Academic Medicine: Vice Chairs' for Education Perceptions of Departmental Culture

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Department chairs are responding to external pressures by legitimizing new educational leadership positions, like the vice chair for education (VCE), to keep pace with the complex medical education climate. Departmental culture has implications on VCE success and retention. In a cross-sectional qualitative study we examine departmental culture from the perspective of 17 VCEs in medicine. VCEs describe current behaviors and values of their departmental cultures via web survey as a primary source. They also characterize the ideal culture they believe would help them thrive in the position. Findings revealed that most found satisfaction with their role, but sought collaborative cultures.

INTRODUCTION

Rising costs associated with the complexity of accreditation regulations, faculty retention, and uncertainty in revenue is a major leadership challenge that higher education faces today. As a result, disciplines within American universities require adaptation or re-invention of educational leadership (Goldstein, Miller & Courson, 2014). Academic Medicine, a component of higher education, is not immune to such a challenge (Kambinski & Geisler, 2012).

Academic Medicine is characterized as a system of organizations that supports the education of physician practitioners, and physician-scientists via patient care and biomedical research in a medical school or teaching hospital setting (Association of American Medical Colleges [AAMC], 2016). Academic medicine departments are often large, complex organizations with the goal of balancing the traditional missions of service, research, and education (Schuster, 2010). Education is paramount to departments situated in academic medical centers even when other institutional missions are more lucrative (i.e. revenue generated from patient care) or prestigious (i.e. federally-funded biomedical research). As such, vice chairs for each of the institutional missions are typically appointed to assist the university department chair in maintaining perspective (Sanfey, Boehler, DaRosa & Dunnington, 2012a).

The *pyramid of educators* is a concept in medical education brought forth in Schuster and Pangaro's (2010) book chapter: Understanding Systems of Education. The apex of the pyramid reflects institutional

leaders such as vice presidents, deans, and department chairs. The authors also coin this group, "academic executives." Are we using chairs or academic executives? As the department chair role continues to evolve, their responsibility for the educational quality and success of their medical education programs and faculty remains unchanged (Kastor, 2013). Chairs face intense challenges such as: a) limited funding for education initiatives, b) increased pressure to generate clinical revenue sometimes to the detriment of dedicated time to teaching medical students, residents and fellows, and c) increased accountability to national accreditation agencies governing physician training standards such as the Liaison Committee on Medical Education (LCME) and Accreditation Council for Graduate Medical Education (ACGME) (Pangaro, 2012;). Given the complexity involved in training future physicians, chairs are responding to external pressures by creating and legitimizing new educational leadership positions to keep pace with the demands of a complex medical education climate. As such, the vice chair for education (VCE) has emerged as a type of "academic executive" that can assist department chairs with the management of these complex and high-stakes demands. The VCE is envisioned to be an influential leader who can carry out the chair's educational vision (Pangaro, 2012).

The creation of the VCE position is reflective of DiMaggio & Powell's (1983) institutional isomorphism; specifically, coercive and normative (Martinez & Knox, 2016). First, coercive change involves responding to external pressure from agencies like national accreditation bodies from which physician-training programs are dependent upon. Secondly, normative isomorphism is similar to its coercive counterpart in that pressure to conform to new professional norms is the goal. Change is driven by the establishment of professional norms, licensing, and credentialing (DiMaggio & Powell, 1983). The academic community has documented the position's professionalization over the last four years (Martinez & Knox, 2016). Although the scope of the VCE may vary depending on the strengths and needs of the chair, existing literature notes that the VCE role is to set the academic direction for program directors, garner resources to launch and sustain valued education initiatives, build relationships and collaborate with key institutional leaders to facilitate the department's education vision (Brownfield et al., 2012; Lewis, 2015; Sanfey et al., 2012a). These studies establish group norms, acceptable credential qualifications for physician-faculty and non-physician-faculty, professional development needs, and time allocations for teaching and directing programs. Further illustrating the combination of coercive and normative isomorphism is the recent launching of VCE interest groups within their academic associations that meet at annual academic conferences (Alliance for Academic Internal Medicine [AAIM], 2013).

Departmental culture has implications on the success and ability of its members to carry out their responsibilities and subsequently, their retention in the position (Pacanowsky & O'Donnell-Trujillo, 1982). Despite the role's institutionalization in the medical field, scholars have yet to consider how the perceived departmental culture could shape and influence this emerging educational leadership position. Consideration of culture is essential to understand if institutions, especially chairs, want to empower and ensure the success of their "right-hand in education." VCEs concentrate their energy and leadership mostly within their departments. However, there is a paucity of data regarding departmental culture and this emerging role. The purpose of our study is to explore the unique perspectives of VCEs in U.S. departments of medicine regarding their respective departmental values, attitudes, and behaviors to fill this gap. To our knowledge this is the first study to explore the context of departmental cultures in academic medicine. This study informs both senior leaders and faculty about in-depth characterizations of culture types and provides a "state-of-the-VCEs" situated within these cultures.

