.55	0.48	0.37	0.44	0.40	0.32	0.53	0.45	0.46	0.47	0.18**	1.00									
PM	0.70	0.42	0.36	0.37	0.25**	0.45	0.65	0.25**	0.49	0.51	0.32	0.55	0.44	0.37	0.41	0.36	0.59	1.00								
PREM	0.62	0.41	0.38	0.32	0.34	0.50	0.22**	0.31	0.20	0.32	0.22**	0.43	0.47	0.18**	0.55	0.21**	0.50	0.48	1.00							
HRM	0.46	0.27**	0.08ns	0.40	0.12**	0.28**	0.13**	0.33	0.33	0.16**	0.00ns	0.30	0.51	0.16**	0.11**	0.41	0.15**	0.19**	0.25**	1.00						
IU	0.66	0.19**	0.19**	0.50	0.32	0.48	0.35	0.28**	0.36	0.28**	0.16**	0.44	0.52	0.26**	0.52	0.40	0.23**	0.35	0.36	0.53	1.00					
PR	0.74	0.57	0.50	0.68	0.30	0.48	0.45	0.54	0.54	0.35	0.27**	0.61	0.46	0.33	0.50	0.24**	0.42	0.34	0.28	0.25**	0.41**	1.00				
RB	0.81	0.43	0.58	0.58	0.29	0.52	0.59	0.50	0.52	0.36	0.49	0.71	0.55	0.39	0.58	0.45	0.49	0.54	0.33	0.33	0.53	0.67	1.00			
SC	0.74	0.33	0.44	0.46	0.58	0.49	0.36	0.45	0.40	0.37	0.15**	0.59	0.45	0.37	0.70	0.33	0.48	0.46	0.57	0.24**	0.57	0.55	0.53	1.00		
SD	0.63	0.24**	0.15**	0.54	0.15**	0.42	0.36	0.40	0.38	0.43	0.13**	0.43	0.44	0.09**	0.33	0.37	0.27**	0.35	0.29	0.50	0.71	0.55	0.48	0.40	1.00	
TD	0.62	0.27**	0.12**	0.55	0.04**	0.44	0.44	0.44	0.38	0.41	0.07**	0.54	0.44	0.12**	0.33	0.48	0.29	0.33	0.41	0.55	0.54	0.42	0.42	0.42	0.54	1.00
TL	0.77	0.55	0.43	0.50	0.38	0.57	0.45	0.47	0.47	0.56	0.38	0.53	0.43	0.20**	0.43	0.33	0.46	0.61	0.61	0.24**	0.49	0.49	0.58	0.58	0.48	0.42

Note: Pearson's product moment correlation between NCHL Health Leadership Competencies (n = 46). All correlations significant at $p < 0.05$ unless otherwise noted as non-significant (ns). Comp. = NCHL Competency, HLC = Health Leadership Competency, AO = Achievement Orientation, AT = Analytical Thinking, CO = Community Orientation, FS = Financial Skills, IS = Information Seeking, IT = Innovative Thinking, SO = Strategic Orientation, AC = Accountability, CL = Change Leadership, COL = Collaboration, COM = Communication, II = Impact and Influence, ITM = Information Technology Management, IN = Initiative, OA = Organizational Awareness, PEM = Performance Measurement, PM = Process Management and Organizational Design, PRM = Project Management, HRM = Human Resources Management, IU = Interpersonal Understanding, PR = Professionalism, RB = Relationship Building, SC = Self Confidence, SD = Self Development, TD = Talent Development, and TL = Team Leadership.

In terms of age, sample CEOs in different age groups scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. Specifically, CEOs aged 36-40 scored Organizational Awareness (mean = 4.00) the highest. CEOs aged 46-50 scored Analytical Thinking (mean = 4.67) the highest, followed by Achievement Orientation (mean = 4.33), Information Seeking (mean = 4.33), Information Technology Management (mean = 4.33), Project Management (mean = 4.33), Professionalism (mean = 4.33), and Self Confidence (mean = 4.33). CEOs aged 51-55 scored Information Seeking (mean = 4.17), Information Technology Management (mean = 4.17), Collaboration (mean = 4.17), and Performance Measurement (mean = 4.17) the highest. Finally, CEOs aged 66-70 scored Performance Measurement (mean = 4.33), Process Management and Organizational Design (mean = 4.33), and Professionalism (mean = 4.33) the highest.

In terms of education, sample CEOs with a graduate degree in a healthcare management (HCM) major or concentration scored HLC and the 26 individual competencies of health administration graduates upon job entry differently from those CEOs without a graduate degree in a HCM major or concentration. CEOs with HCM education scored Information Technology Management (mean = 4.08) and Information Seeking (mean = 4.05) the highest. CEOs without HCM education scored Performance Measurement (mean = 4.00) the highest.

In terms of FACHE years (number of years as a FACHE), sample CEOs in different tenure groups scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. Specifically, CEOs who had been a FACHE for 3 - 5 years scored Information Seeking (mean = 4.50) and Project Management (mean = 4.50) the highest. CEOs who had been a FACHE for 12 - 14 years scored Information Seeking (mean = 4.33), Initiative (mean = 4.33), Interpersonal Understanding (mean = 4.33), and Self Development (mean = 4.33) the highest. CEOs who had been a FACHE for 15 - 17 years scored Information Seeking (mean = 4.60) the highest. In contrast, CEOs who had been a FACHE for 18 - 20 years and for more than 20 years scored Information Technology Management (mean = 4.11 and 4.38) the highest.

In terms of position years (number of years as a hospital CEO), sample CEOs in different tenure groups scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. Specifically, CEOs with a tenure of 1-5 years, 11-15 years, and 16-20 years respectively scored Information Seeking (mean = 4.00, 4.14, and 4.25) the highest. In contrast, CEOs with a tenure of 6-10 years scored Information Technology Management (mean = 4.25) the highest.

In terms of hospital location, sample CEOs of urban, suburban, and rural hospitals scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. Specifically, CEOs of urban hospitals

scored Achievement Orientation (mean = 3.86), Collaboration (mean = 3.86), and Information Technology Management (mean = 3.86) the highest. CEOs of suburban hospitals scored Information Seeking (mean = 4.33) the highest, followed by Information Technology Management (mean = 4.25) and Self Confidence (mean = 4.08). Finally, CEOs of rural hospitals scored Information Seeking (mean = 4.04) the highest, followed by Performance Measurement (mean = 4.00) and Information Technology Management (mean = 3.89).

Finally, in terms of geographic region, sample CEOs representing all U.S. regions scored HLC and the 26 individual competencies of health administration graduates upon job entry differently. More specifically, CEOs of hospitals in the Northeast scored Information Seeking (mean = 4.00) and Information Technology Management (mean = 4.00) the highest. CEOs of hospitals in the Southeast scored Achievement Orientation (mean = 4.11) and Performance Measurement (mean = 4.11) the highest. Similar to hospital CEOs in the Northeast, CEOs of hospitals in the Midwest scored Information Seeking (mean = 3.92) the highest as well. Though CEOs of hospitals in both Northeast and Midwest scored Information Seeking as the highest, the former score (4.00) is higher than the latter score (3.92). In contrast, CEOs of hospitals in the Southwest scored Collaboration (mean = 4.29) the highest, while CEOs of hospitals in the West scored Professionalism (mean = 5.00) the highest.
Additionally, Tables 4.1-4.4 report the results of one-way ANOVA tests and Tukey's post-hoc analyses of hospital CEOs' groupings. Specifically, in terms of sample CEOs' gender, only the mean scores of Human Resources Management (HRM) were found to have statistically significant differences. Results of Tukey's post-hoc analysis indicate that female hospital CEOs on average scored health administration graduates' HRM competency upon job entry significantly higher than their male counterparts (mean = 3.83 vs. 3.05, on a 1-5 scale).

In terms of sample CEOs' age, the mean scores of Analytical Thinking (AT) were found to have statistically significant differences. Results of Tukey's post-hoc analysis indicate that hospital CEOs aged 46-50 on average scored health administration graduates' AT competency upon job entry significantly higher than the CEOs aged 36-40 (mean = 4.67 vs. 3.00, on a 1-5 scale). Moreover, the mean scores of Professionalism (PR) were found to have statistically significant differences across classes of CEO ages.

In terms of sample CEOs' education, the mean scores of Information Technology Management (ITM) were found to have statistically significant differences. Results of Tukey's post-hoc analysis indicate that hospital CEOs with a graduate degree in a healthcare management (HCM) major or concentration on average scored health administration graduates' ITM competency upon job entry significantly higher than hospital CEOs without a graduate degree in a HCM major or concentration (mean = 4.08 vs. 3.50, on a 1-5 scale).

In terms of sample CEOs' FACHE years (number of years as a FACHE), the mean scores of Human Resources Management (HRM) were found to have statistically significant differences. Results of Tukey's post-hoc analysis indicate that hospital CEOs who had been a FACHE for 6 - 8 years on average scored health administration graduates' HRM competency upon job entry significantly higher than hospital CEOs who had been a FACHE for 9 - 11 years (mean = 3.39 vs. 2.33, on a 1-5 scale). Furthermore, the mean scores of Self Development (SD) were found to have statistically significant differences. Results of Tukey's post-hoc analysis indicate that hospital CEOs who had been a FACHE for 12 - 14 years on average scored health administration graduates' HRM competency upon job entry significantly higher than hospital CEOs who had been a FACHE for 9 - 11 years (mean = 4.33 vs. 2.83, on a 1-5 scale). None of the mean scores were found to have statistically significant differences in terms of sample CEOs' position years (number of years as a hospital CEO), hospital location, or geographic region. The mean scores pertain to the overall weighted health leadership competency (HLC) and the 26 individual health leadership competencies.

In summary, six important themes emerged from the descriptive analyses. First, sample CEOs collectively viewed health leadership competencies of health administration graduates upon job entry unfavorably. Second, female CEOs viewed health leadership competencies of health administration graduates upon job entry more favorably than male CEOs, particularly as related to Human Resources Management competency. Third, sample CEOs in different age groups viewed Analytical Thinking and Professionalism competencies of health administration graduates upon job entry significantly different. Fourth, Information Seeking, Information Technology Management, and Performance Measurement were the three top health leadership competencies of health administration graduates upon job entry, as consistently rated by the sample hospital CEOs across gender, age, education, FACHE years, position years, hospital location, and geographic region. Collaboration was the consistently top-rated health leadership competency across gender, age, FACHE years, position years, hospital location, and geographic region. Achievement Orientation was the consistently top-rated health leadership competency across gender, age, position years, hospital location, and geographic region, while Professionalism was the consistently top-rated health leadership competency across gender, age, FACHE years, position years, and geographic region. Fifth, CEOs of suburban hospitals viewed health leadership competencies of health administration graduates upon job entry more favorably than CEOs of urban and rural hospitals. Finally, across all five geographic regions of the United States, hospital CEOs in the Midwest region viewed health leadership competencies of health administration graduates upon job entry least favorably.

Table 4.1

Mean and *SD* of 26 NCHL Competencies rated by CEOs

U.S. Hospital CEO Characteristic	HLC Mean	SD	AO Mean	SD	AT Mean	SD	CO Mean	SD	FS Mean	SD	IS Mean	SD	IT Mean
Total Sample	3.51	0.49	3.76	0.64	3.74	0.71	3.37	0.88	3.46	0.69	3.98	0.77	3.52
Gender													
Male	3.49	0.46	3.73	0.64	3.73	0.68	3.33	0.86	3.45	0.71	3.93	0.73	3.50
Female	3.66	0.72	4.00	0.63	3.83	0.98	3.67	1.03	3.50	0.55	4.33	1.03	3.67
Age (Years) [1]													
36-40	2.85	NA [1]	3.00	NA	4.00 *	NA	2.00	NA	3.00	NA	3.00	NA	2.00
41-45	3.19	0.55	3.40	0.55	3.00	0.71	3.00	1.23	3.20	0.45	4.00	1.00	3.60
46-50	3.64	0.44	4.33	0.58	4.67	0.58	3.33	0.58	3.67	0.58	4.33	0.58	4.00
51-55	3.58	0.58	3.50	1.05	3.83	0.75	3.33	0.82	3.50	0.84	4.17	0.75	3.67
56-60	3.60	0.45	3.89	0.47	3.89	0.58	3.50	0.86	3.78	0.65	3.94	0.80	3.56
61-65	3.46	0.52	3.80	0.63	3.50	0.71	3.50	0.71	3.10	0.57	4.00	0.82	3.30
66-70	3.60	0.51	3.67	0.58	3.67	0.58	3.33	1.53	3.00	1.00	3.67	0.58	3.67
Education [2]													
Yes	3.52	0.51	3.79	0.66	3.71	0.77	3.40	0.86	3.45	0.72	4.05	0.80	3.61
No	3.45	0.42	3.63	0.52	3.88	0.35	3.25	1.04	3.50	0.54	3.63	0.52	3.13
FACHE Years [3]													
3-6	3.69	0.11	4.00	0.00	4.00	1.41	2.50	0.71	3.50	0.71	4.50	0.71	3.50
6-9	3.52	0.55	3.85	0.56	3.69	0.86	3.31	1.03	3.54	0.52	4.00	0.71	3.39
9-12	3.23	0.57	3.67	0.82	3.83	0.75	3.00	0.63	3.50	0.55	3.50	0.84	3.50
12-15	3.77	0.39	4.00	0.00	4.00	0.00	3.67	0.58	3.67	0.58	4.33	0.58	4.00
15-18	3.59	0.34	3.60	1.14	3.80	0.84	4.00	0.71	3.20	0.84	4.60	0.55	3.40
18-21	3.44	0.49	3.56	0.53	3.56	0.53	3.33	1.00	3.78	0.83	3.56	0.73	3.33
21-24	3.58	0.56	3.88	0.64	3.75	0.71	3.50	0.76	3.00	0.76	4.13	0.84	3.88
Position Years													
1 - 5	3.46	0.47	3.75	0.58	3.69	0.60	3.19	0.83	3.31	0.60	4.00	0.82	3.44
6 - 10	3.53	0.53	3.75	0.68	3.81	0.75	3.25	0.86	3.75	0.78	3.88	0.72	3.63
11 - 15	3.58	0.54	3.86	0.38	3.71	0.95	3.57	0.79	3.14	0.38	4.14	0.90	3.57
16 - 20	3.44	0.56	3.75	1.26	3.75	0.96	3.75	1.26	3.50	1.00	4.25	0.96	3.25
21 - 25	3.00	NA [4]	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00
26 - 30	3.69	NA [4]	4.00	NA	4.00	NA	4.00	NA	4.00	NA	4.00	NA	4.00
Over 30	4.04	NA [4]	4.00	NA	4.00	NA	5.00	NA	3.00	NA	4.00	NA	4.00
Hospital Location													
Urban	3.43	0.33	3.86	0.38	3.71	0.49	2.86	0.38	3.57	0.54	3.71	0.76	3.29
Suburban	3.51	0.57	3.75	0.87	3.75	0.75	3.67	0.65	3.58	0.79	4.00	0.85	3.67
Rural	3.53	0.51	3.74	0.59	3.74	0.76	3.37	1.01	3.37	0.69	4.04	0.76	3.52
Geographic Region													
Northeast	3.43	0.40	3.50	0.58	3.75	0.50	3.25	0.96	3.50	0.58	4.00	0.82	3.00
Southeast	3.59	0.50	4.11	0.60	3.89	0.78	3.44	0.73	3.78	0.67	4.00	0.87	3.67
Midwest	3.42	0.46	3.63	0.58	3.58	0.78	3.25	0.85	3.42	0.65	3.92	0.78	3.42
Southwest	3.64	0.68	4.00	0.82	4.00	0.58	3.57	1.13	3.43	0.79	4.14	0.90	3.86
West	3.89	0.22	3.50	0.71	4.00	0.00	4.00	1.41	2.50	0.71	4.00	0.00	4.00

NOTE: $+p < 0.10$, $* p < 0.05$, $** p < 0.01$ significant difference between mean variable scores within demographic characteristic according to one-way ANOVA (n = 46). [1]No respondents were aged below 36 or over 70. NA = standard deviation not available for one observation of CEO Age at 36-40 years. [2]Education = A graduate degree with a major or concentration in healthcare management. [3]No respondents were as a FACHE for fewer than 3 years; and 2 Lifetime Members were treated as a FACHE for 21-24 years. [4]NA = standard deviation not available for one observation of CEO Position Years at 21-25, 26-30, and Over 30, respectively.

