

November 2021

Using Developmental Evaluation For Clinical Faculty Development In A New Academic Consortium

Candice Kunkle
University of South Florida

Follow this and additional works at: <https://digitalcommons.usf.edu/etd>

 Part of the [Education Commons](#)

Scholar Commons Citation

Kunkle, Candice, "Using Developmental Evaluation For Clinical Faculty Development In A New Academic Consortium" (2021). *Graduate Theses and Dissertations*.
<https://digitalcommons.usf.edu/etd/9160>

This Dissertation is brought to you for free and open access by the Graduate School at Digital Commons @ University of South Florida. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact scholarcommons@usf.edu.

Using Developmental Evaluation For Clinical Faculty Development In A New Academic
Consortium

by

Candice Kunkle

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in Educational Program Development
with a concentration in Educational Innovation
Department of Lang., Lit., Ed.D., Excep. Ed, and Physical Ed.
College of Education
University of South Florida

Major Professor: Elizabeth Shaunessy-Dedrick, Ph.D.
J.Howard Johnston, Ph.D.
Veselina Lambrev, Ph.D.
Cheryl Ellerbrock, Ph.D.

Date of Approval:
October 13, 2021

Keywords: graduate medical education, community hospitals, academic mergers, innovative
platforms, curriculum development, professional development

Copyright © 2021, Candice Kunkle

DEDICATION

To my children- Alana, Layla, and Caleb- who inspire me each day with a love for learning.

Your love gives me a sense of direction and purpose. Mommy loves you all, completely and unconditionally.

To my husband, Derek-who always makes me laugh. Wipes my tears. Hugs me tight. Watched me succeed and seen me fail. Kept me strong. Thank you for accepting me for who I am and for always standing by my side. I love you.

Lastly, to all the healthcare professionals-thank you for your dedication to medicine and commitment to humanity. I stand by you and your service.

ACKNOWLEDGEMENTS

I have been fortunate enough to have an incredible support system along this journey. First, I would like to thank my committee, not only for their guidance and expertise but for their commitment to education and shaping the minds of our cohort. Dr. Shaunessy-Dedrick, thank you for your open arms and for taking me under your wing when you agreed to be my major professor. I am beyond humbled to have you as my 'go-to' and will forever be in your debt. Dr. Howard Johnson, the founding father of the program, what a privilege to have your expertise, truly an honor to have you along for the ride. Dr. Veselina Lambrev, thank you for introducing me to this approach and being a genuine cheerleader along the way. Finally, Dr. Cheryl Ellerbrock, thank you for agreeing not only to joining my committee but for your comprehensive notetaking as the chair and as a complementary, charming, and analytical perspective. Being a part of the Skyway cohort has been such a pleasant experience; I was able to visit the beautiful campuses at St. Petersburg and Sarasota and meet a savvy group of professionals, which resulted in many long-lasting friendships. To my friends, thank you for holding me up, my pillars of strength; your endless support and encouragement have truly made this possible. To my family, my driving force and main source of motivation. To my mother, thank you for your faith. To my father, my first love, thank you for being the guardrails and for always holding my hand; "I am the sponge!". To my sisters, exquisite flowers you are, I adore each of you; thank you for inspiring me to be better. To my extended family, I cherish your love and support. Lastly, thank you to my husband and children for your gravitating support and your everlasting love.

TABLE OF CONTENTS

ABSTRACT.....	v
CHAPTER ONE: INTRODUCTION.....	1
Introduction and Background.....	1
Shortage of Physicians.....	2
Medical Schools.....	3
Graduate Medical Education.....	4
Accreditation.....	4
Residency Positions.....	5
Academic Medicine/Medical Center.....	5
Defining the Study.....	6
Statement of the Problem.....	6
Clinical Educator Learning Series.....	7
Positionality.....	9
Purpose of the Study.....	11
Inquiry Questions.....	12
Terminology.....	13
CHAPTER TWO: LITERATURE REVIEW.....	16
Introduction.....	16
The Role of Clinical Faculty.....	16
Clinical Faculty in Teaching Hospitals.....	18
Community Hospitals.....	19
Community Physicians in Community Hospitals.....	21
Faculty Development.....	22
Graduate Medical Education.....	24
Regulation and Accreditation.....	25
ACGME.....	27
Organizational Culture and Clinical Leadership.....	29
Curriculum Planning and Faculty Development Program.....	30
Influential Factors.....	32
External Factors.....	33
Theoretical Framework.....	34
Evaluation and Assessment of Needs.....	38
Overview of the Current State.....	40
Future Directions.....	41
Summary.....	43
CHAPTER THREE: METHODS.....	45
Introduction.....	45