LITERATURE REVIEW

In his commentary, Getting to the Next Phase in Medical Education - A Role for the Vice Chair for Education, Pangaro (2012) highlighted gaps in the nation's overall approach to medical education. He starts with a brief overview of the power department chairs have historically held in setting medical education curriculum and culture. He asked the academic community to use evidence-based data and educational theory to inform future directions and departmental leadership: thus, proposing a new paradigm. He called for institutional leaders, like department chairs, to create and nurture organizational

cultures that foster innovation and creativity. From his perspective, such a culture could enable VCEs to be change agents. Pangaro (2012) posits,

Lest medical education become solely hostage to both distant management through regulatory metrics and to the financial pressures within the institution…I believe that the vice-chair for education is a critical figure in moving this cultural nexus in the right direction. Could we…work toward creating an educational culture that fosters local creativity and tolerates more interinstitutional variance and, therefore, generates more educational scholarship and leads to more evidence-driven educational practices?... My answer is a strong 'Yes!' (p. 999-1000).

Over the last decade, educational leadership literature in academic medicine has focused on the role, demographics, and experiences of department chairs (Davis, Zweig, Franko & Weider, 2015; Grigsby, Hefner, Souba & Kirch, 2004; Kastor, 2013; Lieff et al., 2013; Yedidia & Bickel, 2001). Only four descriptive works and one literary review pertaining to the VCE role have been published (Brownfield, Clyburn, Santen, Heudebert & Hemmer, 2012; Lieff et al., 2012; Lewis et al., 2015; Martinez & Knox, 2016; Sanfey et al., 2012a; 2012b). Sanfey et al. (2012a) discussed existing demographics of VCEs nationally, qualifications, responsibilities, time allocations for teaching and administration, and rationale behind the creation of the position in departments of surgery. In their subsequent study, Sanfey et al. (2012b) examined specific training and career development needs of VCEs. As the foundational work on VCEs the most unique contribution of these scholars was the time allocation for VCEs. They found that VCE MDs receive a mean of 21% (SD = 19%) protected time from patient care demands to conduct administrative duties and another 29% (SD = 12%) for direct teaching and scholarship engagement. VCE PhDs receive 13% (SD = 25%) for administration and 74% (SD = 30%) for teaching.

Corroborating Sanfey et al.'s first study (2012a) on role descriptions, Brownfield and colleagues (2012) qualitatively studied VCEs in internal medicine departments. Following suit, Lewis et al. (2015) published a brief descriptive report synthesizing survey responses from national radiology VCEs and propagate role descriptions, responsibilities, purview, and additional leadership roles. None of these studies contextualize the role by considering perceived departmental cultures unique to their institutions. Authors also do not apply a theoretical framework from which to examine and explain their findings.

Unlike Sanfey et al. (2012a; b), Brownfield et al. (2012) found no VCE PhD's identified in internal medicine. They confirmed Sanfey et al.'s (2012a) responsibilities list that includes: oversight of education programs, appropriate credentials for the role, and concluded that the VCE has the potential to be the direction setter for educational research and change. Their most unique contribution is their identification of perceived challenges amongst their respondents. VCEs reported ill-defined responsibilities and an extensive scope of purview. To assist VCEs in effectively carrying out their roles, the authors suggested clearly defined duties that match institutional priorities. Their study provides a set of guidelines for VCEs to negotiate the position with their chairs as a means to mitigate feelings of uncertainty in the role. As such, Brownfield et al. (2012) further call for clarification of the VCE role through the alignment of job expectations with institutional priorities. Such a call requires both investigation into the departmental cultures where VCEs work, and the application of theory to understand their lived realities and context. Our study addresses both needs. We ask VCEs to reflect on their context and report dynamics of relationships, behaviors and values so scholars can better understand the heterogeneity in academic departments that have institutionalized the VCE role. We move beyond role descriptions and examine the departmental cultures to get a sense of their institution's priorities. As a means to better frame issues and enrich findings, we apply organizational culture as a theoretical framework from which to explain findings (Nimmon, Paradis, Schrewe & Mylopoulos, 2016).