Table 4.2

Mean and *SD* of 26 NCHL Competencies rated by CEOs

U.S. Hospital CEO Characteristic	SO Mean	SD	AC Mean	SD	CL Mean	SD	COL Mean	SD	COM Mean	SD	II Mean	SD	ITM Mean
Total Sample	3.11	0.67	3.13	0.83	3.15	0.92	3.72	0.94	3.57	0.72	3.11	0.67	3.98
Gender													
Male	3.10	0.67	3.10	0.84	3.20	0.76	3.65	0.92	3.50	0.68	3.08	0.66	3.93
Female	3.17	0.75	3.33	0.82	2.83	1.72	4.17	0.98	4.00	0.89	3.33	0.82	4.33
Age (Years) [1]													
36-40	3.00	NA [1]	2.00	NA	3.00	NA	4.00	NA	3.00	NA	3.00	NA	2.00
41-45	3.00	0.00	2.80	1.10	3.00	1.00	3.60	0.89	3.00	0.71	2.40	0.89	3.80
46-50	3.00	1.00	2.67	0.58	3.00	0.00	4.00	1.00	3.67	0.58	3.00	0.00	4.33
51-55	3.00	0.89	3.17	0.75	3.00	0.89	4.17	0.75	3.67	1.03	3.33	0.82	4.17
56-60	3.22	0.55	3.28	0.67	3.39	0.85	3.50	1.15	3.67	0.69	3.17	0.51	4.11
61-65	3.00	0.94	3.20	0.92	2.80	1.23	3.70	0.82	3.50	0.53	3.20	0.63	3.90
66-70	3.33	0.58	3.33	1.53	3.67	0.58	4.00	0.00	4.00	1.00	3.33	1.16	3.67
Education [2]													
Yes	3.16	0.68	3.05	0.80	3.16	0.97	3.74	1.01	3.63	0.71	3.08	0.71	4.08 +
No	2.88	0.64	3.50	0.93	3.13	0.64	3.63	0.52	3.25	0.71	3.25	0.46	3.50
FACHE Years [3]													
3-6	3.50	0.71	2.50	0.71	3.50	0.71	4.00	0.00	3.50	0.71	3.00	0.00	4.00
6-9	3.15	0.56	3.31	0.95	3.31	0.86	3.85	0.56	3.54	0.78	3.15	0.69	3.85
9-12	2.83	0.41	3.00	0.63	3.00	0.63	3.17	0.98	3.33	0.82	2.67	0.82	3.67
12-15	3.33	0.58	2.67	0.58	3.33	0.58	4.00	1.00	3.67	0.58	3.33	0.58	3.67
15-18	3.00	0.71	3.40	0.89	3.40	1.14	4.20	0.84	3.80	0.45	2.80	0.84	4.00
18-21	2.89	0.60	3.11	0.93	2.78	1.30	3.33	1.41	3.44	0.88	3.33	0.71	4.11
21-24	3.38	1.06	3.13	0.84	3.13	0.84	3.88	0.84	3.75	0.71	3.25	0.46	4.38
Position Years													
1 - 5	3.25	0.68	2.81	0.75	3.25	0.58	3.94	0.77	3.38	0.50	3.06	0.44	3.75
6 - 10	3.06	0.68	3.19	0.83	3.25	0.86	3.50	1.21	3.69	0.95	3.19	0.83	4.25
11 - 15	3.00	0.82	3.43	0.79	2.71	1.50	3.71	0.76	3.71	0.76	3.14	0.69	4.00
16 - 20	3.00	0.82	3.00	0.82	3.00	1.41	4.00	0.82	3.50	0.58	2.75	0.96	4.00
21 - 25	3.00	NA [4]	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00
26 - 30	3.00	NA [4]	4.00	NA	3.00	NA	3.00	NA	4.00	NA	3.00	NA	5.00
Over 30	3.00	NA [4]	5.00	NA	4.00	NA	4.00	NA	4.00	NA	4.00	NA	3.00
Hospital Location													
Urban	3.00	0.58	3.14	0.90	3.00	0.58	3.86	0.90	3.57	0.54	3.14	0.69	3.86
Suburban	3.00	0.74	2.83	0.84	3.17	1.03	3.58	0.90	3.42	0.67	3.00	0.85	4.25
Rural	3.19	0.68	3.26	0.81	3.19	0.96	3.74	0.98	3.63	0.79	3.15	0.60	3.89
Geographic Region													
Northeast	3.25	0.50	2.75	0.96	3.25	0.50	3.75	0.96	3.50	0.58	3.00	0.00	4.00
Southeast	3.11	0.33	3.11	0.78	3.11	0.78	4.00	0.87	3.56	0.73	3.11	0.60	4.56
Midwest	2.96	0.69	3.17	0.76	3.00	1.02	3.42	0.97	3.46	0.78	3.04	0.69	3.88
Southwest	3.43	0.98	3.00	1.00	3.43	0.98	4.29	0.76	3.71	0.49	3.14	0.90	3.71
West	3.50	0.71	4.00	1.41	4.00	0.00	4.00	0.00	4.50	0.71	4.00	0.00	3.50

NOTE: $+p < 0.10$, $* p < 0.05$, $** p < 0.01$ significant difference between mean variable scores within demographic characteristic according to one-way ANOVA (n = 46). [1]No respondents were aged below 36 or over 70. NA = standard deviation not available for one observation of CEO Age at 36-40 years. [2]Education = A graduate degree with a major or concentration in healthcare management. [3]No respondents were as a FACHE for fewer than 3 years; and 2 Lifetime Members were treated as a FACHE for 21-24 years. [4]NA = standard deviation not available for one observation of CEO Position Years at 21-25, 26-30, and Over 30, respectively.

Table 4.3

Mean and *SD* of 26 NCHL Competencies rated by CEOs

U.S. Hospital CEO Characteristic	IN Mean	SD	OA Mean	SD	PEM Mean	SD	PM Mean	SD	PRM Mean	SD	HRM Mean	SD	IU Mean
Total Sample	3.44	0.83	3.07	0.71	3.87	0.78	3.67	0.87	3.44	0.83	3.15	0.73	3.44
Gender													
Male	3.45	0.85	3.08	0.69	3.83	0.75	3.70	0.82	3.43	0.81	3.05*	0.68	3.43
Female	3.33	0.82	3.00	0.89	4.17	0.98	3.50	1.23	3.50	1.05	3.83	0.75	3.50
Age (Years) [1]													
36-40	3.00	NA [1]	4.00	NA	3.00	NA	2.00	NA	3.00	NA	3.00	NA	3.00
41-45	2.80	0.84	2.60	0.55	3.20	0.84	3.00	1.00	2.80	1.10	3.00	1.00	3.20
46-50	3.67	1.53	3.00	1.00	3.67	1.16	4.00	1.00	4.33	1.16	2.33	1.16	3.33
51-55	3.50	0.55	3.00	0.89	4.17	0.75	4.00	0.63	3.67	0.52	3.17	0.75	3.67
56-60	3.67	0.84	3.17	0.62	4.00	0.69	3.67	0.91	3.39	0.85	3.22	0.65	3.56
61-65	3.30	0.82	2.90	0.74	3.80	0.79	3.70	0.68	3.60	0.70	3.40	0.52	3.40
66-70	3.33	0.58	3.67	0.58	4.33	0.58	4.33	0.58	3.00	0.00	3.00	1.00	3.00
Education [2]													
Yes	3.42	0.89	3.00	0.70	3.84	0.82	3.66	0.85	3.42	0.89	3.13	0.78	3.42
No	3.50	0.54	3.38	0.74	4.00	0.54	3.75	1.04	3.50	0.54	3.25	0.46	3.50
FACHE Years [3]													
3-6	4.00	0.00	3.50+	0.71	3.50	0.71	3.50	0.71	4.50	0.71	3.50+	0.71	4.00
6-9	3.08	0.76	3.23	0.73	3.69	0.75	3.62	1.04	3.31	0.75	3.39	0.77	3.46
9-12	3.50	1.05	2.83	0.75	3.67	1.03	3.50	1.23	3.00	1.27	2.33	0.82	3.00
12-15	4.33	0.58	3.33	0.58	4.00	0.00	4.00	1.00	4.00	0.00	3.33	0.58	4.33
15-18	3.40	0.55	2.20	0.45	4.40	0.55	3.60	0.55	3.80	0.84	2.80	0.45	3.40
18-21	3.78	0.83	3.22	0.67	3.89	0.78	3.56	0.88	3.33	0.87	3.22	0.67	3.44
21-24	3.13	0.84	3.13	0.64	4.00	0.93	4.00	0.54	3.38	0.52	3.38	0.52	3.25
Position Years													
1 - 5	3.50	0.73	3.13	0.72	3.81	0.66	3.50	0.82	3.69	0.70	3.13	0.50	3.44
6 - 10	3.50	1.03	3.13	0.81	3.88	0.96	3.75	1.00	3.25	1.00	2.94	0.85	3.44
11 - 15	3.43	0.79	3.00	0.58	4.00	0.82	3.86	0.69	3.71	0.76	3.71	0.76	3.43
16 - 20	2.75	0.50	2.50	0.58	4.00	0.82	3.50	1.00	3.00	0.82	3.00	0.82	3.50
21 - 25	3.00	NA [4]	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00
26 - 30	4.00	NA [4]	3.00	NA	4.00	NA	4.00	NA	3.00	NA	3.00	NA	3.00
Over 30	4.00	NA [4]	4.00	NA	4.00	NA	5.00	NA	3.00	NA	4.00	NA	4.00
Hospital Location													
Urban	3.29	0.76	3.14	0.69	3.57	0.54	3.71	0.95	3.29	0.76	3.14	0.38	3.43
Suburban	3.58	1.17	2.92	0.79	3.75	0.87	3.75	0.97	3.42	1.17	2.92	0.90	3.50
Rural	3.41	0.69	3.11	0.70	4.00	0.78	3.63	0.84	3.48	0.70	3.26	0.71	3.41
Geographic Region													
Northeast	3.75	0.50	3.00	0.82	3.50	0.58	3.25	0.96	3.75	0.96	3.00	0.00	3.25
Southeast	3.67	1.00	2.89	0.78	4.11	0.78	3.67	1.12	3.11	0.93	3.00	0.87	3.56
Midwest	3.25	0.79	3.08	0.65	3.71	0.81	3.58	0.78	3.46	0.88	3.21	0.78	3.46
Southwest	3.57	0.98	3.00	0.82	4.14	0.69	4.00	0.82	3.71	0.49	3.14	0.69	3.29
West	3.50	0.71	4.00	0.00	4.50	0.71	4.50	0.71	3.00	0.00	3.50	0.71	3.50

NOTE: $+p < 0.10$, $* p < 0.05$, $** p < 0.01$ significant difference between mean variable scores within demographic characteristic according to one-way ANOVA (n = 46). [1]No respondents were aged below 36 or over 70. NA = standard deviation not available for one observation of CEO Age at 36-40 years. [2]Education = A graduate degree with a major or concentration in healthcare management. [3]No respondents were as a FACHE for fewer than 3 years; and 2 Lifetime Members were treated as a FACHE for 21-24 years. [4]NA = standard deviation not available for one observation of CEO Position Years at 21-25, 26-30, and Over 30, respectively.