Study Design.....	46
Developmental Evaluation Principles.....	48
Systems Thinking and the Complexity Perspective.....	48
Setting and Participants.....	49
Participants.....	49
Setting.....	52
Interview protocol.....	57
Data Sources, Collection and Analysis.....	57
Developmental Evaluation Principles.....	59
 CHAPTER FOUR: FINDINGS.....	 61
Introduction.....	61
Data Analysis.....	61
Coding.....	62
Needs Assessment.....	62
Change Behavior and Practices.....	62
Elements of Participation and Motivation.....	64
Effectiveness, Engagement, Relevance, Accessibility, and Satisfaction.....	66
Timing and Emphasizes on Topics.....	68
Improvement Ideas for Instruction.....	70
Interviews.....	71
Relationship with USF and HCA.....	72
CELS Workshops.....	73
What did CELS Attendees Enjoy the Most and the Least.....	74
Why Participants Attended CELS Workshops.....	75
The Impact on the Evolving Clinical Educator.....	76
Effect of CELS on the Consortium Relationship.....	77
Ways the CELS Affects Participants Behaviors and Practices.....	78
Specific Topics, Areas, Categories to Include in Series.....	78
How Can the Series be Improved.....	79
Ways the CELS can Provide Community of Educators.....	80
Developmental Evaluation Principles.....	82
 CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS.....	 86
Statement of Problem.....	86
Purpose of the Study.....	86
Method.....	87
Discussion.....	88
Evaluation Question One.....	88
Evaluation Question Two.....	89
Evaluation Question Three.....	91
Implications.....	92
Recommendations.....	92
Conclusion.....	93
 REFERENCES.....	 95

APPENDIX A: CLINICAL EDUCATOR LEARNING SERIES NEEDS ASSESSMENT	107
APPENDIX B: INTERVIEW QUESTIONS SAMPLES PROTOCOL	111
APPENDIX C: FACULTY DEVELOPMENT: NEEDS ASSESSMENT.....	113
APPENDIX D: INTERVIEW CODING REPORT.....	118
APPENDIX E: SURVEY CODING REPORT	122

LIST OF TABLES

Table 1: Summary of survey participants’ demographic information	51
Table 2 Faculty Development: June 2019 Needs Assessment Topics Generated	54
Table 3: Clinical Educator Learning Series: Assessment of Learners.....	55
Table 4: CELS Topics: 2019-2020 and 2020-2021	56
Table 5: Developmental Evaluation Principles, Process and Products and Principles.....	59
Table 6: Responses to Survey Question: Examples of Changes of Behavior/Practice.....	63
Table 7: Responses to the Survey Questions: Examples of Changed Behavior & Practices	64
Table 8: Reasons Why Respondents Attended the CELS	65
Table 9: Responses: Effectiveness, Engagement, Relevance, Accessibility, and Satisfaction.....	67
Table 10: Topics Respondents Would Like to See in the Series or Need More Time	68
Table 11: Research Development, Equity, and Cultural Competence.....	69
Table 12: Responses to Survey Question: Ideas to Improve Series.....	70
Table 13: Interview Participants Demographic Information & Interview Document Listing.....	71
Table 14: Developmental Evaluation Principles in the Clinical Educator Learning Series	84

ABSTRACT

This study aims to support the development of the series, particularly this evaluation study addresses the faculty development program within a newly formed academic partnership between teaching and community physicians. The evaluation addresses the opportunities, assets, and strengthens in the programming while constructing it for the intended users. While this study supports the evolution of the new program, it jointly enhances the collective's efforts and innovative initiatives within a new academic partnership among leaders and clinical faculty through its ongoing development. The learning and actions derived from the assessments were guided by analysis from needs assessments and interviews as part of the developmental evaluation and stakeholders' experiences and feedback.