Theoretical Framework

Organizational culture theory recognizes environments of organizations as highly complex and diverse (Pacanowsky & O'Donnell-Trujillo, 1983). The theory utilizes behaviors, norms, attitudes, opinions, and individual perspectives to define organizational culture and seeks to explain how culture is created, adopted, perpetuated or reinvented. Organizational theorists recommend researchers begin with

an examination of what members have to say about the environment in question (Bergquist, 1992). From the interpretivist perspective, our study describes organizational culture (from this point forward, departmental culture) as one that is characterized by the symbols and themes self-identified by VCEs (Papa, Daniels & Spiker, 2008). As departmental cultures have relevance and may determine the feelings of success in a role, we turn to organizational theory to frame existing and reveal desired cultures among VCEs.

METHODS

In the context of being a PhD education specialist working in academic medicine and a physician-faculty member with a VCE appointment, our study design resulted in an insider-researcher approach. We wondered how others in the VCE position contextualized the role to fit their individual institutional priorities. We also wondered how they would characterize their faculty and chair behaviors in their departments relative to promoting the educational mission. Pangaro's (2012) commentary particularly resonated with us as he formally acknowledged the potential the VCE could bring to education in departments if met with a particular philosophy, leadership style, resource allocation, and support. As such, our research questions asked: 1) how do current VCEs perceive and characterize their departmental culture and 2) what is the self-described ideal departmental culture that VCEs perceive would maximize their success in their role as a change agent?

Exempt by the Institutional Review Board, a qualitative exploratory case study design was implemented to explore VCE perceptions about the context that is departmental culture (Patton, 2002; Yin, 2003). Working from a constructivist model, we asked VCEs to reflect on their individual department's traditions, day-to-day activities, and value systems of faculty and their chair to gain an understanding of the cultures in which they were expected to lead. VCEs described their view of reality and current conditions to assist us with understanding how departmental cultures can influence and shape their actions, orientations, and motivations.

Recruitment

We bound our case by targeting physician (MD) and non-physician (PhD/EdD) faculty who both held the VCE position in internal medicine departments in the United States and whom were on the national VCE interest group email ListServ list from April 2012 to August 2013 in our examination. As the senior author held a VCE position, we accessed the national internal medicine VCE email ListServ list initiated by Brownfield et al. (2012) to initiate purposeful selection and identify the potential pool of VCEs. Narrowed by verification, zero PhD/EdD VCEs and 94 MD VCEs and accompanying institutions were identified. Fifty-eight active VCEs were confirmed representing 54 institutions.

Data Sources and Collection

To ensure trustworthiness, between-method triangulation was implemented to leverage the strengths of each data collection approach while elucidating corresponding aspects of departmental cultures across three data sources (Denzin, 1978; Lincoln & Guba, 1985; Paul, 1996; Patton, 2002); 1) a survey soliciting reflective text responses from VCEs as the primary source, 2) a ListServ allowing for electronic discourse analysis (Dholakia & Zhang, 2004; Kozinets, 2010), and 3) a national meeting discussion via participant-observation field notes.

Web survey: Participants and Their Departments

In June 2013, borrowing from the philosophical underpinnings of Cameron and Quinn's (1999) work on organizational culture, we designed and released an anonymous one-time web survey with text box input hosted by Survey Link© (Qualtrics, Provo, Utah) (Refer to Appendix A for survey questions). The survey was announced and released on the VCE email ListServ list and open for two months to the 58 MD-VCEs. To gather information about their attitudes and values of VCEs, questions focused on the specific constructs of: a) existing and ideal departmental cultures, b) additional leadership roles VCEs

held; c) administrative time allocation; d) perceptions of faculty behavior, and values; and f) aspects of the position that bring on apprehension and satisfaction.

The survey garnered 17 voluntary participants from a mixture of 17 public or private universities with an academic medical center partnership represented each departmental culture typology (17/58; 29%). The results of the original 58 MD-VCE's surveys after trustworthiness factors were conducted, elicited the following demographics fro the basis of our qualitative analysis. As leaders in their institutions and often senior leadership in the department, five of 17 (28%) of VCE respondents were women. Eleven of 17 (65%) respondents were from large departments (≥ 250 MD faculty members) and 14 of 17 (82%) of VCEs had more than one leadership role in their institution.

VCE ListServ Threads

A second source was 24 de-identified non-confidential email discourse threads posted on the VCE ListServ list from April 18, 2012 through August 15, 2013. Access was gained as the senior author had membership to the VCE online community. The intent of this forum is to serve as a peer discussion medium for advice and ideas as issues surface at their institution. Data from this forum served as supportive evidence of the day-to-day activities of the VCEs that can corroborate or refute data themes from the survey responses. The objective was to encapsulate relevant written exchanges that could clue us in to priorities and values common to the group (Kozinets, 2010). Using electronic discourse, such as emails, embraces the broadest interpretation of discourse in linguistics (Handley, 2010). As such, examining the topics and themes discussed within this online community made for a richer understanding of the VCE role.