Table 4.4

Mean and *SD* of 26 NCHL Competencies rated by CEOs

U.S. Hospital CEO Characteristic	PR Mean	SD	RB Mean	SD	SC Mean	SD	SD Mean	SD	TD Mean	SD	TL Mean	SD
Total Sample	3.87	0.83	3.67	0.76	3.78	0.81	3.46	0.72	3.24	0.74	3.57	0.78
Gender												
Male	3.85	0.86	3.63	0.74	3.78	0.80	3.48	0.75	3.20	0.69	3.58	0.71
Female	4.00	0.63	4.00	0.89	3.83	0.98	3.33	0.52	3.50	1.05	3.50	1.23
Age (Years) [1]												
36-40	2.00 *	NA [1]	3.00	NA	3.00	NA	2.00	NA	3.00	NA	3.00	NA
41-45	3.40	0.89	3.20	0.84	3.60	0.55	3.40	1.14	3.40	0.89	3.40	0.89
46-50	4.33	1.16	3.67	0.58	4.33	1.16	3.00	1.00	3.00	0.00	4.00	1.00
51-55	3.33	0.82	3.83	0.75	4.00	0.63	3.50	0.84	2.83	1.17	3.83	0.75
56-60	4.11	0.58	3.83	0.71	3.72	0.90	3.61	0.61	3.22	0.65	3.61	0.85
61-65	3.90	0.74	3.50	0.85	3.80	0.92	3.40	0.52	3.40	0.70	3.40	0.70
66-70	4.33	1.16	4.00	1.00	3.67	0.58	3.67	0.58	3.67	0.58	3.33	0.58
Education [2]												
Yes	3.95	0.77	3.71	0.77	3.82	0.87	3.47	0.69	3.26	0.69	3.58	0.83
No	3.50	1.07	3.50	0.76	3.63	0.52	3.38	0.92	3.13	0.99	3.50	0.54
FACHE Years [3]												
3-6	4.00	1.41	3.50	0.71	4.50	0.71	4.00 +	0.00	3.50	0.71	4.00	0.00
6-9	3.77	0.83	3.69	0.75	3.77	0.73	3.54	0.78	3.39	0.77	3.77	0.73
9-12	3.67	0.82	3.17	0.75	3.67	0.82	2.83	0.75	2.83	0.41	3.33	1.03
12-15	4.00	0.00	3.67	0.58	4.00	1.00	4.33	0.58	3.33	1.16	3.67	0.58
15-18	4.00	0.71	3.80	0.45	4.00	0.71	3.60	0.55	3.20	0.45	3.80	1.10
18-21	3.67	1.00	3.78	0.83	3.89	0.78	3.22	0.67	3.11	0.93	3.22	0.67
21-24	4.25	0.89	3.88	0.99	3.38	1.06	3.50	0.54	3.38	0.74	3.50	0.76
Position Years												
1 - 5	3.69	0.79	3.56	0.81	3.56	1.03	3.56	0.73	3.19	0.66	3.50	0.73
6 - 10	3.88	0.89	3.69	0.79	4.06	0.68	3.38	0.89	3.19	0.83	3.50	0.89
11 - 15	4.00	0.82	3.71	0.76	3.86	0.69	3.29	0.49	3.71	0.76	3.57	0.79
16 - 20	4.00	0.82	3.75	0.50	3.50	0.58	3.75	0.50	2.75	0.50	4.00	0.82
21 - 25	3.00	NA [4]	3.00	NA	3.00	NA	3.00	NA	3.00	NA	3.00	NA
26 - 30	5.00	NA [4]	4.00	NA	4.00	NA	3.00	NA	3.00	NA	4.00	NA
Over 30	5.00	NA [4]	5.00	NA	4.00	NA	4.00	NA	4.00	NA	4.00	NA
Hospital Location												
Urban	3.86	0.38	3.71	0.76	3.57	0.54	3.57	0.54	2.71	0.49	3.71	0.49
Suburban	3.92	0.79	3.58	0.79	4.08	0.79	3.42	0.90	3.25	0.62	3.58	1.00
Rural	3.85	0.95	3.70	0.78	3.70	0.87	3.44	0.70	3.37	0.79	3.52	0.75
Geographic Region												
Northeast	3.75	1.26	3.75	0.96	3.75	0.96	3.00	0.82	3.25	0.50	3.75	0.50
Southeast	4.22	0.44	4.00	0.71	3.78	1.09	3.33	0.71	3.00	0.50	3.56	1.13
Midwest	3.63	0.82	3.42	0.65	3.75	0.68	3.46	0.72	3.33	0.82	3.50	0.66
Southwest	4.00	0.82	3.86	0.90	3.86	1.07	3.71	0.76	3.00	0.82	3.71	0.95
West	5.00	0.00	4.50	0.71	4.00	0.00	4.00	0.00	4.00	0.00	3.50	0.71

NOTE: $+p < 0.10$, $* p < 0.05$, $** p < 0.01$ significant difference between mean variable scores within demographic characteristic according to one-way ANOVA (n = 46). [1]No respondents were aged below 36 or over 70. NA = standard deviation not available for one observation of CEO Age at 36-40 years. [2]Education = A graduate degree with a major or concentration in healthcare management. [3]No respondents were as a FACHE for fewer than 3 years; and 2 Lifetime Members were treated as a FACHE for 21-24 years. [4]NA = standard deviation not available for one observation of CEO Position Years at 21-25, 26-30, and Over 30, respectively.

Regression analyses

Table 5 reports the results of linear regression analyses as related to sample hospital CEOs' hiring decision regressed on health administration graduates' health leadership competency across the CEOs' gender, age, and hospital locations. Most of the results from the regression analyses were not statistically significant (i.e., $p > 0.05$).

Table 5

CEO hiring decisions regressed on HA graduates' Health Leadership Competency across CEOs' gender, age, and hospital locations

CEO characteristics	Term	Beta (95% CI)	SE	Z	*p*
All CEOs (*n*=46)	Constant	2.03 (0.94, 3.11)	0.54	3.76	0.001
	HLC	-0.13, (-0.44, 0.18)	0.15	-0.86	0.393
	R-square	1.66%			
Gender					
Male	Constant	2.40 (1.19,3.61)	0.60	4.02	<0.001
	HLC	-0.22, (-0.57, 0.12)	0.17	-1.13	0.198
	R-square	4.23%			
Female	Constant	0.04 (-2.418, 2.489)	0.88	0.04	0.970
	HLC	0.31 (-0.351, 0.969)	0.24	1.30	0.263
	R-square	29.71%			
Age (years)					
55 or younger	Constant	1.07 (-0.86, 3.01)	0.90	1.20	0.253
	HLC	0.14 (-0.43, 0.70)	0.26	0.52	0.611
	R-square	2.04%			
Over 55	Constant	2.71 (1.31, 4.11)	0.69	3.95	<0.001
	HLC	-0.32 (-0.71, 0.07)	0.19	-1.66	0.108
	R-square	8.68%			
Hospital Type					
Urban	Constant	0.56 (-5.86, 6.98)	2.50	0.22	0.832
	HLC	0.30 (-1.57, 2.16)	0.72	0.41	0.700
	R-square	3.22%			
Suburban	Constant	2.94 (0.98, 4.91)	0.88	3.33	0.008
	HLC	-0.36 (-0.92,0.19)	0.25	-.146	0.175
	R-square	17.6%			
Rural	Constant	1.68 (0.20, 3.15)	0.72	2.34	0.027
	HLC	-0.05 (-0.46, 0.37)	0.20	-.023	0.823
	R-square	0.20%			

NOTE: Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient; HLC = Health Leadership Competencies; $n = 46$.

Analyses of qualitative data

In addition to demographic characteristics and quantitative data, qualitative data in narratives were also collected from FACHE credentialed U.S. hospital CEOs who responded to the survey. The qualitative data were coded according to the NCHL's 26 competencies. The frequency of each competency's occurrence was then tallied.

Table 6 reports the frequency distribution of all health leadership competencies sought by the sample hospital CEOs, using the 26 competencies in the NCHL's Health Leadership Competency Model. The table lists the 26 competencies in the same sequence as presented in the survey instrument. Notably, no qualitative data collected from the 46 completed responses matched two of the 26 competencies: (1) Process Management and Organizational Design, and (2) Talent Development.

Table 7 reports health administration graduates' health leadership competencies in the order of importance (from the most important to the least important) to the sample hospital CEOs, using the 26 competencies in the NCHL's Health Leadership Competency Model. On the basis of Table 7, Table 8 reports health administration graduates' top 15 health leadership competencies that were important to the sample hospital CEOs. On the basis of the top 15 competencies, Table 8 also reports health administration graduates' top five ranked health leadership competencies that mattered most to the sample hospital CEOs. The top five ranked health leadership competencies are Self Development, Information Seeking, Analytical Thinking, Organizational Awareness, Accountability, Achievement Orientation, Change Leadership, Interpersonal Understanding, and Professionalism. Finally, the top five ranked competencies were mapped to the NCHL Health Leadership Competency Model's three themes: Transformation, Execution, and People.

Table 6

Frequency distribution of the 26 NCHL Health Leadership Competencies

Competency	Frequency
Achievement Orientation	5
Analytical Thinking	9
Community Orientation	2
Financial Skills	3
Information Seeking	11
Innovative Thinking	1
Strategic Orientation	4

Table 6, *cont.*

Accountability	5
Change Leadership	5
Collaboration	1
Communication	4
Impact and Influence	1
Information Technology Management	1
Initiative	3
Organizaitonal Awareness	7
Performance Measurement	7
Process Management and Organizational Design	0
Project Management	1
Human Resources Management	1
Interpersonal Understanding	5
Professionalism	5
Relationship Building	2
Self Confidence	2
Self Development	21
Talent Development	0
Team Leadership	2

Note: The NCHL competencies are listed in the same sequence as presented in the survey instrument (refer to Appendix A).

Table 7

Ranking of Health Administration graduates' Healthcare Leadership Competencies from the perspectives of U.S. hospital CEOs

NCHL Competencies	Frequency
Self Development	21
Information Seeking	11
Analytical Thinking	9
Organizational Awareness	7
Accountability	5
Achievement Orientation	5

Table 7, *cont.*

Change Leadership	5
Interpersonal Understanding	5
Professionalism	5
Communication	4
Stretegic Orientation	4
Financial Skills	3
Initiative	3
Performance Measurement	3
Community Orientation	2
HR Management	2
Relationship Building	2
Self Confidence	2
Team Leadership	2
Collaboration	1
Impact and Influence	1
Information Technology Management	1
Innovative Thinking	1
Project Management	1
Process Management and Organizational Design	0
Talent Development	0

NOTE: The NCHL competencies are listed in the sequence of importance to the U.S. hospital CEOs in the final sample (n = 46).

Table 8

Mapping the most important Health Administration graduates' Healthcare Leadership Competencies as perceived by the U.S. hospital CEOs to the NCHL model's themes

NCHL Competencies[1]	Top 15 Competencies	Top 5 ranked Competencies	NCHL Health Competency Model's Three Themes[2]
Self Development	21	21	People
Information Seeking	11	11	Transformation
Analytical Thinking	9	9	Transformation

Table 8, *cont.*

Organizational Awareness	7	7	Execution
Accountability	5	5	Execution
Achievement Orientation	5	5	Transformation
Change Leadership	5	5	Execution
Interpersonal Understanding	5	5	People
Professionalism	5	5	People
Communication	4		Execution
Strategic Orientation	4		Transformation
Financial Skills	3		Transformation
Initiative	3		Execution
Performance Management	3		Execution
Community Orientation	2		Transformation

NOTE: [1]The National Center for Healthcare Leadership (NCHL)'s competencies are listed in the sequence of importance to the U.S. hospital CEOs in the final sample (n = 46). [2]Copyright 2005-2010 National Center for Healthcare Leadership (2010).

Discussion

The results from quantitative and qualitative data analyses have been triangulated. Table 9 presents a summary of the consolidated results.

As shown in Table 10, hospital CEOs viewed that health administration graduates upon job entry demonstrated Information Seeking, Professionalism, and Achievement Orientation competencies in line with the needs of the CEOs. The study results also revealed a gap. Specifically, from the perspective of the sample hospital CEOs, health administration graduates upon job entry lack several top competencies sought by the CEOs: Self Development, Analytical Thinking, Organizational Awareness, Accountability, Change Leadership, and Interpersonal Understanding.

Table 9

Summary of quantitative and qualitative results

Top Competencies[1] of Health Administration Graduates upon Job Endtry as Consistently Rated by Hospital CEOs	Top Five Ranked Competencies[1] Sought by Hospital CEOs
Information Seeking	Self Development
Information Technology Management	Information Seeking
Performance Management	Analytical Thinking
Collaboration	Organizational Awareness
Professionalism	Accountability
Achievement Orientation	Achievement Orientation
	Change Leadership
	Interpersonal Understanding
	Professionalism

NOTE: [1]The National Center for Healthcare Leadership (NCHL)'s competencies in its Health Leadership Competency Model.

Study limitations

This cross-sectional observational study presents several key limitations. First, the survey instrument was developed using the 26 competencies included in the NCHL Health Leadership Competency Model version 2.1 completed in December 2005 (NCHL, 2012). The reliability and validity of the survey instrument relied on the reliability and validity of this particular NCHL Health Leadership Competency Model. According to the NCHL (2010), interdisciplinary subject matter experts developed and validated the Model then refined it in collaboration with industrial and educational psychologists, and refinement and validation of the Model are ongoing with continued solicitations for feedback from users, researchers, and expert panels regarding its validity and relevance (NCHL, 2010).

Second, data collection was extremely challenging, resulting in a low response rate at slightly above 5% [48 / (554+381) = 48 / 935 = 5.13%]. Specifically, two attempts were made. In the first attempt, 554 letters were mailed via the U.S. Postal Services (USPS) to FACHE-credentialed U.S. hospital C-Suite executives (CEO, CFO, CMO, CIO, CLC, and other). The mailed letter included a link to the web-based survey. In the second attempt, an email was sent to another 390 FACHE credentialed C-Suite executives of U.S. hospitals. The email included a link to the web-based survey. Of the 390 emails sent,

381 were delivered. However, only 48 responses were returned from CEOs of hospitals across all U.S. regions (12 responses from the USPS mail group and 36 from the email group. Of the 48 total responses, 2 were incomplete and thereby excluded from the final sample.

Third, the study's scope was limited to the FACHE-credentialed hospital C-Suite officers. FACHE-credentialed hospital CEOs constituted the final study sample. Limiting the study to include only FACHE-credentialed hospital C-Suite executives may have contributed to the very low response rate and resulted in over 80% of the respondents being over 50 years old. This concentration in respondents aged over 50 may indicate age-related bias in their perceptions of health administration graduates' leadership competencies upon job entry. This bias may skew the study results to some extent.

Fourth, the study's scope excluded FACHE-credentialed C-Suite officers of other healthcare organizations such as Federally Qualified Community Health Centers, medical groups, skilled nursing facilities, health insurance companies, and pharmaceutical companies. These organizations play an important role in the current value-based healthcare environment, and can help reduce the care cost per capita and improve population health. It is also relevant to point out the NCHL Health Leadership Competency Model is by design applicable to a myriad of healthcare organizations despite the Model's emphasis on leadership competencies pertinent to health delivery organizations (NCHL, 2010). Therefore, this exclusion may introduce a potential bias towards the perceived health leadership competencies of health administration graduates upon job entry.

Managerial and policy implications

The final study sample was comprised of FACHE-credentialed hospital CEOs representing all regions of the United States. Therefore, the results from this exploratory study may present some policy implications to accreditation organizations for health administration education. Study findings may also present some managerial implications to administrators and educators of health administration programs across the United States and beyond.

First, the study findings may be informative to policymakers at health administration accreditation organizations, such as the Commission on the Accreditation of Health Management Education (CAHME). According to the current criteria published by the CAHME (2018), Criteria III indicates that curricula (and related sub-criteria) should be revisited to address the areas for improvement, for instance, the health leadership competency gaps as identified by the FACHE-credentialed hospital CEOs. The findings help affirm the necessity and relevance of the CAHME's curriculum criteria.

Second, the study findings may inform organizations such as the International Hospital Federation that represent the hospital industry the gap between industry sought-after leadership competencies and health administration graduates' actual leadership competencies. For example, healthcare leaders around the globe met in 2017 to discuss the importance of a competency-based health administration education (Stanowski, 2018). This example also affirms the need for health administration educators to respond to the industry's call in a timely manner with an action plan.

Third, the study findings may provide insights to U.S. health administration programs and help them make continuous improvement in health administration education in order to meet the needs of the industry. While all 26 NCHL health leadership competencies are important, some of them are the most important to those who hire our graduates. For example, some FACHE-credentialed healthcare executives look for Self-Development, Information Seeking, and Analytical Thinking competencies in job applicants who are health administration graduates (Fick, Dishman, Adler, & Williams, 2016). Therefore, it is necessary for health administration programs to place a considerable emphasis on those health leadership competencies that matter the most to the industry.