The evaluation uses the approach to collectively gather and organize the data collected from surveys and interviews as part of the data analysis and to inform stakeholders while supporting the innovation. Even though this example is focused on an innovation platform in the clinical faculty development program context, it can be applied in other contexts due to the increasing interest in multi-stakeholder platforms and the inherent challenges with evaluating these complex systems in high uncertainty. This study can guide future mergers with academic medical centers and community hospitals for leaders, curriculum designers, and faculty developers

CHAPTER ONE: INTRODUCTION

Introduction and Background

Medical school faculty are often asked to assume new academic duties for which they have received no formal training. The influence of professional preparation, such as teacher education programs for medical educators has been a fruitful topic in academic medicine. However, there has been considerable growth in implementing initiatives for expanding such professional roles, as the role and training of teaching physicians that must be reviewed and enhanced. The nature in which medical teacher learning is similar to any teacher learning, in which highlights the relevance on teacher professional development from a practice perspective (Shulman, 2005). The fundamentals in which future teaching physicians are taught are often taught through forms of professional preparation. Many years in medicine are spent in learning how to perform like a physician, however, a less emphasis on the pragmatic skills and teaching.

In addition, health systems across the developed world are facing a multifaceted challenge—a rapidly aging population, the relentless drive for increased quality and productivity, and advancing technology capabilities (O’Sullivan & Irby, 2011). The United States is experiencing a severe shortage of up to nearly 122,000 physicians by 2032 as the demand for physicians continues to grow (AAMC, 2019), primarily due to the growth and aging of the population and the impending retirement of older physicians (AAMC, 2019). Thus, there is an increased need for curriculum reform, competition in the healthcare market, and competition for clinical educators to support research. Such rivalry requires that faculty members acquire new skills in leadership, research, and clinical teaching practices.

Shortage of Physicians

The United States' population is growing and aging. As the country starts to address the populations' health goals, such as reducing obesity and improving blood pressure control, Americans' life expectancies will continue to increase. In fact, according to the U.S. Census Bureau, the nation's population is estimated to grow over 10% by 2032 (Association of American Medical Colleges, [AAMC], 2019). While the population of those under 18 years of age is only projected to grow 3.5%, the population aged 65 years and over is projected to grow by 48% (AAMC, 2019). This is because by the year 2030, all Baby Boomers will be 65 years of age or over. Because senior citizens have a much higher per capita rate of healthcare resources consumption compared to younger populations, seniors' demands for health services are projected to be much higher (AAMC, 2020). The need for specialties like geriatric medicine will rise; therefore, demand for physician specialties that predominately care for senior citizen will continue to increase.

In addition, 15% of the physician workforce is currently comprised of physicians over 65 years of age and 27% of physicians are between the ages of 55 and 64. Therefore, over 40% of the current physician workforce is close to retirement in the next decade (AAMC, 2019). Further, physician burnout will be a contributing factor in physicians' accelerating retirement and reduction of work hours. The 2018 Medscape National Physician Burnout and Depression Report indicated that 42% of physicians reported burnout, with long work hours and excess bureaucratic tasks noted as leading causes of burnout (Peckham, 2018). The decline in average hours worked has also been related to the trend of working part-time. Mean hours worked per week decreased by 7.2%, from 55 to 51 hours per week, between 1996 and 2008 according to work published in the Journal of the American Medical Association by Staiger, Auerbach and

Beuerhaus (2010). From a numerical perspective, this decrease amounted to a loss of more than 36,000 physicians from the workforce. The evolution in physician work patterns is the strongest indicator of projected physician supply, such as work hours and retirement, along with the shift in the demand's specialties.

Medical Schools

Enrollment in U.S. medical schools has grown by 31% since 2002 combined with increases in enrollment at schools of osteopathic medicine. Overall, medical student enrollment is now 52% higher than in 2002 (AAMC, 2019). In 2006, the AAMC called for a 30% increase in medical student enrollment as a response to the concern of the physician shortage crisis. Since then, class sizes have increased in medical schools, and there has been a surge in the establishment of new medical schools. The rise in enrollment in medical schools has raised the question of the number of residency slots. However, residency training positions following the completion of medical school have expanded at a rate of only 1% since the congressional cap on federal funding in the Balanced Budget Act of 1997 (AAMC, 2019). This limit prevented funding for programs such as Medicare for graduate medical education training. However, Medicare payments to teaching hospitals were intended to serve the diverse populations who rely on their benefits and services, which enables those forefronts in medical research to expand on patient care.