Prolonged participant observation. Prolonged observation and documentation of VCEs nationally mobilizing to form a VCE interest group in internal medicine was an additional methodology. The leading organization for internal medicine is the Alliance for Academic Internal Medicine (AAIM). The AAIM hosts a bi-annual national conference. The gathering brings together physician and non-physician faculty with educational leadership roles. New forums for educational leaders were the focus of the observation. As such, publically disseminated events and agenda topics for the 2012 calendar year were observed and stored as field notes. Discussion themes from the October 13, 2012 national VCE gathering were memorialized in field notes in the absence of formal meeting minutes.

Coding and Analysis

Kohlbacker (2006) encourages the integration of qualitative content analysis into data analysis in case study research. Such analysis is a systematic, theory driven approach to text analysis using category systems and acknowledges the role the investigators play in developing meanings during categorization. We adopt this approach for our study.

Survey transcripts, verbatim email discourse text, and observation notes were imported and coded using Nvivo 10© qualitative software (QSR, Melbourne, Australia). The selected variable to launch coding was the phenomena under review: documented and perceived characteristics of organizational culture as expressed by VCEs. We began with open coding of data to generate core themes and sub-themes. We disaggregated core themes and mapped relationships between core and sub-themes across sources in subsequent axial and selective coding. Detailed themes and relationships are illustrated in Appendix B. Direct quotes from VCE survey responses were reported verbatim using surname pseudonyms.

We independently reviewed data to reach a consensus regarding initial coding themes. Regarding dependability and confirmability, an external scholar with qualitative experience in our college and medicine education field reviewed the coding themes and de-identified data. Informant feedback was not an option for the primary data source given that responses were submitted anonymously. Two negative sub-theme categories were reconciled through discussion of the audit trail and authors' rationale for categorizations.

FINDINGS

Characterizations of Existing Departmental Culture: Behaviors, Values, Apprehensions, and Satisfaction

Overall departmental cultures of the VCEs completing the survey were self-categorized into one of four groups listed on the survey prompt: managerial, negotiating, collaborative or creative.

Managerial and Negotiating Cultures

Just under half of VCE survey responders reported a perception of working within a managerial culture. Managerial and negotiation cultures were grouped for analysis as they shared similar characteristics. Descriptions of these cultures emphasized behavior and values reflective of low faculty participation, highly controlling leaders and conservative fiscal practices (Refer to Table 1).

TABLE1
EXISTING DEPARTMENTAL CULTURE DEMOGRAPHCIS FROM VCE WEB SURVEY

Departmental Culture Classifications from web survey	No. (%)	Time Allocation for VCE Role	Gender	Mean (*SD*) Department Size in each Culture (determined by # faculty)
Perceived Existing Culture as:				
Managerial	8 (47)	≤ 25% = 8	F=4 M= 4	200.3 (85.70)
Collaborative	4 (24)	≤ 25% = 4	F= 1 M=3	260.0 (114.30)
Negotiating	3 (18)	≤ 25% =3	F=0 M=3	166.6 (158.85)
Creative	2 (12)	≤ 25% = 2	F=0 M=2	375.0 (106.06)
Total	17 (100)	≤ 25% = 17	(F5+M12)=17	232.8 (115.61)

Behaviors and Values

Ninety-one percent of survey responders originating from managerial and negotiating cultures described faculty behavior as lethargic. They described poor attendance at important administrative meetings and traditional academic events with low-trust in executive leadership. VCEs reported a perception of lack of transparency from deans, and micro-managing tendencies from department chairs that, they believed, limited their role in decision making on educational issues. Capturing the collective tone, Dr. Smith from a negotiating culture wrote, "We have a division based culture and not a departmental culture. I think this is because faculty trust their division chiefs, but not the chair. Faculty behavior at these [meetings] is a mixture of interest and skepticism." Just over a third of VCEs in these two typologies described subcultures with behavior changing depending on the specific leader of a gathering or event. VCEs perceived that when they or division chiefs presided over meetings or events, a trusting atmosphere where the exchange of ideas was encouraged and productive discussions mostly occurred. Alternatively, they reported a perception that meetings led by their chairs were more informational rather than a forum for the exchange of ideas or an appropriate time to dialogue with the chair. However, VCEs noted that most faculty remain quietly attentive at chair led meetings.

VCEs described most events as low value and not a large part of their departmental cultures. They widely attributed this to faculty not having enough time in their schedules for additional events. However, medical student gatherings, resident-physician award ceremonies and graduation events were described as

valued and highly attended. As such, half of the VCEs in these typologies noted time taken for teaching medicine to students and resident-physicians and collaborating with colleagues was a common reason for satisfaction and pride in their role.