Finally, the study findings may provide U.S. health administration programs with insights to curricula development and assessment, such as developing learning objectives and assessing learning outcomes of their programs. For example, MHA courses at one university were re-developed or enhanced to address the competency gap in Self Development, Analytical Thinking, Organizational Awareness, Accountability, Change Leadership, and Interpersonal Understanding as identified by the FACHE-credentialed hospital CEOs. At another university, the program leadership and faculty plan to use the study results to inform part of their future course development and revisions. Specifically, the plan is to review the health leadership program's current curriculum, assess where in the courses to integrate these competencies as appropriate, and implement the changes to address the competency gap.

Recommendations for future research

Future research efforts may focus on collecting data from all CEOs of U.S. hospitals, using a survey instrument reflective of the latest version of the health leadership competencies, as NCHL (2010) emphasizes that its Health Leadership Competency Model undergoes on-going refinement and validation. Perceptions of all U.S. hospital CEOs may provide broader views of health administration graduates' health leadership competencies upon job entry. Such an approach may also enable a broader participation in the survey, resulting in a higher response rate.

Future research may also explore how CEOs of other healthcare organizations such as Federally Qualified Community Health Centers, medical groups, skilled nursing facilities, health insurance companies, and pharmaceutical companies perceive health leadership competencies of health administration graduates upon job entry. Whether being involved in the direct health delivery or not, these organizations play a crucial role in the current value-based and patient-centered healthcare environment.

Finally, future research may explore how C-Suites executives of healthcare organizations across the United States perceive health leadership competencies of graduates from fully online health administration programs. Examples of these organizations are hospitals, Federally Qualified Community Health Centers, medical groups, skilled nursing facilities, health insurance companies, and pharmaceutical companies. The study may apply a mixed-methods approach, focusing on examining the perceptions of healthcare organizations' C-Suite executives on health leadership competencies of online health administration graduates upon job entry.

References

Abdi, H., & Williams, L. J. (2010). Tukey's Honestly Significant Difference (HSD) Test. In N. Salkind (Ed.), *Encyclopedia of research design.* Thousand Oaks, CA: Sage.

American College of Healthcare Executives. (2013, March/April). Top issues confronting hospitals: 2012 (ACHE CEO Survey). *Healthcare Executive, 28*(2), 94.

American College of Healthcare Executives. (2014, January 13). American College of Healthcare Executives announces top issues confronting hospitals: 2013. Retrieved from http://www.ache.org/pubs/Releases/2014/top-issues-confronting-hospitals-2013.cfm

American College of Healthcare Executives. (2015, January 12). Survey: Healthcare finance, reform top issues confronting hospitals in 2014. Retrieved from https://www.ache.org/pubs/Releases/2015/top-issues-confronting-hospitals-2014.cfm

American College of Healthcare Executives. (2016, February 2). Top issues confronting hospitals in 2015. Retrieved from http://ache.org/pubs/research/ceoissues.cfm

Association of University Programs in Health Administration [AUPHA]. (2018). History of AUPHA. Retrieved from http://www.aupha.org/about/historyofaupha

Commission on the Accreditation of Health Management Education [CAHME]. (2018). Fall 2017 CAHME Criteria for Accreditation. Retrieved from https://cahme.app.box.com/s/rvxw8rhi56zwki3z5kubpyk417u4r1u2

Cliff, B. (2012). Patient-centred care: The role of healthcare leadership. *Journal of Healthcare Management, 57*(6), 381-383.

Davidson, P. L., Azziz, R., Morrison, J., Rocha, J., & Braun, J. (2012). Identifying and developing leadership competencies in health research organizations: A pilot study. *Journal of Health Administration Education, 29*(2), 135-154.

Fick, J., Dishman, L., Adler, K., & Williams, L. (2016, June 22). *What leadership competencies of health administration graduates matter most to hospital CEOs?* Presented the 60-minute education session at the 2016 Annual Meeting of Association of University Programs in Health Administration, Kansas City, Missouri.

Garman, A. N., & Johnson, M. P. (2006). Leadership competencies: An introduction. *Journal of Healthcare Management, 51*(1), 13-17.

Institute of Medicine. (2012). *Best care at lower cost: The path to continuously learning health care in America*. Washington, DC: The National Academy Press.

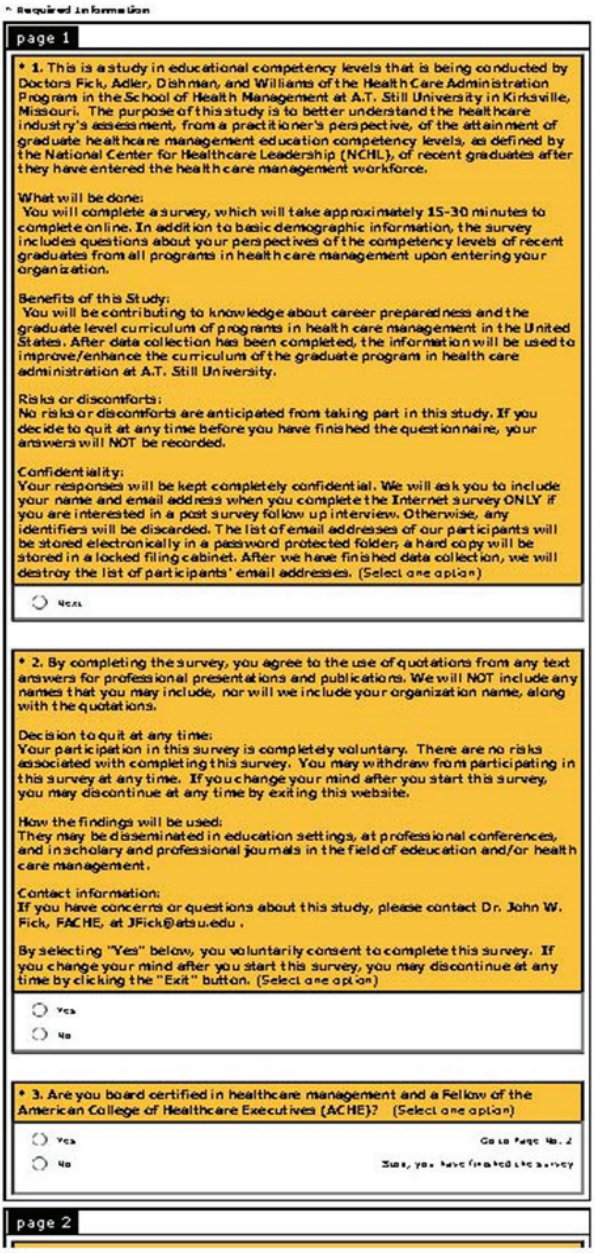
McAlearney, A. S. (2010). Executive leadership development in U.S. health systems. *Journal of Healthcare Management, 55*(3), 206-222.

National Center for Healthcare Leadership [NCHL]. (2010). Health Leadership Competency Model summary. Retrieved from http://www.nchl.org/documents/navlink/competency_model-summary_uid31020101024281.pdf

National Center for Healthcare Leadership [NCHL]. (2012). Health Leadership Competency Model (v2.1). Retrieved from http://www.nchl.org/DocumentsNavLink/NCHL_Competency_model-full_uid892012226572.pdf

Stanowski, A. (2018). 2017 CAHME Accreditation Criteria. Retrieved from http://cahme.net/blog/2017/02/10/2017-cahme-accreditation-criteria/

Appendix: CEO Survey



* Required Information

page 1

* 1. This is a study in educational competency levels that is being conducted by Doctors Fick, Adler, Dishman, and Williams of the Health Care Administration Program in the School of Health Management at A.T. Still University in Kirksville, Missouri. The purpose of this study is to better understand the healthcare industry's assessment, from a practitioner's perspective, of the attainment of graduate healthcare management education competency levels, as defined by the National Center for Healthcare Leadership (NCHL), of recent graduates after they have entered the health care management workforce.

What will be done:
You will complete a survey, which will take approximately 15-30 minutes to complete online. In addition to basic demographic information, the survey includes questions about your perspectives of the competency levels of recent graduates from all programs in health care management upon entering your organization.

Benefits of this Study:
You will be contributing to knowledge about career preparedness and the graduate level curriculum of programs in health care management in the United States. After data collection has been completed, the information will be used to improve/enhance the curriculum of the graduate program in health care administration at A.T. Still University.

Risks or discomforts:
No risks or discomforts are anticipated from taking part in this study. If you decide to quit at any time before you have finished the questionnaire, your answers will NOT be recorded.

Confidentiality:
Your responses will be kept completely confidential. We will ask you to include your name and email address when you complete the Internet survey ONLY if you are interested in a post survey follow up interview. Otherwise, any identifiers will be discarded. The list of email addresses of our participants will be stored electronically in a password protected folder; a hard copy will be stored in a locked filing cabinet. After we have finished data collection, we will destroy the list of participants' email addresses. (Select one option)

Yes

* 2. By completing the survey, you agree to the use of quotations from any text answers for professional presentations and publications. We will NOT include any names that you may include, nor will we include your organization name, along with the quotations.

Decision to quit at any time:
Your participation in this survey is completely voluntary. There are no risks associated with completing this survey. You may withdraw from participating in this survey at any time. If you change your mind after you start this survey, you may discontinue at any time by exiting this website.

How the findings will be used:
They may be disseminated in education settings, at professional conferences, and in scholary and professional journals in the field of edeucation and/or health care management.

Contact information:
If you have concerns or questions about this study, please contact Dr. John W. Fick, FACHE, at JFick@atsu.edu .

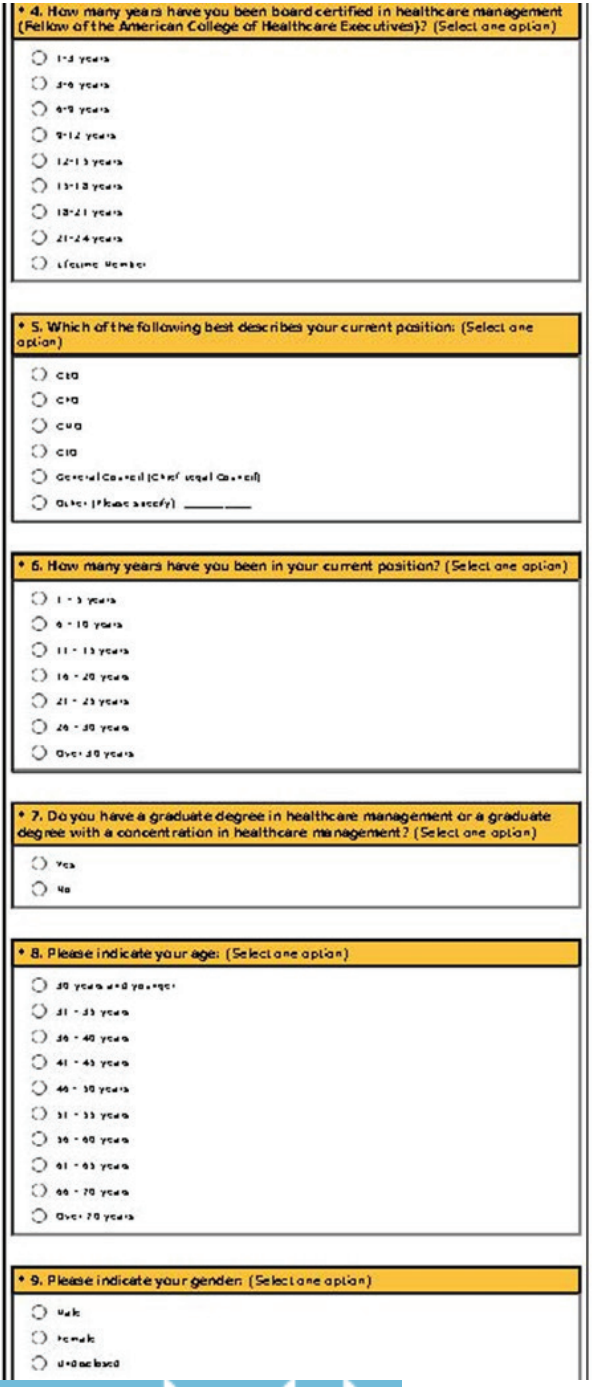
By selecting "Yes" below, you voluntarily consent to complete this survey. If you change your mind after you start this survey, you may discontinue at any time by clicking the "Exit" button. (Select one option)

Yes
No

* 3. Are you board certified in healthcare management and a Fellow of the American College of Healthcare Executives (ACHE)? (Select one option)

Yes — Go to Page No. 2
No — Sure, you have finished the survey

page 2



* 4. How many years have you been board certified in healthcare management (Fellow of the American College of Healthcare Executives)? (Select one option)

- 1-5 years
- 5-6 years
- 6-9 years
- 9-12 years
- 12-13 years
- 13-18 years
- 18-21 years
- 21-24 years
- Lifetime Member

* 5. Which of the following best describes your current position: (Select one option)

- CEO
- CFO
- CMO
- CIO
- General Counsel (Chief Legal Counsel)
- Other (Please specify) _____

* 6. How many years have you been in your current position? (Select one option)

- 1 - 5 years
- 6 - 10 years
- 11 - 15 years
- 16 - 20 years
- 21 - 25 years
- 26 - 30 years
- Over 30 years

* 7. Do you have a graduate degree in healthcare management or a graduate degree with a concentration in healthcare management? (Select one option)

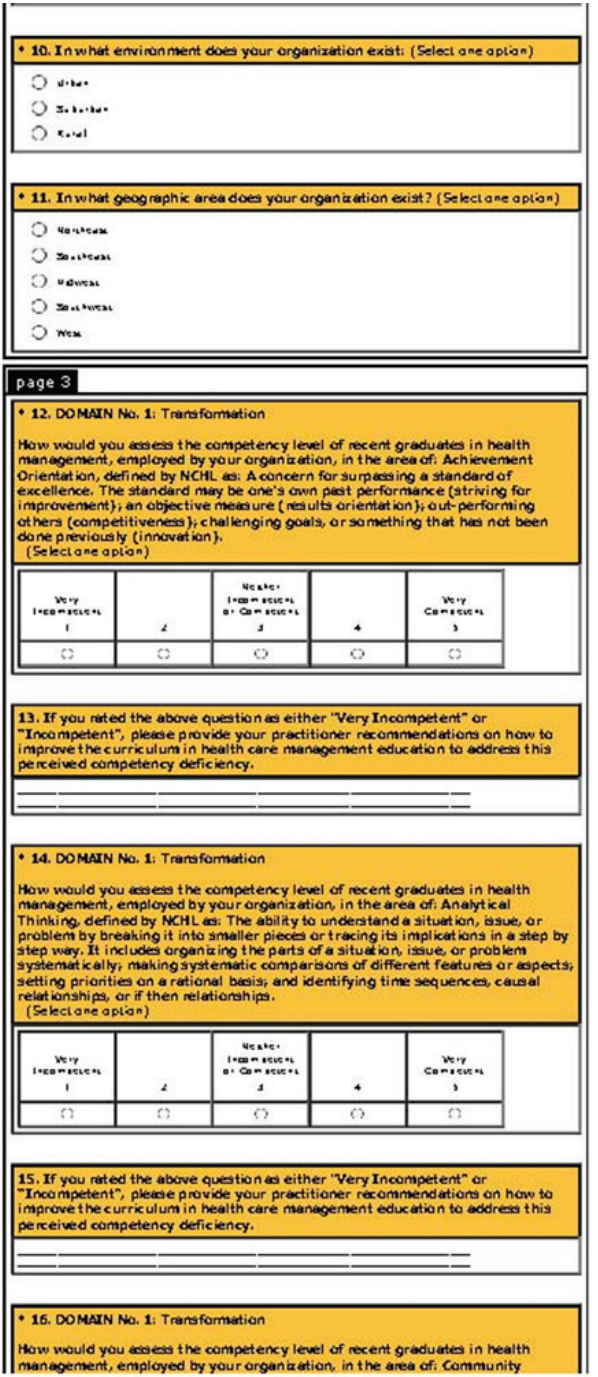
- Yes
- No

* 8. Please indicate your age: (Select one option)