Teaching hospitals provide valuable services to both Medicare beneficiaries and non-beneficiaries. The graduate medical education training of physicians and other health professionals in teaching hospitals is key to providing the nation with its supply of high-quality physicians as well as enhancing the quality of care provided to hospital patients (Davis, 2000). Most of the cost of residency programs is derived from teaching hospitals. However, the

Balanced Budget Act halted the federal revenue and had negative implications on teaching hospitals and the number of residency positions that could be supported. This is problematic as medical school graduates must undergo additional training in a residency program to practice medicine. Moreover, with significant expansion in enrollment, the focus has shifted to graduate medical education in the effort to combat the impending physician shortage.

Graduate Medical Education

Graduate medical education refers to the period of training in a particular specialty (residency) or subspecialty (fellowships) following medical school (ACGME, 2010). Graduate medical education is linked to formal postdoctoral work in American hospitals, which is largely a 20th century phenomenon (Stevens, 1978). Physicians in training are referred as residents and fellows, are expected to complete their training during their graduate medical education tenure (GME), which is the formal medical post-doctoral training, in preparation for board certifications and state licensures to practice medicine.

Accreditation

The current approach to the Accreditation Council for Graduate Medical Education (ACGME), requires that each program be creative in showing individual residents' improvement, which should result in improvements in the program (Joyner, 2004). Under the ACGME, residency and fellowship programs are to adhere to the standards in place for efficiency and compliance within those institutional and program requirements. It is no longer acceptable to grant accreditation to institutions that demonstrates the potential to educate; rather, institutions had to document the actual accomplishment and were held accountable when non-compliant.

Residency Positions

While medical school schools are increasing and graduating more competent learners, the number of residency training positions has not kept pace. A shortage of residency positions ultimately has a big impact on the physician shortage.

Academic Medicine/Medical Center

Physicians, whether they have an academic role or not, teach daily through preventive counseling, introducing new diagnoses, and negotiating treatment options (Stull & Duviver, 2017). Academic medicine encompasses the traditional tripartite mission of educating the next generation of physicians and biomedical scientists, discovering causes of and cures for disease, and advancing knowledge of patient care while caring for patients (Kanter, 2008). Therefore, clinical teachers play a crucial role in the education of future physicians. Physicians going into academic medicine versus private practice usually have an interest in teaching and research. Employing academic medical centers, universities, and/or teaching hospitals will have expectations in clinical, teaching, and research activities.

Due to the financial constraints put in place by the federal limit in the 1990s, there has been a reduction in the financial support of university centers by state and local governments as well as less federal funding for research. As a result, the academic model has changed. During the past 20 years, enormous pressure has been placed on academic physicians to generate more of their salary through patient care, thereby reducing time for research and/or teaching (Borger et al., 2010). Additionally, with the duty hour restrictions enforced by ACGME for residency programs, faculty involvement in inpatient care has increased, and less time can be spent on research and teaching. Salaries to attract and recruit clinical faculty have also been challenged as the reality of doing primarily clinical work in an academic setting could be deceiving. Among

the challenges facing academic medicine today are physician capacity problems, the shifting demand of clinical obligations, and expectations from teaching hospitals.

Recent health reform initiatives are stimulating higher levels of coordination and system integration. This includes the rise of consolidation and the expansion of relationships among academic medical centers and other hospitals. These relationships take on the many forms of partnerships, consortiums, mergers, acquisitions, affiliations, collaborations, and joint ventures. Among these, collaborations ranging from affiliations to acquisitions are becoming more prevalent as a way of responding not only to delivering high-quality and low-cost care but also to ensuring a steady flow of patients who need academic medical centers' highly specialized care. In 2010, approximately 20% of health-related merger and acquisition deals involved an academic medical center, and this percentage is expected to increase (PWC, 2012). Many institutions are responding to the emergent change in the evolving healthcare system in addition to the transitional physician workforce's needs.

All medical facilities, academic medical centers, teaching hospitals, community hospitals, and other clinical enterprises have the responsibility of graduating enough competent health professionals into medical practices and, therefore, the obligation to assure the quality and effectiveness of the clinical learning environment. As a result, there is a developing focus on the changing dynamics of the clinical faculty.