Apprehensions and Points of Satisfaction

Apprehensions for this group focused on funding needs and perceptions of inadequate infrastructure to support teaching demands and administrative requirements set forth by boards and accreditation agencies. From these VCEs vantage point, national education accreditation pressures were the primary focus for institutional leaders and their chairs. The emphasis on the tracking of physician work hours, and monthly performance evaluations was believed to be a major contributing factor to the launch of the VCE position in their departments. As such, the VCE role was perceived as one that is administratively focused on regulatory aspects. For instance, Dr. Anderson completed the apprehension prompt, [what keeps me up at night is:]. He wrote,

> There is much more complicated accreditation thus teaching resources and energy is redirected to administrative/managerial activities. Insufficient funding to support faculty and faculty drop out, trying to satisfy the incoherent contradictory rules of the regulating agencies such as ACGME, LCME and state boards.

Apprehensions about funding for education programs, compensation for faculty time to engage in education, and the need for basic administrative support services were well documented theme on the online VCE ListServ. Moreover, the agenda discussion points from the AAIM October meeting also highlighted funding as a primary concern amongst VCEs in attendance (N=12). Based on online and meeting exchanges, finance saturates these particular exchanges and appears to be at the forefront of many VCEs concerns.

Finally, when VCEs were asked to reflect on the aspects of the role that brought them satisfaction, the vast majority indicated feelings of pride and satisfaction when they were able to procure funding to work toward their desired infrastructure and establish formal "education budgets" for their office. Interestingly, only a minority of VCEs cited satisfaction in mentoring faculty and learners.

Overall, survey responses, topic trends in email threads and interest group discussions articulated exhaustion when dealing with institutional leadership, frustration with regulatory agencies, overstretched schedules, and concern over constrained resources.

Collaborative and Creative Cultures

Thirty-five percent of VCEs completing the survey self-identified their departments with the collaborative and creative cultures (See table 1). VCEs characterized this set of cultures as an environment with department leadership that was approachable, had high-trust among members and espirit de corps.

Behaviors and Values

All VCEs emphasized the chair's approachability and trust as central towards creating a collaborative environment. Three key descriptive characteristics of their chairs emerged: They noted 1.a.) significant and transparent actions to acquire resources on the VCEs behalf, or 1.b.) dispatching/empowering VCEs to secure resources on behalf of the department, 2) the allowance of semi-autonomous decision-making on education issues, and 3) the encouragement of idea-and-credit sharing. Furthermore, all VCEs from these cultures noted formal announcements or public declarations of the importance of the VCE leadership role within the department by their chair. They perceived this to be critical in the legitimization of their role to other members. As an example, Dr. Crowley wrote, "I think [my chair] values my experience and style. There is trust there so [the chair] defers to me at times and introduces me at every executive gathering."

Eighty-three percent of VCEs in this sub-group reported satisfactory to good attendance at administrative meetings led by them or the chair. VCEs documented behavior as "active listening" by attendees and stimulating dialogue routinely occurred with department leaders. Unlike their managerial and negotiation counterparts, this group reported such meetings as necessary and valued events.

Apprehensions and Points of Satisfaction

Dissimilar to their counterparts, apprehensions among the majority in this subgroup were not about funding basic operational costs of education programs, but rather funding for enrichment of existing educational programs, and to what extent their programs were providing learners with high quality learning experiences from high performing faculty. Also, half of these VCEs emphasized interacting with learners, the positive partnership with their chair, and inclusion in creative strategic planning for the educational mission contributed to their satisfaction with the role. However, despite minimal, but present online dialogue about educational strategic planning for the medical school curriculum and curricular committee templates, program enrichment and faculty evaluation were notably absent from email themes and the national meeting discussion.

Shared Challenges Regarding Multiple Leadership Roles: Time Allocation

The lack of time for less tangible academic activities like advising, mentorship of students, resident-physicians and junior faculty was a common issue across all four cultures. The vast majority of VCEs recounted holding an additional administrative leadership position inside, and sometimes outside their departments, such as a college level deanship (See Table 2). Most served as the Internal Medicine residency director while a few served in two other leadership roles. All indicated no more than 25% protected time solely for the VCE role. The perceptions about the impact of having multiple leadership positions on the VCE role were mixed equally. VCEs who also held an Internal Medicine residency directorship, in particular, felt as though the position lent itself well to the VCE role. Dr. Smith, again, wrote of the congruence; "I think the Internal Medicine Director is integral to many department functions, and the role has oversight of subspecialties in the eyes of the ACGME so the VCE role is a good fit." Furthermore, others noted that holding multiple leadership roles could foster synergy between the roles, department activities, and other administrative office activities at the higher college/school level. Dr. DiTorino, a VCE who was also a division chief wrote about the dual role as one that "allows for knowledge about important educational issues/challenges occurring across the department because of the intimate knowledge of the fellowship [education program] at a division level as chief." On the other hand, the remaining half perceived the opposite. "Administrative time is bundled so one can be short changed in the role when it comes to protected time" wrote Dr. Witten again, a VCE and a student education director. Another VCE with a Dean role documented, "(B)oth roles are full-time jobs in addition to being a clinician. I always feel as though I am multi-tasking and not putting 100% into both roles." Having multiple roles with insufficient protected time led to the internalization of competing demands with not enough time to do quality work.