- 30 years and younger
- 31 - 35 years
- 36 - 40 years
- 41 - 45 years
- 46 - 50 years
- 51 - 55 years
- 56 - 60 years
- 61 - 65 years
- 66 - 70 years
- Over 70 years

* 9. Please indicate your gender: (Select one option)

- Male
- Female
- Undisclosed



* **10.** In what environment does your organization exist: (Select one option)

- Urban
- Suburban
- Rural

* **11.** In what geographic area does your organization exist? (Select one option)

- Northeast
- Southeast
- Midwest
- Southwest
- West

page 3

* **12. DOMAIN No. 1:** Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Achievement Orientation, defined by NCHL as: A concern for surpassing a standard of excellence. The standard may be one's own past performance (striving for improvement); an objective measure (results orientation); out-performing others (competitiveness); challenging goals; or something that has not been done previously (innovation).
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

13. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

* **14. DOMAIN No. 1:** Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Analytical Thinking, defined by NCHL as: The ability to understand a situation, issue, or problem by breaking it into smaller pieces or tracing its implications in a step by step way. It includes organizing the parts of a situation, issue, or problem systematically; making systematic comparisons of different features or aspects; setting priorities on a rational basis; and identifying time sequences, causal relationships, or if then relationships.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

15. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

* **16. DOMAIN No. 1:** Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Community

Orientation, defined by NCHL as: The ability to align one's own and the organization's priorities with the needs and values of the community, including its cultural and ethnocentric values and to move health forward in line with population based wellness needs and national health agenda.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

17. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

*** 18. DOMAIN No. 1: Transformation**

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Financial Skills, defined by NCHL as: The ability to understand and explain financial and accounting information, prepare and manage budgets, and make sound long term investment decisions. (Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

19. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

20. DOMAIN No. 1: Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Information Seeking, defined by NCHL as: An underlying curiosity and desire to know more about things, people, or issues, including the desire for knowledge and staying current with health, organizational, industry, and professional trends and developments. (Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

21. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

22. DOMAIN No. 1: Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Innovative Thinking, defined by NCHL as: The ability to apply complex concepts, develop creative solutions, or adapt previous solutions in new ways for breakthrough thinking in the field.D
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5

○	○	○	○	○

23. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

24. DOMAIN No. 1: Transformation

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Strategic Orientation, defined by NCHL as: The ability to draw implications and conclusions in light of the business, economic, demographic, ethnocultural, political, and regulatory trends and developments, and to use these insights to develop an evolving vision for the organization and the health industry that results in long term success and viability.

(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

25. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

page 4

26. Domain No 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Accountability, defined by NCHL as: The ability to hold people accountable to standards of performance or ensure compliance using the power of one's position or force of personality appropriately and effectively, with the long term good of the organization in mind. (Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

27. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

28. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Change Leadership, defined by NCHL as: The ability to energize stakeholders and sustain their commitment to changes in approaches, processes, and strategies.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

29. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

30. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Collaboration, defined by NCHL as: The ability to work cooperatively with others as part of a team or group, including demonstrating positive attitudes about the team, its members, and its ability to get its mission accomplished.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

31. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

32. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Communication, defined by NCHL as: The ability to speak and write in a clear, logical, and grammatical manner in formal and informal situations, to prepare cogent business presentations, and to facilitate a group.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

33. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

34. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Impact and Influence, defined by NCHL as: The ability to persuade and convince others (individuals or groups) to support a point of view, position, or recommendation.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

35. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

36. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Information Technology Management, defined by NCHL as: The ability to see the potential in and understand the use of administrative and clinical information technology and decision support tools in process and performance improvement. Actively sponsors their utilization and the continuous upgrading of information management capabilities.

(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

37. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

38. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Initiative, defined by NCHL as: The ability to anticipate obstacles, developments, and problems by looking ahead several months to over a year.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

39. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

40. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Organizational Awareness, defined by NCHL as: The ability to understand and learn the formal and informal decision making structures and power relationships in an organization or industry (e.g., stakeholders, suppliers).This includes the ability to identify who the real decision makers are and the individuals who can influence them, and to predict how new events will affect individuals and groups within the organization. (Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

41. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

42. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health

management, employed by your organization, in the area of: Performance Measurement, defined by NCHL as: The ability to understand and use statistical and financial methods and metrics to set goals and measure clinical as well as organizational performance; commitment to and employment of evidence based techniques.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

43. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

44. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Process Management and Organizational Design, defined by NCHL as: The ability to analyze and design or improve an organizational process, including incorporating the principles of quality management as well as customer satisfaction.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

45. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

46. Domain No. 2: Execution

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Project Management, defined by NCHL as: The ability to plan, execute, and oversee a multiyear, large scale project involving significant resources, scope, and impact. Examples include the construction of a major building, implementation of an enterprise wide system (patient tracking, SAP), or development of a new service line.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

47. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

page 5

48. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Human Resources Management, defined by NCHL as: The ability to implement staff development and other management practices that represent contemporary best practices,

comply with legal and regulatory requirements, and optimize the performance of the workforce, including performance assessments, alternative compensation and benefit methods, and the alignment of human resource practices and processes to meet the strategic goals of the organization.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

49. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

50. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Interpersonal Understanding, defined by NCHL as: The ability to accurately hear and understand the unspoken or partly expressed thoughts, feelings, and concerns of others.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

51. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

52. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Professionalism, defined by NCHL as: The demonstration of ethics and professional practices, as well as stimulating social accountability and community stewardship. The desire to act in a way that is consistent with one's values and what one says is important.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

53. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

54. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Relationship Building, defined by NCHL as: The ability to establish, build, and sustain professional contacts for the purpose of building networks of people with similar goals and that support similar interests.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

55. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to

Improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

56. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Self Confidence, defined by NCHL as: A belief and conviction in one's own ability, success, and decisions or opinions when executing plans and addressing challenges.
(Select one option)

Very Incompetent 1	Neither Incompetent or Competent 2	3	4	Very Competent 5
○	○	○	○	○

57. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

58. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Self Development, defined by NCHL as: The ability to see an accurate view of one's own strengths and development needs, including one's impact on others. A willingness to address needs through reflective, self-directed learning and trying new leadership approaches.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

59. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

60. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Talent Development, defined by NCHL as: The drive to build the breadth and depth of the organization's human capability, including supporting top performing people and taking a personal interest in coaching and mentoring high potential leaders.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

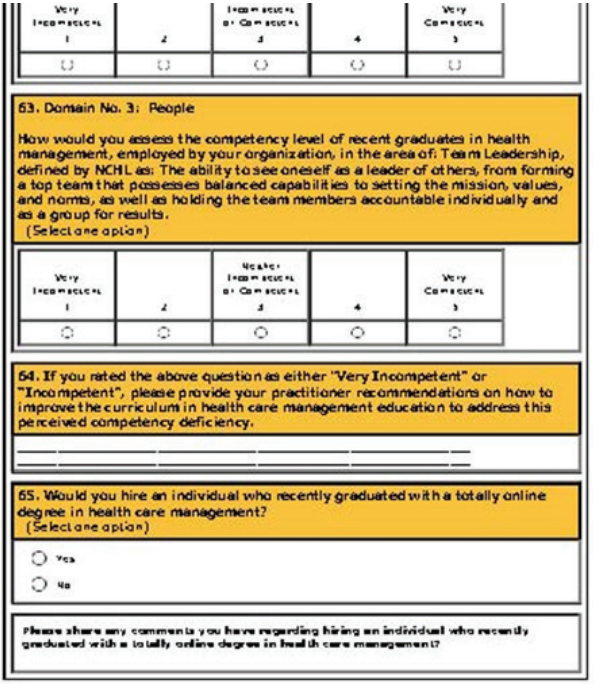
61. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

_____
_____

62. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Team Leadership, defined by NCHL as: The ability to see oneself as a leader of others, from forming a top team that possesses balanced capabilities to setting the mission, values, and norms, as well as holding the team members accountable individually and as a group for results.
(Select one option)

		Neither		



Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

63. Domain No. 3: People

How would you assess the competency level of recent graduates in health management, employed by your organization, in the area of: Team Leadership, defined by NCHL as: The ability to see oneself as a leader of others, from forming a top team that possesses balanced capabilities to setting the mission, values, and norms, as well as holding the team members accountable individually and as a group for results.
(Select one option)

Very Incompetent 1	2	Neither Incompetent or Competent 3	4	Very Competent 5
○	○	○	○	○

64. If you rated the above question as either "Very Incompetent" or "Incompetent", please provide your practitioner recommendations on how to improve the curriculum in health care management education to address this perceived competency deficiency.

65. Would you hire an individual who recently graduated with a totally online degree in health care management?
(Select one option)

○ Yes
○ No

Please share any comments you have regarding hiring an individual who recently graduated with a totally online degree in health care management?

Competency Models in Graduate Healthcare Management Education: Analysis of Current Practices and Recommendations for Getting to Best Practices

Melanie P Standish, BS

Abstract

In the interest of supporting dialogue about the use of competency models in graduate healthcare management education programs, I was invited by the special issue editor to conduct a survey of current practices in the field. This analysis was made possible in large part because these programs are required, as a condition of accreditation, to provide public access to the models their programs adopt. As such most models are available via program websites. To provide context, I open the paper with a brief overview of the history and science of competency modeling as practiced by the profession of industrial/organizational psychology, as well as our current best-practice guidelines. I then describe the CAHME guidelines, as well as the types and characteristics of competency models currently being used by CAHME-accredited programs, in the context of these best-practice definitions. I also provide a synthesis of these models that was completed with the assistance of a natural language processing program. I conclude the paper with a summary of some of the challenges I believe that healthcare management faces in its use of competency models and recommendations for the future.

Please address correspondence to: Melanie P Standish, Department of Psychology, Lewis College of Human Sciences, Illinois Institute of Technology, 201 Tech Central, 3424 South State Street, Chicago, Illinois 60616; Phone: (708) 856-5554; Email: mstandis@hawk.iit.edu

Acknowledgement: The author thanks Alyssa Matias for her support in organizing the data for this paper.

Introduction

In support of this special issue on competency modeling, I was asked by the guest editor to provide a perspective on competency models from the profession that has been most responsible for their adoption and use in the field of practice: industrial/organizational psychology. In responding to this request, I will (a) provide some context by providing a definition, some history, and current guidelines concerning best practices; (b) analyze and synthesize the models currently used by healthcare management graduate programs; and (c) develop recommendations for how the field might best move in the direction of these best practices. The results of these efforts appear below, starting with the history.

History

Before beginning an analysis, it will be important to clarify what competencies are (and are not), since there appears to be variability in how these terms are currently used in healthcare management education. For the purposes of this review, I will adopt the definition provided by Campion, Fink, Ruggeberg, Carr, and Phillips (2011, p. 226), which defines competencies as: "collections of knowledge, skills, abilities, and other characteristics (KSAOs) that are needed for effective performance in the jobs in question." This definition underscores three important properties of competencies. First, they are broader in scope than concepts such as learning objectives and behaviors. Second, they extend beyond knowledge and include its appropriate practical application. Finally, they relate to specific jobs or roles.

The glossary of the current Commission on the Accreditation of Heathcare Management Education (CAHME) self-study document (CAHME Self-Study Handbook, 2017) contains a definition for "Competence/Competency." While this definition is roughly compatible with the Campion definition, I caution against using the term "competence" interchangeably with "competency," since it is likely to cause confusion. When most professions use the term "competence," they are referring to a specific *individual's* capabilities, whereas "competencies" refers to the *definition* of effective performance. In other words, you assess a person's "competence" using measures of performance of one or more specific "competencies."

Competency models: a brief history

Graduate healthcare management, which can trace its roots back at least as far as the 1930's (Davis, 1984), predates the appearance of competency models and competency-based higher education. The first use of the latter came in

1968, when several pilot programs were launched by the U.S. Department of Education to improve the preparation of elementary school teachers (Nodine, 2016). At about the same time in history, competency modeling started to see widespread adoption in corporate workplaces, especially in the United States. In that context, computing technologies were beginning to accelerate the pace of change, and traditional approaches to understanding and managing performance (e.g,. job analysis), started to be viewed as too cumbersome and inflexible for use with knowledge workers. Using an approach called Behavioral Event Interviewing (BEI), an adaptation of the critical incident interviewing technique (Flanagan, 1954), more flexible models of performance could be developed for these and other types of roles (McClelland, 1998).

In the decades to follow, the growth and popularity of competency models led to considerable variation in their use, and a lack of clarity regarding what constituted appropriate practice. Concerns about rigor and quality of practice led the Society for Industrial and Organizational Psychologists (SIOP) to create a task group to examine how competency models were being used. The task force validated the concerns that many approaches being used at the time lacked an appropriate level of rigor, and called for greater attention to competency model development, particularly in circumstances where employment decisions were being informed by competency-based assessment (Shippmann et al., 2000).

Competencies in practice: the current state-of-the art

In 2010, the SIOP task force for competency models was reinstated with a charge to develop clearer practice guidelines for competency modeling. The work of the task force culminated in a publication in 2011, listing 20 practice guidelines in three areas of practice: model development, organizing and presenting competency information, and application (Campion et al., 2011). Model development guidelines related to ensuring that a model aligns with the organi zation's mission and strategic objectives, and is based on a rigorous analysis of the actual work of stakeholders rather than the opinions of a few key leaders. Organization/presentation guidelines involved ensuring that models were designed with the end user in mind, providing enough detail for appropriate application but not so much as to make the model unwieldy. Application guidelines focused on ensuring that models would be appropriately integrated into the full complement of human resource functions, and that provisions were proactively put in place to ensure a review / update cycle took place every five years (or fewer) so that the model continued to fit the organization's current strategic priorities and needs (Campion et al., 2011).