TABLE 2
BREAKDOWN OF MULTIPLE LEADERSHIP POSITIONS

VCE role and additional leadership positions	No. (%)
VCE+ Internal Medicine Program Director	5 (29)
VCE+ College Level Dean	3 (18)
VCE only	3 (18)
VCE + Other unspecified leadership role	2 (12)
VCE + Division Chief	1 (6)
VCE+ Division Chief+ IM Program Director	1 (6)
VCE+ Medicine Fellowship Program Director	1 (6)
VCE + Clerkship Director + Fellowship Director	1 (6)
Total	17 (100)

Maximizing the Leadership Role: VCE Characterizations of Ideal Departmental Cultures

Three key characteristics of an ideal culture that emerged from the VCE survey were trustworthiness of their chair, resource abundance, and decision-making power on educational issues. On the whole, the desired characteristics within departmental cultures primarily aligned with the collaborative and creative culture typologies.

The vast majority of VCEs cited a preference to work in collaborative cultures, followed by the creative culture and one noted the desire for a managerial culture in their survey responses. Among VCEs desiring the collaborative or creative cultures they expressed preference to work in departments that are trustworthy, having a unified departmental identity, sufficient financial and staff support, and autonomy to make decisions regarding educational issues. None desired a negotiating environment. All VCEs originating from collaborative cultures desired no change in culture (Refer to Table 3).

TABLE 3
IDEAL DEPARTMENTAL CULTURE PREFERENCES FROM VCE WEB SURVEY

Perceived Ideal Culture as:	Originating culture (Gender breakdown)	No. (%)
Collaborative	Managerial = 7 (F=2; M=5) Negotiating = 3 (F=1; M=2) Collaborative = 2 (F=1;M=1) Creative = 1 (M=1)	13 (76)
Creative	Managerial = 1 (F=1) Collaborative = 1 (M=1) Creative = 1 (M=1)	3 (18)
Managerial	Collaborative=1 (M=1)	1 (6)
Negotiating	0	0
Total	17	17

When prompted to explain what they wish their chair would do to support them in their VCE role, 91% of VCEs called for greater control over finances for education efforts. This was especially the case for those originating from managerial and negotiated cultures. As an example, Dr. Davis completed the prompt sentence, [I wish my Chair would]…"help enable me to have more control over finances, obtain more education funding, and support more junior faculty in their teaching responsibilities." At the same time, among the four VCEs originating from collaborative cultures, Dr. Cook wrote, "no suggestions-I have great support and mentorship from [the chair]! We share similar values, and approaches. I am challenged yet comfortable." Aspirations and goals for those from managerial and negotiating cultures are different from their collaborative and creative counterparts. The pattern that emerged among VCEs from

managerial and negotiating cultures called for time to mentor faculty, autonomy and empowerment to make decisions, and for their chair's to value education as much as they did clinical research. The focus is in acquiring decision making power, basic funding and administrative support. Alternatively, aspirations and goals detailed in the survey by their collaborative and creative counterparts focused on innovative ways to increase the rigor and quality of educational programs, and funding for those enrichments. Dr. Cooper reflected, "The New Accreditation System is the new kid on the block. The move to more web-based and self-learning development is a major cultural change. [Smart technologies] are changing things, as are many technological advances in medical education." Dr. Cooper goes on to elaborate about how these changes impact the role based on the survey prompt [How have these changes impacted your role as VCE]: "It's all good, though hard to balance the 'must do' things required by LCME, ACGME etc., and the creative things that are tied to our own, not regulatory bodies, goals."

DISCUSSION AND IMPLICATIONS

Organizational culture theory recognizes departmental cultures as diverse and complex academic environments. Themes and recommendations described by the VCEs completing our survey reflect the convergence of their subjective interpretations about departmental values, multiple leadership responsibilities and their own personal idea of what the VCE role should entail; thus, making the departmental culture descriptions rich and reflective of their diverse experiences. The complexity of these cultures is highlighted in the multiple behaviors and dynamics described, which segregated out as subcultures primarily based on the characteristics (i.e.: trust) of institutional leadership. Perceived micromanagement and rigidity in managerial and negotiating cultures apparently makes the VCE role less clear and challenging. In such an environment, is the VCE superfluous? Is the role to assist the chair as manager or co-develop and enforce an educational vision for the department? In these managerial cultures, which preoccupy the VCE with financial management rather than championing scholarly achievements, the VCE role likely requires a specific leader: one with traits that differ from the typical senior professor in medicine with expertise and background in educational design and program development.