Competencies in leadership

Effective performance in leadership roles has been a core focus of industrial/organizational psychology for over a century. Throughout this history, progress has involved cycles of theory expansion followed by efforts to synthesize and consolidate findings into a coherent whole. Earlier cycles identified tasks and relationships to be core elements of the leadership role; more recent cycles added an emphasis on helping people and organizations to change. Most recently, Gary Yukl (2012) synthesized the evidence base about leadership performance to create a competency meta-model, which identified 15 competencies within four domains: Task-oriented, Relations-oriented, Change-oriented, and External. While the model did not directly address the concept of management as a "profession" (i.e., its responsibility to society as a whole), the discussion section of the paper identified ethics and social responsibility as important areas for future work. With the addition of these concepts, Yukl's work provided the most robust foundation for a competency model that is specific to professional management.

Competencies in accreditation

The Commission on the Accreditation of Healthcare Management Education (CAHME) requires its accredited programs to identify a competency model by which their program measures student success (CAHME Self Study Handbook, 2017). The handbook does not identify a specific set of competencies to be used by programs, noting that programs have the freedom to select competencies that most closely fit the program's mission. However, the handbook does identify four broad areas (I will refer to these as "domains") programs must address: (a) communications and interpersonal effectiveness; (b) critical thinking, analysis, and problem solving; (c) management and leadership; and (d) professionalism and ethics. Each domain description contains a list of example competencies that might fit the CAHME definition. Given the level of freedom that individual programs have to define competencies locally, an important question I hope to address in this review is whether a core set of competencies might be identified that could more robustly define the educational pathway for professional healthcare managers.

Methods

Identification of competency models

To examine current practices, my first step was to compile models currently being used by CAHME-accredited programs. Using the "Search for an Accredited Program" feature on CAHME's website, I created a list of all currently

accredited programs. This step identified 98 unique programs. I then visited each program's website and searched for the page describing the program's competency model. I looked for a description of how the model was developed (i.e., in-house vs. adopted). If no description was provided, I examined the model against other models cited in the CAHME guide to identify evidence that the model had been derived from one of these models. I also compiled each of the model descriptions into an Excel workbook. Descriptions varied considerably in their level of detail. However, when possible, I attempted to parse the model into the following levels of scope: domains, competencies, competency levels, and behavioral statements.

Model synthesis

To develop a synthesis across models, I first needed to identify a referent model for use in comparing across programs. For two reasons, I selected the Yukl (2012) model for this purpose. First, as previously noted, the model is rooted in research on leadership performance, broadly defined. This work expands upon the factor analysis research by Yukl, Gordon, and Taylor (2002), in which the researchers created a hierarchical taxonomy based on the extensive empirical research on effective leadership. The selection of this model ties back to best practices in competency modeling identified by Campion et al. (2011), which included the need for a more rigorous methodological approach to competencies. The selection of Yukl (2012) as the referent model for finding a core set of competencies meets the methodological rigor that Campion et al. (2001) suggests. Second, because the model was not explicitly mentioned by any of the programs, it can provide a starting point that is not overly biased toward the practices of one or more current programs. To expand the relevance of the Yukl model to healthcare management, I also created two new competency definitions from the discussion section of his article, capturing the ethical and social responsibility components he mentioned for future research.

With the referent model specified, I next examined the population of competency models currently in use, along with their origins. This analysis indicated that most programs fell into one of three categories: (1) adaptations of the National Center for Healthcare Leadership (NCHL) model; (2) adaptations of the American College of Healthcare Executives and/or Healthcare Leadership Alliance (ACHE/HLA) competencies; and (3) models that were either locally developed or whose origins were not identifiable.

To develop a synthesis model, I conducted crosswalks against the revised Yukl model using the NCHL model, the ACHE competencies, as well as eight programs selected to represent the locally-developed category. To help ensure the crosswalks were completed as objectively as possible, I conducted

this step with the assistance of the software program CrossBot v1.1 (Garman & Lindsey, 2017). CrossBot uses an open-source natural language processor (Gensim v2.1 – Rehurek & Sojka, 2010) to calculate the similarity between two competencies, using a metric that identifies both the overlap of words as well as their relative frequency of use within the corpus. The technique, called cosine similarity, provides a metric on a 0-1 scale that increases as two passages of text become both more similar and more distinct from other passages. The program has a long history of use and success in many applications involving the identification of related texts (Fang, Tao, & Zhai, 2004). Once cosines have been calculated, CrossBot then flags the best match between competencies in the comparison model and each competency in the referent model.

Results

Descriptive statistics

From the website searches, I was able to find competency model data for 86 of the 98 programs. For 11 of the remaining 12, I was not able to identify any evidence that their model was posted on their website, and 1 program referenced a model but the hyperlink was broken. For the programs I could find competency models for, the mean number of competency domains for each model was 3.9 (*SD*=1.8) and the average number of competencies for each model was 21.4 (*SD*= 11.1). In terms of origin, 43% of the programs either did not provide source information for their model or indicated it had been developed locally. Of the programs that indicated a source, 52% had adapted their model from the National Center for Healthcare Leadership, 41% had adapted their model from American College of Healthcare Executives, and 7% mentioned a different source.

Model synthesis

For the computer-assisted analysis, I first conducted a comparison of NCHL and ACHE to the Yukl model, using cosines of .30 or higher as for identifying matches. This cutoff identified matches for the following competencies: Encouraging Innovation, Networking, Advocating Change, Problem Solving, Envisioning Change, and Ethical Practices. The .30 cutoff was selected in reference to the research findings of Garman, Standish, and Kim (2018).

I next searched for potential sources of profession-specific competencies by comparing the ACHE and NCHL models directly to each other. This analysis identified four additional competencies: Communication Skills, Human Resource Management, Financial Skills, and Information Technology Management. Aggregating the two steps above yielded a core model containing 10 competencies (see Table 1 for competency descriptions).

My next step was to compare the CAHME domains against the synthesized competency list that I'll refer to as the Core Model. In this analysis, three of the four CAHME competency domains matched the Core Model. While the Core Model accounted for 75% of the required CAHME domains, the CAHME domains only matched with about 40% of the Core Model, suggesting that the current CAHME domains do not span the breadth of competencies that I am suggesting in this paper.

By selecting eight programs from this list, I then compared the fit of this Core Model to programs using locally developed models. I found that competencies in the locally-developed models matched 45.0% of the Core Model on average (*SD*= .178). This means that locally developed models are only accounting for about half of the competencies that the Core Model suggests.

When examining how locally-developed models overlapped with the Core Model, the percentages of overlap were rather small, suggesting that there is a large number of extraneous competencies across the programs which do not map to the core competencies I identified in Table 1.

Table 1

Competency list resulting from the synthesis across program

Study	Competency	Description
Yukl (2012)	Encouraging Innovation	Encourages innovative thinking and new approaches for solving problems and promotes the adoption of innovative new products, services, or processes.
Yukl (2012)	Networking	Uses social networks and events to build and maintain favorable relationships with peers, superiors, and outsiders beyond the organization who can provide useful information or assistance.
Yukl (2012)	Advocating Change	Proposes desirable changes based on potential threats or opportunities and explains why the change is appropriate. Takes personal risk to promote the change despite difficulty.
Yukl (2012)	Problem Solving	Identifies work-related problems that can disrupt operations, analyzes and diagnoses the situation, and then acts to resolve the issue in a confident way.

Table 1, *cont.*

Yukl (2012)	Envisioning Change	Communicates a clear, appealing vision that is linked to member values and ideals. Describes a proposed change or new initiative with enthusiasm and optimism.
Yukl (2012)	Ethical Practices	Communicates ethical standards and conduct. Models ethical behavior, and opposes unethical conduct.
Calhoun et al. (2008)	Communication Skills	Speaks, writes, and presents in a logical manner and appropriately prepares content for business presentations and group meetings.
Calhoun et al. (2008)	Financial Skills	Understands and explains financial and accounting information. Possesses the ability to prepare and manage budgets. Makes justifiable long-term investment decisions
Calhoun et al. (2008)	Human Resources Management	Understands and correctly implements best human resource practices to meet the strategic goals of the organization.
Calhoun et al. (2008)	Information Technology Management	Identifies opportunities to adopt administrative and clinical technology that will improve workforce performance. Actively promotes the utilization and continuous upgrading of information management tools.

NOTE: Descriptions adapted from references listed.

Recommendations

In analyzing current practices in graduate healthcare management education against the synthesized Core Model of suggested competencies, I offer three concerns which tie back to the best practices highlighted by Campion et al. (2011).

My first concern relates to the decentralized approach taken to defining the profession. According to the self-study handbook, the mission, vision, and values of the program are all defined locally, implying that the profession itself is also locally defined. While this approach may afford programs maximum flexibility in meeting local needs, the creation of many local identities probably interferes with the development of a more robust broader definition. The results of this work indicate that there are a wide range of extraneous competencies across locally developed models that do not map on to the core competencies I identified from the overlapping work of Yukl, NCHL, and ACHE. Accord-

ing to the best practices highlighted by Campion et al. (2011), competencies should not only be related to organizational goals and objectives, but should also be related to the entire organizational context. My recommendation is to consider a more balanced approach in which there is a central definition that is then tailored to local needs rather than being authored at the local level.

My second concern relates to how broadly the accreditation criteria define competencies, given how important competencies are to the overall accreditation process. According to Campion et al. (2011), best practices for competency modeling include the use of a common language, which seems to be lacking across CAHME-accredited programs as evidenced by the many extraneous competencies in locally developed models which did not overlap with the suggested Core Model competencies. Because the CAHME competency domains provide so much latitude for local customization, their utility in specifying a common language of performance for the profession seems limited. My recommendation for this concern is to develop or adopt a more robust competency model in common, or else at least strengthen the guidelines for development and validation at the local level. In terms of the former, the modeling work presented in this paper could provide a useful starting point for this work. In terms of the latter, guidelines such as those provided by Campion et al. (2011) could provide this guidance.

My third and final concern relates to the gaps that were identified by the crosswalks to the Yukl (2012) leadership research synthesis. While some of these gaps may reflect differences in the language used to describe competencies, others may represent missed opportunities to develop future healthcare leaders in ways that will maximize their performance. For example, Yukl's "External" domain, which includes competencies related to how a leader coordinates their work with other leaders within and/or outside of their organization, may provide helpful guidance as health systems continue to diversify their organizational forms and relationships (e.g., Garman & Canar, 2013). Campion et al. (2011) recommends that competencies should be maintained over time, as to keep a model relevant to the future of a given organization or profession. As graduate healthcare management education aims to prepare students in their transition into becoming future professionals, this concern becomes particularly salient. To address this concern, my recommendation is to incorporate a periodic review of the management and leadership research to ensure that curriculum development is informed by this evolving evidence base.

Conclusion

Throughout the process of conducting the research described in this paper, it was clear to me that the work healthcare managers do is extremely important. From a mission perspective, it would certainly seem like it meets the definition of a profession. However, the breadth of competency models being used suggest a lack of a clear definition of the profession's boundaries and core competencies. While the concerns presented in this paper are distinct, they all relate back to the same core problem, which is the absence of a robust, universally recognized definition of healthcare management's mission and scope of practice – the lack of a clear professional identity. I hope that the analysis provided here will contribute toward adopting a more rigorous set of core competencies, as well as making better use of the models already used.

References

ACHE Healthcare Executive Competencies Assessment Tool [Pamphlet]. (2016). Healthcare Leadership Alliance and the American College of Healthcare Executives.

CAHME Self-study Handbook (2017). Retrieved December 17, 2017 from http://www.cahme.net.

Calhoun, J. G., Dollett, L., Sinioris, M. E., Wainio, J., Butler, P. W., Griffith, J. R., . . . Warden, G. L. (2008). Development of an Interprofessional Competency Model for Healthcare Leadership. *Journal of Healthcare Management, 53*(6), 375-391.

Campion, M., Fink, A., Ruggeberg, B. J., Carr, L., & Phillips, G. M. (2011). Doing Competencies Well: Best Practices in Competency Modeling. *Personnel Psychology, 64*, 225-262.

Davis, M. M. (1984). Development of the first graduate program in hospital administration. *Journal of Health Administration Education, 2*(2), 121-134.

Fang, H., Tao, T., & Zhai, C. X. (2004). A formal study of information retrieval heuristics. In K. Järvelin, M. Sanderson, P. Bruza, & J. Allan (Eds.), *Proceedings of the 27th ACM SIGIR conference on research and development in information retrieval (SIGIR'04)* (pp. 49–56). ACM.

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin, 51*(4), 327-358.

Garman, A. N., & Canar, W. J. (2013). Consulting psychology in the health sector: A reflection on the last and next decades. *Consulting Psychology Journal: Practice and Research, 65*(4), 309-313.

Garman, A. N. & Lindsey, Z. (2017). *CrossBot v1.1 – a Gensim-enabled Python program to automate competency crosswalks*. Working paper, Rush University HSM Leadership Center.

Garman, A.N., Standish, M. P., Kim, D.H. (2018). Enhancing efficiency, reliability and rigor in competency model crosswalks through natural language processing. Working papers, Department of Health Systems Management, Rush University.

McClelland, D. C. (1973). Testing for Competence Rather Than for Intelligence. *American Psychologist*, 1-14.

McClelland, D. C. (1998). Identifying Competencies with Behavioral-Event Interviews. *Psychological Science, 9*(5), 331-339.

Nodine, T. (2016). How did we get here? A brief history of competency-based higher education in the United States. *The Journal of Competency-Based Education, 1*(1), 5-11.

Overview of the HLA Competency Directory. (2010). Retrieved December 14, 2017, from http://www.healthcareleadershipalliance.org/Overview%20of%20the%20HLA%20Competency%20Directory.pdf

Peterson, D. R. (1976). Is psychology a profession? *American Psychologist, 31*(8), 572-581.

Řehurek, R. & Sojka, P. (2010). Software Framework for Topic Modelling with Large Corpora. In Proceedings of LREC 2010 workshop New Challenges for NLP Frameworks. Valletta, Malta: University of Malta. p. 46-50, 5 pp. ISBN 2-9517408-6-7.

Salton, G. (1991). Developments in automated text retrieval. *Science, 253*, 974-980.

Shippmann, J. S., Ash, R. S., Battista, M., Carr, L., Eyde, L. D., Hesketh, B., . . . Prien, E. P. (2000). The Practice of Competency Modeling. Personnel *Psychology, 53*, 703-740.

Stefl, M. E. (2008). Common Competencies for All Healthcare Managers: The Healthcare Leadership Alliance Model. *Journal of Healthcare Management, 53*(6), 360-373.

Yukl, G. (2012). Effective Leadership Behavior: What We Know and What Questions Need More Attention. *Academy of Management Perspectives*, *26*(4), 66-85.

Yukl, G., Gordon, A., & Taber, T. (2002). A Hierarchical Taxonomy of Leadership Behavior: Integrating a Half Century of Behavior Research. *Journal of Leadership & Organizational Studies, 9*, 15-32.

Program Management Issues

Program Management for Faculty Development: Addressing the Changing Faculty Roles in a Direct Assessment Competency-Based Model

Linda J. Mast, PhD, Bobbi Winter, DHSc, Miriam Ross, DHA, & Lisa McIntyre-Hite, PhD

Abstract

Competency -based education (CBE) models are gaining attention within higher education and continuing professional education in the healthcare sector. While there are many models of competency-based education, Walden Master of Health Administration CBE program uses a direct assessment model. The direct assessment CBE model is based on a truly student-centered and self-directed approach to learning. In a direct assessment program, credit hours or time are no longer a proxy for measuring student learning. In this model, rigorous assessments measure student learning and validate competency achievement. Students are in the driver's seat in terms of pacing their work efforts, and there is a non-linear approach to selecting the competencies they choose to complete. This has resulted in a very unique and personalized engagement with faculty based content areas of strength or limitations as informed by their prior knowledge and work experience.

The Walden University direct assessment model presents challenges for faculty who have primarily taught in more traditional, structured programs with specified sequencing of content that is delivered according to structure driven by faculty. This article describes the approach to faculty development that Walden University's Master of Health Administration CBE has implemented and how it has been utilized to address those challenges. Recent research on

Please address correspondence to: Linda J. Mast, PhD, FACMPE, College of Health Sciences, Walden University, 155 Fifth Avenue South, Suite 100, Minneapolis, MN 55401
Phone: (630) 442-3624; Email: linda.mast@waldenu.edu

the faculty development needs anticipated by faculty development practitioners and the C-BEN Quality Framework are introduced as a starting point to guide a program management approach for faculty development as more healthcare administration programs implement competency-based curricula.

Introduction

Healthcare administration programs have shifted to an approach focusing on competencies to improve the level of preparedness of graduates for future leadership in the healthcare industry (Jones, 2015, Friedman & Frogner, 2010). This focus on competencies, known as competency-based education (CBE), was endorsed by the Department of Education in 2013. The CBE approach includes a focus on the type of knowledge, skills, and attitudes students need to meet the needs of the workplace in contrast to what the teacher thinks the student should know (Garman & Johnson, 2006). With the many variances among programs regarding how competency-based models are implemented, timely and relevant faculty development strategies become one way in which CBE program quality is defined and evaluated. The C-BEN Quality Framework for CBE programs was developed in response to the need to define quality as it relates to competency-based education across the spectrum of CBE models (C-BEN, 2015). The eight elements of quality established in the C-BEN Quality Framework are:

- demonstrated institutional commitment to and capacity for CBE innovation;
- clear, measurable, meaningful, and integrated competencies;
- coherent program and curriculum design;
- credential-level assessment strategy with robust implementation;
- intentionally designed and engaged learner experience;
- collaborative engagement with external partners;
- transparency of student learning; and
- evidence-driven continuous improvement.

The C-BEN Quality Framework specifically discusses faculty development within element one ("demonstrated institutional commitment to and capacity for CBE innovation") and element four ("credential level assessment strategy with robust implementation"). Specifically, the C-BEN standards indicate

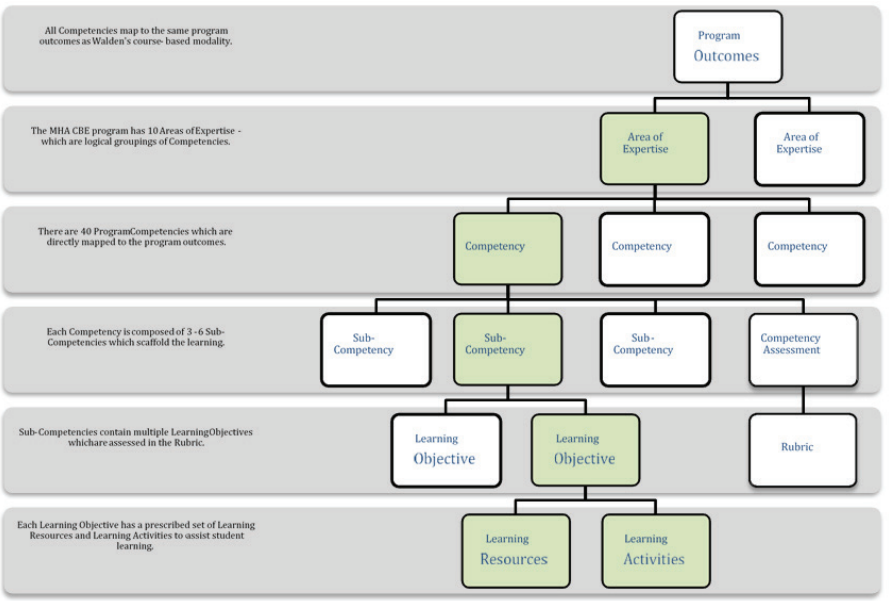
that the institution should develop and adopt a faculty and staff model that meets the unique needs of its CBE program, noting that developed or highly developed CBE institutions have a deep understanding of learner needs in a CBE model. Another performance indicator is that faculty members are identified for specialized roles and have been trained on these roles, and that the institution is committed to refining the faculty and staff structure to support the needs of students based on data. Walden University's Master of Health Administration CBE (MHA CBE) program is in its second year and faculty have refined their practice as well as roles and responsibilities based on qualitative and quantitative feedback of students, indicating that the C-BEN standards provided useful guidance for assessing and refining faculty development initiatives for the MHA CBE program at Walden University.

Program overview

The Walden University Master of Health Administration (MHA CBE) program uses a direct assessment model and includes 40 discrete competencies (Figure 1). The program was launched in May 2016 and has primarily attracted students with significant work experience in healthcare who may have been out of formal education environments for a long time.

Figure 1

Direct assessment CBE model at Walden University



Source: Walden University, 2015

All competencies in the program were developed with employer input and included use of faculty subject matter experts and instructional design experts.

Because there was still little research available related to direct assessment in competency-based curriculum in higher education at the time development started, best practices in adult learning, online education, and outcomes-based assessment were used in the development process (McIntyre-Hite et al., 2015). Since the program was launched, a team of faculty were recruited and hired who specifically expressed interest in working within the CBE model. While all faculty have doctoral degree, and bring significant teaching experience, few have had prior experience with teaching and supporting students in a flexibly-paced, student-driven, direct-assessment CBE model. Therefore, initial onboarding, training, and ongoing faculty development has been a key focus of program management. Using foundations as a starting point for assessing faculty development offers the opportunity to evaluate effectiveness of faculty development and identify opportunities for enhancements.

Assessing faculty development

Faculty development status and progress can be assessed along a continuum using the C-BEN Quality Framework elements and standards that directly apply to faculty development. The two key standards within the C-BEN Quality Framework align specifically to faculty development are illustrated in Figures 2a and 2b.

Figures 2a & 2b

Faculty development standards within the C-BEN Quality Framework

Figure 2a

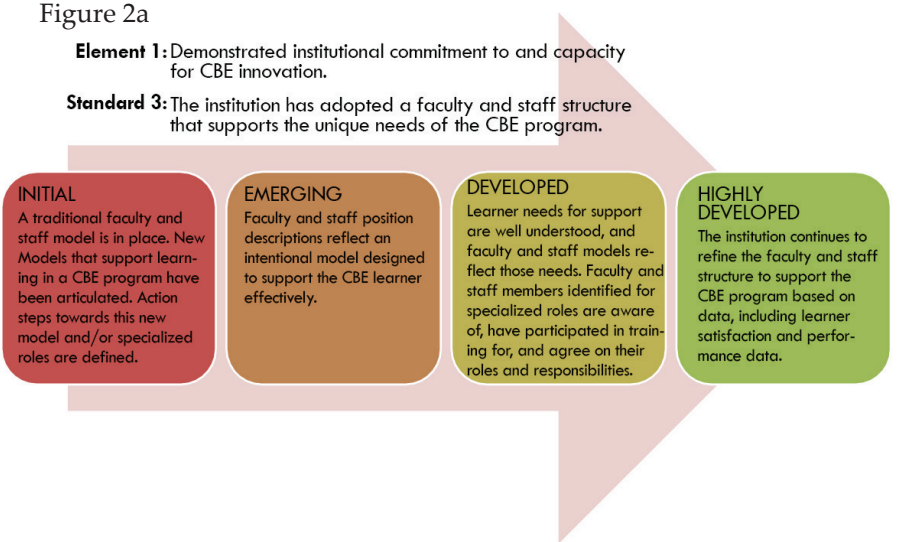
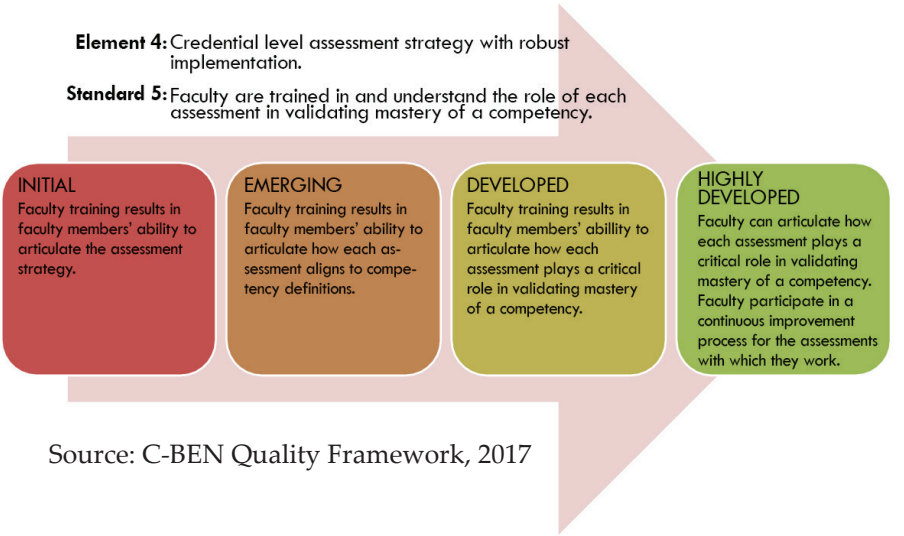


Figure 2b



Source: C-BEN Quality Framework, 2017

Sorcinelli and her colleagues surveyed 500 members of the Professional and Organizational Development (POD) Network in Higher Education, the largest professional association of faculty development scholars and practitioners in higher education, to gain insights into the top issues that faculty development practitioners expect to face in the coming years (Sorcinelli, 2007). While a variety of issues were identified, there were three common themes: (a) a changing professoriate; (b) the changing nature of the student body; and (c) the changing nature of teaching, learning, and scholarship,

These three themes and the C-BEN standards within the Quality Framework serve as a useful foundation for the implementation and ongoing refinement of faculty development initiatives for the MHA CBE program at Walden.

Changing professoriate

The POD respondents in Sorcinelli's 2006 study discussed key changes in professoriate to include expanded roles, demand for continuous learning to keep up with technological change, and the need for more collaboration among faculty. These issues reflect very similar experiences among the MHA CBE faculty team. For example, McIntyre-Hite et al. (2015) emphasized that once the program launched, faculty found that, in addition to teaching, significant time would need to be dedicated to revising rubrics, creating resources, and providing updates to the program based on assessment data and student

feedback in a nimble and flexible process. In a direct-assessment CBE model, faculty roles shift and include curation of the learning experience in real time based on qualitative student feedback and quantitative data. For many faculty, this constant review, revision, and curation of relevant, engaging, and updated content is a new skill.

Similar to needs identified by POD respondents, keeping up with technological change has also been a focus for faculty development for the MHA CBE program. Given that the Walden University learning management system for the competency-based programs is specific and unique to CBE, many specific training approaches were required to keep faculty informed on how to adapt to the technology and how to use it to best engage with students in a substantive manner without dictating the direction of the interactions. Ensuring faculty proficiency with the technology is important because new students need guidance and support as they enter CBE programs.

One of the most unique aspects of the MHA CBE program is the necessity for collaboration that comes from the design of the direct assessment model. Faculty who serve as subject matter experts (SMEs) collaborate with faculty who serve as assessors for the same competency. The role of teaching and support are disaggregated from the assessment. Assessors are anonymous to the student to provide an independent assessment based on a very detailed rubric. Thus, faculty partners collaborate to discuss student progress and any plans for how to best support student learning. In addition, each student also has an academic coach who works closely with them throughout their time in the program and are a key part of the collaboration process. The need for a CBE-specific faculty and staff structure, as described in the C-BEN Quality Framework Standards, underscores the importance this structure plays in creating an environment where necessary collaboration occurs.

Another aspect of the changing professoriate identified in the POD study revolves around work-life balance. This can be especially challenging for part-time faculty; bringing highly valued real-world perspectives to teaching is not easy because they are balancing multiple work demands as well as demands in their personal lives. For the MHA CBE faculty, there can be a risk of burnout since there are no breaks. Students in the MHA CBE program work at their own pace on a continuous basis, and there are no breaks in study like there are in traditional course-based programs. However, because students progress through competencies at different times, faculty report that the time requirements for communication and grading assessments, while continuous, are more flexible and offer greater opportunities for personalized feedback as opposed to grading sizeable numbers of papers at once as faculty are required to do in a traditional online course. Ensuring faculty and staff structure is designed to support these differences is essential.

Changing nature of student body

Advancement in available technology in the past 20 years has resulted in significant growth in the number of online programs, hybrid model programs, and, more recently, the expansion of competency-based delivery models. With these expanding program options, access to higher education attracts more adult learners, including many who have significant life and work experience. The MHA CBE program provides a clear example of the changing nature of the student body that requires some adaptation in faculty approach to teaching. The majority of MHA CBE students have significant work experience in the healthcare sector (i.e., physicians, nurses, and individuals who are currently in administrative positions in healthcare settings). They have typically been out of a formal higher education environment for quite some time and frequently express some anxiety and apprehension about being successful. Student populations are more diverse. There are students in the MHA CBE program who are international and for whom English is a second language. This places unique demands on faculty to be able to customize their approach to feedback and support to students as they progress through competency modules. There are many ways to meet the unique needs of the changing student body which can be positive for faculty and support student success. Some of these identified by Walden MHA CBE faculty are listed below (Ross, 2017).

Connect with students as they enter a competency with a friendly and substantive general announcement and personal connection.

- Encourage students to share their view of the competency and their professional experience related to the competency content. This can save time, avoid confusion, and encourage completion.
- Share faculty expertise through discussion and encourage students to share.
- Discuss the learning resources to encourage students to access the information as well as writing center resources.
- Encourage general writing skills in addition to strengthening scholarly tone and APA style knowledge.
- Provide supplemental course information that will engage students in discussions and keep dialogue current. Encourage general writing skills in addition to strengthening scholarly tone and APA style.