In terms of the collaborative and creative cultures, we see complexity in navigating through the positive working relationship with the chair. Semi-autonomous decision making and trust between the leaders with their faculty are clearly the defining characteristics of these cultures. VCEs currently in these desired cultures are able to focus energy on matters related to educational practice, design and faculty development. A desire to focus on the aforementioned issues over struggling for resources and autonomy could explain why those in our study preferred to work in collaborative and creative cultures. Achieving a culture change to mirror the desired collaborative and creative environment for those in more controlling and fiscally oriented cultures will depend upon a combination of institutional priorities and chair-VCE dynamics within the department.

Institutional priorities manifest themselves in available resources, traditions, behaviors and values of faculty and their leadership. As such, role expectations can be anchored to institutional priorities. While Brownfield et al. (2012) call for expectations and scope of duties to be aligned with institutional priorities, findings from our study suggest that role expectations may be contingent upon several contextual factors: 1) a VCE's perspective on multiple leadership roles, and 2) their department's distinctive culture. After an in-depth examination we find a complex interplay between institutional priorities and the VCE working relationship and dynamic with the chair. Survey responses, in particular, highlight the critical role the chair plays in creating, sustaining or changing culture which is consistent with organizational culture theory.

Finally, findings reveal a mixed perception about bundled time for administrative roles. Multiple roles are viewed as problematic by some while others feel that the combination fosters a natural and appropriate synergy.

VCE Retention Implications and Recommendations

While VCEs in managerial and negotiating cultures expressed different concerns than those in collaborative and creative cultures, the cultures may function in different environments. We speculate that those respondents currently in a collaborative and creative culture are operating in a resource rich environment, perhaps a private institution, while those in managerial and negotiating cultures may currently be facing fiscal issues in an ever-changing healthcare environment. This is important to differentiate because although managing funds is an important part of the position, VCEs reporting finances as a top apprehension is concerning and likely to impact the educational experience. As a result, they may self-identify predominately as fiscal managers as oppose to scholars or advocates focused on setting the department's educational "big picture." Depending on their future leadership career interests and individual strengths, this will likely impact their retention in the position.

The specific desire for collaborative and creative cultures builds on Pangaro's (2012) recent call for "phase three" in medical education leadership wherein the chair exercises a democratic leadership style. This includes encouragement of collaboration and creativity, sharing in decision making, and empowerment of the VCE to lead and act on behalf of the department by the chair. Findings suggest that this can most readily be achieved through a unified educational vision between the VCE and chair. Based on our findings and in line with Brownfield et al.'s (2012) guidelines, the chair should take into account the views and capabilities of the VCE candidates at the time of selection. Prospective VCEs should have frank conversations with their chairs, deans, and faculty members about the departmental culture as well as educational priorities to determine their "fit" for the role. VCEs should be mindful of the context in which they will serve the chair.

Limitations and Future Research

Our study has several limitations. First, unlike Sanfey et al.'s (2012a) mixed-methods works, no PhD/EdD held the role of VCE in Departments of Medicine as they did in Departments of Surgery. As such, our study lacks the perspective of this subgroup. Next, while our study is restricted to the medicine specialty, we do provide an applicable starting point for scholars to explore differences and similarities in other health science disciplines such as nursing, public health, or pharmacy. Third, we do not include perspectives on departmental culture from a critically influential member: the department chair. Including this view to counter, confirm or shed alternative light on those of the VCE views would have bolstered our triangulation. Nonetheless, our design provides a snapshot of the various organizational cultures in which VCEs in medicine function and lead. Despite a slight overrepresentation of VCEs in managerial cultures among those completing the survey, each typology is represented in the study. Hence, we provide a framework from which to identify and understand the departmental cultures that intersect with and shape the VCE role. Given the subject matter, faculty survey fatigue, and time challenges of those in these executive positions, data collection can be challenging. Alternative methodologies should be considered in future research. Prospective studies are encouraged to build on our work with an even more robust design that could include the following: a) semi-structured and open-ended individual or focus group interviews not just with VCEs, but chairs and teaching faculty for multi-level perspectives, b) ethnographic observation of the various departments, meetings and gatherings, and c) disaggregating by private or public universities with hospital partnerships. Future studies could build on our work by longitudinally examining curricular and/or educational policy initiatives spearheaded by their departments. A report on perceived departmental changes or stagnation toward curricular or policy goals and the role their VCEs played in implementing these initiatives could further advance our understanding of the role. Furthermore, as an alternative theoretical framework, a social cognitive approach to further analyze the relationship between departmental culture and VCE's perceptions of success and satisfaction can be considered. A framework that examines people's beliefs about their capabilities due in part to motivation, knowledge, skills, and resources to achieve their aspirations and goals provide an additional dimension in understanding the educational leadership roles like the VCE. As such, applying Bandura's (1986) self-efficacy theory is a possibility. Using this vantage point, scholars can explain how and why