Based on their professional background and experience, students entering the program have different levels of professional competency and confidence in their self-perceived knowledge base, which may influence their ability to successfully achieve the competencies. Once they begin working on compe-

tency content, they sometimes find it more difficult than expected, leaving them feeling anxious and overwhelmed by the time needed to successfully complete the various objectives. The CBE program provides the unique opportunity for Subject Matter Experts (SMEs) and Assessors to work one-on-one with students and facilitate their learning in a way that is outcome driven and most valuable to them. SMEs in the Walden CBE program can interact with each student as soon as they begin to explore the competency. Students are encouraged to share their background and experiences with the topic covered, providing SMEs the ability to frame responses to questions and requests for additional information in a way which empowers students to leverage their skills and experience. This may require additional research by faculty to determine how to best accomplish this goal. There is a strong emphasis on the development of problem solving and critical analysis skills. The goal of these student-faculty interactions is to optimize learning and facilitate the correlation of previous experience to new insights developed as students work through the competencies. It is important that students view their experience as a shared journey with their SME and coach. This aspect of the faculty role often requires additional support and training as outlined in the C-BEN Quality Framework standard to ensure that faculty are trained in and understand the role of each assessment in validating mastery of a competency.

As CBE programs continue to grow, faculty see variance in individual learner style when it comes to how students navigate each competency. Students may approach a competency and engage in assessment of their learning by going directly to the assessment after engaging with faculty and may achieve that competency on a first attempt. However, some students approach a competency as assessment for learning, with the understanding that they may take multiple attempts to achieve the competency. Students use the feedback they receive on an assessment to address any gaps in learning and attempt the competency assessment again once they have a greater understanding of areas in need of improvement. Learner styles in this modality differ from traditional online courses in which all students move through content at the same pace and typically only have one attempt per course assignment. In this regard, faculty must be flexible and attuned to the learning style each student brings to a competency.

Another aspect of the nature of the student body identified by Walden CBE faculty is the challenge that students experience in making the transition to scholarly writing. When communicating with students, it is not unusual to find it has been many years since they produced any written work outside of emails and text messages, and that they have relied on Google to provide them with the resources they need to successfully complete their professional tasks.

Use of scholarly resources is required to assist students in the development of evidence-based responses for written assessments. SMEs and assessors work with students to develop and improve their writing skills, providing detailed feedback on work products with links to additional resources they may find beneficial. Development of scholarly writing skills is an ongoing focus as students progress through the competencies, and Walden faculty who teach in the MHA CBE program have expressed that it is exciting to see students grow as they work on more complex learning and assessment activities.

Changing nature of teaching, learning and scholarship

Ability to engage students in a learner-centered approach is considered the most critical challenges to address in faculty development and support services offered to faculty (Sorcinelli, 2007). The scholarship of teaching is central to many of the support activities available to Walden University faculty through the Center for Faculty Excellence. At Walden, the Center for Faculty Excellence provides faculty support through regularly scheduled webinars, with an extensive library of information available on-demand on a vast range of topics to support learner-centered teaching strategies. In addition, there are online forums established by faculty where student-centered teaching ideas can be exchanged and new opportunities explored.

The scholarship of teaching has gained broader appreciation in part due to the work of the Carnegie Foundation for the Advancement of Teaching. Walden's MHA CBE faculty identify a key benefit of the direct assessment CBE model is the ability of students to use their professional expertise and skills in a scholarly and creative way as they complete projects and assignments. They have discovered that faculty can encourage this process as they gain experience in the CBE learning model and develop a thorough understanding of the content related to the competencies they teach. Since Walden MHA CBE faculty work with students in several different competencies at different points, they can observe how students improve their scholarly approach to learning as they progress through the MHA program.

MHA CBE faculty roles

Interviews with faculty nationwide examined the faculty experience teaching CBE as contrasted with traditional teaching models and reported that alternating between classroom instruction and online instruction under the same job parameters was as difficult (Rainwater, 2016). For the MHA CBE program at Walden University, there was a decision by intention to recruit and appoint a team of faculty who specifically expressed interest in the CBE model of teaching. Faculty in the Walden MHA CBE program teach only in

the CBE program which eliminates the difficulties faculty at other institutions have expressed regarding alternating between CBE and traditional models of teaching. It allows faculty to focus on developing and refining teaching techniques which are specific to student success in CBE.

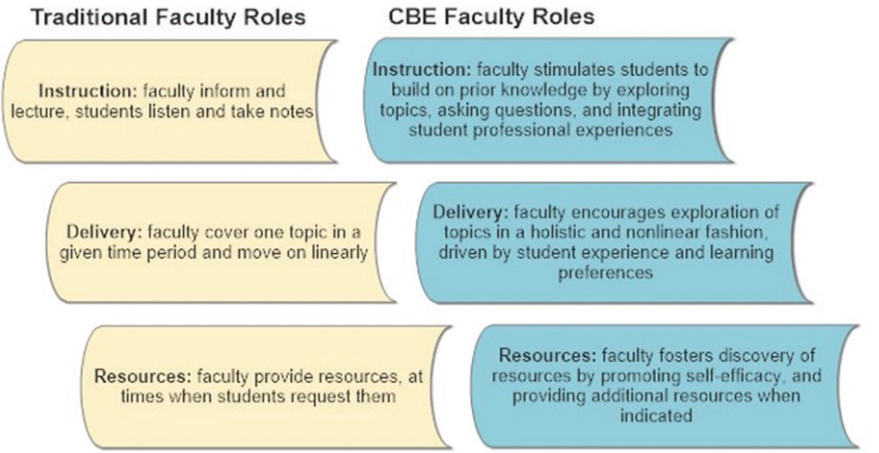
Unlike traditional online classrooms, students determine the amount of time they spend on each competency. The type of assistance needed from faculty is based on faculty-student interactions and the unique learning needs of each student. This can be difficult for new faculty who are used to controlling the degree of participation and timing of assignment submissions. One of the benefits of CBE is it allows faculty to focus their efforts on assisting students who may be having difficulty with a concept, rather than attempting to have ongoing engagement with each student in a class. This is particularly beneficial for international students who may struggle with understanding information which is not presented in their primary language. SMEs may find they need to devote additional time to researching topics and information which is applicable to the unique needs and experiences of individual students rather than managing student questions using the a more traditional one-size-fits-all approach. The following quote from Newbold (2017) resonated with the Walden MHA CBE faculty:

> Faculty must demonstrate a commitment to responding to questions, requests, and invitations for conversation without preplanning. The teacher's agenda cannot be preset, as one might in a traditional course, until the student sets his or hers. In essence, the faculty member might broadly know what her class is about – he/she most certainly is the content expert—but he/she may not know the structure of delivery until the student determines the course of action. For this reason and many others, it is essential that CBE institutions offer faculty the opportunity and space to learn from one another.

The key faculty roles in the MHA CBE program are presented in Figure 3.

Figure 3

Key faculty roles



Source: Winter, B. (2017)

Faculty development initiatives at Walden University

Within the context of the anticipated needs for faculty development as presented in Sorcinelli's POD research and the C-BEN Quality Framework, specific faculty development initiatives within the Walden MHA CBE program are discussed in this section.

Formal faculty training

Newbold et al. (2017) observed that faculty are challenged when called upon to adapt to a relatively new pedagogical paradigm without formal training. Formal training is an important part of faculty development for the MHA CBE program. Customized onboarding and training called Tempo Faculty Orientation (TFO) for faculty teaching in the MHA CBE model is provided for all new faculty. It is important for a new faculty member to understand the overall structure of the CBE learning model as explained by program outcomes, areas of expertise, and achieving competencies. Students often have difficulty understanding the need to rewrite and improve their assignments to achieve competency. Helping them understand that this is a positive not negative part of the program is essential to student growth and success. In TFO training, the faculty experience mirrors the self-directed, direct assessment model that students experience in the Walden MHA CBE program. New faculty engage in applied exercises in CBE assessment process to understand the CBE model,

training in the unique learning management system. Comprehensive training includes a combination of independent application of teaching expectations as well as synchronous webinar based collaborative engagement where new faculty can engage in collaborative discussions specific to the direct assessment model.

The direct assessment model encourages students to use their professional expertise and experience to produce deliverables that reflect their creativity and individual learning goals. This aligns with Knowles' theory of self-directed and autonomous learners, with faculty facilitating the learning experience and assisting students to reach their educational goals (Dardin, 2013).

Students use the rubric to determine whether to *achieve* or *master* the competency, with additional critical analysis and research required to achieve the latter. Assessors provide substantive feedback which encourages students to further explore ideas and engage in critical analysis of the assessment criteria. Students enter the program with a range of skills and experience, and faculty and coaches must adapt their level of mentoring and feedback accordingly. It is important that students understand the assessment process is part of the learning experience, and they should not become frustrated if they do not achieve the competency on their first attempt. New faculty must recognize the importance of rubrics and their role in facilitating an objective assessment of the student work. Training around assessment feedback and how to encourage persistence through multiple attempts is key in ensuring faculty support students through their assessment process. During the orientation process, new assessors can review previously scored assessments which provide a framework for developing their student feedback. New faculty may find it challenging that they do not always have full control over what information is presented to the student. Sharing of information between all members of the team is imperative, and any perceived challenges can be mitigated by developing a close working relationship with the SME and coach to establish clarity on assessment expectations. The exchange of ideas and information becomes routine as the faculty gains experience in the CBE process. New faculty receive mentoring from both academic leadership and colleagues in the MHA CBE program.

Faculty team meetings

Monthly faculty meetings are an excellent opportunity for SMEs, assessors, coaches, and administrators to share best-practices and discuss opportunities for improving the student experience. It is a supportive environment where student feedback is regularly examined, and faculty can share experiences on ways to enhance student engagement. Monthly meetings are an important

way for faculty to remain current and engaged in the CBE program. Meetings eliminate confusion when there are program changes and promote the sharing of information and best practices. They also foster a team approach to the process of helping students achieve success. By engaging as group, administrators, faculty, and coaches can respond appropriately to resolve difficulties or complaints.

Community of practice/informal training

The Center for Faculty Excellence recently collaborated with MHA CBE academic leadership to host a four-week structured program, called a Junto. The Junto is a time-limited approach to one of the POD best practices of facilitating teaching circles where faculty can share experiences and support each other. The Walden CBE Junto used scholarly inquiry from selected journal articles, collaboration with colleagues in discussion board, and a synchronous webinar where executive leadership for CBE programs university-wide presented key information about the Walden CBE model and solicited feedback from faculty participants. The Junto created a space for open discussions of best practices, challenges, and aspects that surprised faculty most about transitioning to CBE teaching model.

Project teams including faculty, coaches, and academic leadership have been engaged in creating support tools for faculty such as Assessor Guidelines. Student feedback has a direct impact on the program that is more robust than with traditional programs. Student and faculty comments make a positive difference in the program. Faculty have ownership of the specific competencies they teach and make recommendations for enhancements to summative assessment activities, resources, or instructions provided to the student for completing the assessment. This ownership is important to faculty satisfaction and is a major difference between traditional and CBE learning. The benefit to students is a vibrant learning experience than remains current and engaging. Faculty and coaches work together to improve the student learning experience. Based on feedback related to assessor comments as well as SME and coach discussions with students, competency content is updated, assessments are revised, and additional resources provided on an individual basis dependent on student need. This nimble and student-centered approach enables faculty to respond to constant changes in healthcare regulations and professional standards, and assists faculty in determining where modifications in content and assessment criteria are needed. The goal is to optimize student learning and ensure the information presented is relevant to the students' work setting.

Use of learner satisfaction and performance data

The C-BEN Quality Framework standard related to institutional support for CBE identifies highly developed programs as those where the institution continues to refine the faculty and staff structure to support the CBE program based on data, including learner satisfaction and performance data. The Walden University MHA CBE program strives to achieve this level of development in several ways. Reports from student focus groups are regularly shared with faculty and staff to provide insights on faculty impact on student experience. In addition, regular and systematic collection of students' experience as well as assessment outcomes trends are reported as a regular part of program management and decision making. This data shapes refinement to processes and helps to identify potential areas where further faculty training or faculty involvement in quality improvements are indicated.

Conclusion: implications for faculty development

As healthcare administration programs continue focus on competency-based models, consideration of how to manage faculty development is essential. Teaching strategies and the use of technology to support competency-based models may differ significantly from the faculty experience in traditional teaching models. Part of effective program management requires that the changing nature of the professoriate, the changing nature of the student body, and the changing nature of teaching, learning, and scholarship are understood and incorporated into faculty development initiatives. Use of the C-BEN Quality Framework can help guide decisions on developing and delivering relevant CBE training and support to faculty as they navigate evolving faculty and student roles where students are much more self-directed. To best summarize the importance of customized faculty development for CBE, faculty reflections on the student experience are clearly illustrated in the following narrative by a Walden CBE faculty member:

> Every student is unique and brings strengths, skills, and learning goals to a competency. Students all need to meet competencies but how they develop and learn is different. We need to provide both structure, opportunity, and the space to enhance their skills. As an example, I have worked as SME and assessor with a student who began as a minimalist in all aspects of learning. He did what was required and often used three attempts. As he has moved through the program, I have observed major improvements and a desire to exceed expectations.

This is often the case when students have opportunities to improve skills based on structure, content, and creativity – and one-on-one contacts with a team that cares about their success (Newbold et al., 2017). Effective program management that invests in faculty development to support the unique demands of teaching in a CBE model will help ensure a quality student learning experience.

References

Competency-Based Education Network. C-BEN Quality Framework (September 2017). Retrieved from http://www.cbenetwork.org/sites/457/uploaded/files/CBE_Quality_Framework.pdf

Cummings, G. (2011). Investing in teachers to invest in themselves. *Journal of Adult Education. 40* (2), 9-23.

Dardin, D. C. (2014). Relevance of the Knowles Theory in distance education. *Creative Education, 5*, 809- 812.

Friedman, L. H., & Frogner, B. K. (2010). Are our graduates being provided with the right competencies? Findings from an early careerist skills survey. *Journal of Health Administration Education, 27*(4), 269-296.

Garman, A. N., Johnson, M. P. (2006). Leadership competencies: An introduction. *Journal of Healthcare Management, 51*(1), 13-17.

Guglielmino, L., Long, H., & Heimstra, R. (2004). Self-direction in learning in the United States. *International Journal of Self-Directed Learning, 1*(1), 1-17.

Heimstra, R. (2013). Self-directed learning: Why do most instructors still do it wrong? *International Journal of Self-Directed Learning, 10*(1), 23–34.

Jones, W. (2015). *Health care administration faculty perceptions on competency education, graduate preparedness, and employer competency expectations.* Walden University ScholarWorks Walden Dissertations and Doctoral Studies.

McIntyre-Hite, L., Kadrie, M., Pederson, H. & Hudgins, T. (2015) Developing an online direct-assessment competency-based masters in healthcare administration: Insights, challenges, and lessons learned. *Journal of Healthcare Administration Education, 32*(4), 613-619.

Newbold, C., Seifert, C., Doherty, B., Scheffler, A., & Ray, A. (2017). Ensuring faculty success in online competency-based education programs. *The Journal of Competency-based Education, (2)*, 3.

Rainwater, T.S.M., (2016) Teaching and learning in competency-based education courses and programs: Faculty and student perspectives. *The Journal of Competency-based Education, 1*(1), 42–47.

Sorcinelli, M.D. (2007). Faculty development: The challenge going forward. *Peer Review, 9* (4), 4-8.