VCE's perceive the culture they navigate through, and even more so, explain how and why they approach institutional goals and challenges the way they do.

CONCLUSION

Institutional leaders and faculty play an integral role in shaping departmental cultures. This study examines departmental culture from the perspective of the VCE, a role undergoing professionalization in academic medicine. In medicine departments, physician VCEs participating in our study are educational leaders, who often serve in multiple leadership roles at the department as well as the college level. Although most MD VCE's generally find satisfaction with their role, they continue to seek collaborative cultures within the department. As departmental culture is set by the chair (Kastor, 2013), understanding the types of departmental cultures and how they shape the faculty and the VCE role can assist leaders in defining what success in these roles means. VCE's can gain clarity about roles and responsibilities if they align their efforts with institutional priorities, which become apparent and are intimately linked to departmental culture.

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APPENDIX A
WEB SURVEY

1. I give permission for my responses to be used in this study. Y__ N__

Definition: Keep in mind the definition of organizational culture	The collective values, attitudes, beliefs, vision, norms and behaviors of those in an organization (your dept of medicine). It is also the dominant pattern of behaviors that are taught to faculty in order for them to adapt, function or make change. This also affects how groups interact with each other in both positive and negative ways. Competing values could lead to the creation of sub-cultures within the department.

Typology of Organizational Cultures (Adapted from William Bergquist's *Four Cultures of the Academy*, Jossey-Bass 1992; Cameron & Quinn's *Diagnosing and Changing Organizational Culture*, Addison-Wesley 1999)			
COLLABORATIVE	**CREATIVE**	**MANAGERIAL**	**NEGOTIATING**
• High-trust environment. • There is a premium on teamwork. • Knowledge, power and credit is shared.	• Focus on innovation. • Empowered to risk-take. • Initiative and freedom are encouraged.	• Highly structured • Well-defined structure for authority and decision making. • Focus on monitoring processes. • Fiscal responsibility.	• Values confrontation and bargaining to conform or stabilize relationships. • Respond to external pressures and competitors.

2. a. From your experiences, which of the above is the **dominant** category that describes your current departmental culture? _______

2. b. Which **dominant** category do you think would be <u>ideal</u> for you as the Vice Chair? __
Why do you think so? ______________

3. What's your story? There are likely numerous instances; however, please describe a defining moment/incident/experience that supports your answer choice for 2a and/or 2b.

4. How do faculty behave/respond at department education meetings you or your Chair lead? *Reflect upon, but do not limit yourself to the following areas:* *attendance; discussion; effectiveness*
5. Is there anything you would like to see different about these meetings that could make your job as VCE better? If so, why?
6. What department or College/School events are well attended and thus, valued?
7. What events are <u>not</u> celebrated, but maybe should be? Why is it important to you?
8. What notable changes/implementations relevant to the educational mission within the dept have you observed over the last 2 yrs (or since your arrival if <2 yrs? *This could be related to how and where we train students, trainee, infrastructure for your program, faculty behavior, communication, advocacy, etc. Anything that resonates with you strongly.*
9. Are these changes/implementations ideal for your role as VCE, if any?

Complete the sentence:

10. What keeps me up at night is…
11. From a VCE standpoint, I think the happiest time in my job is/was…
12. I wish I could…
13. I wish my Chair would/could…

14. How were you **FIRST** introduced as the Vice Chair for Education in your department? Make **one selection**.

o read in newsletter o saw in department organizational chart, o personally introduced to the VCE	o informed at my recruitment interview or thru recruitment materials o informed at department meeting o informed at education meeting	o informed at division meeting o Other-Describe: __

15. Are you ALSO the Clerkship Director or Internal Medicine Residency Director? Yes__ No ___ Any other leadership role ________________

16. As applicable to you, how much protected time (or buy down time) do you receive for VCE role_____ or Combined VCE/Director/Chief ____

17. **Department Size. Number of:**

Total Residents_____ Total Fellows_____	ACGME accredited Fellowships ______ ACGME accredited Residencies (housed in your dept)____ FT MD teaching faculty _____

APPENDIX B
CODING SCHEME