Defining the Study

Statement of Problem

Given the operating context, the role of clinical faculty has increasingly evolved into a discipline of its own, particularly the development of the clinical faculty role within the various teaching and community hospitals. Teaching hospitals are affiliated hospitals with an academic

medical center and a medical school. Traditionally, teaching hospitals have been governed under the social missions of clinical care, education, and research. In comparison, non-teaching hospitals include community hospitals (Stephenson-Laws, 2017) and primarily focus on serving the local community. While several entities are preparing to respond to the inevitable physician shortage in the United States, many community hospitals and healthcare systems are coordinating new care pathways through the integration of academic medical centers and new partnerships. A subset of the health system delivery consolidation trend has included the development of partnerships or mergers between the American Medical Colleges and community hospitals (Fleishon et al., 2016). To help address the physician shortage crisis, several medical schools and for-profit organizations have formed academic partnerships to address the need to train and retain physicians within their local states. With the formation of new affiliations between these two systems by sharing academic resources, clinical faculty from both sides are expected to join forces to assemble a cadre of educators, professionals, researchers, and leaders. While the expectation for integration and efficiency has been set, it remains to be seen whether clinical faculty from both teaching and community hospitals can jointly promote academic excellence in a teaching and learning community. Whether faculty development initiatives will be enough to form a consortium of clinical educators through the integration of these two distinct enterprises needs to be investigated. One such initiative is the focus of this study and the evaluation of the training to support clinical educators is the focus.

Clinical Educator Learning Series

Clinical educators teach a variety of learners across multiple learning environments and within multiple clinical contexts. The lack of formal training on effective teaching methodologies in various clinical settings and time constraints are among the key challenges for

faculty to address in high quality teaching and learning best practices, to establish a common education taxonomy, and promote high quality teaching and learning in the clinical learning environment. The Clinical Educator Learning Series for faculty seeks to foster the knowledge, skills, and attitudes for enhanced teaching and learning opportunities and improved confidence in teaching among medical education professionals. The purpose of the program within a newly formed consortium is to further develop a culture of collaboration between USF Health, an academic medical center, and HCA, a for-profit organization, to enhance the quality of Graduate Medical Education programs at HCA West Florida division hospitals and create additional opportunities to enhance the educational mission.

This faculty development program seeks to create a community of educators through workshops and seminars across a continuum of teaching and learning. The objectives of this program are to 1) to provide a forum for community of practice 2) to enhance confidence in clinical teaching and 3) to offer strategies and resources for improvement of teaching practices. The vision of this program is improving leadership and teaching best practices through an integrated cadre of faculty about teaching and community physicians. For a new program and new relationship in this study, evaluating the curriculum as it is being develop requires a more adaptive model to engage in the emerging developments while delivering the program. In the innovative stages of such complex projects, such as the HCA and USF Health consortium, with multiple stakeholders, utilizing a comprehensive evaluation framework serves as a foundation for the developmental needs in this study. Therefore, understanding the implementation process of developing a program requires a developmental evaluation framework to support the context in which the interventions are being introduced.

This evaluation study provides an understanding of the challenges that come with developing local clinical educators for both teaching and community physicians under the newly formed consortium while strengthening the partnership between HCA West Florida and USF Health.

Positionality

In my role as a Graduate Medical Education project manager, I manage and oversee the academic deliverables between two distinct enterprises: an academic medical center, USF, and a for-profit organization mostly made up of community hospitals, HCA. With previous years in Graduate Medical Education and as a University employee for over eight years, I acknowledge that I bring biases to the study. As well as my proximity to the external stakeholder, Hospital Corporate of America (HCA), I recognize the research bias, however to ensure the study free from subjectivity that could influence results, I plan to describe a detailed approach in following chapters along with the following introduction of the my position and relation to the participants. The Hospital Corporation of America (HCA) and University of South Florida (USF) consortium is a newly formed as a partnership aimed at responding to a shortage of physicians by expanding the graduate medical education (GME) programs in the West Florida Division. The consortium seeks to train and retain, approximately 7,000 future physicians in the state of Florida (AMMC, 2019) by the year 2025. Florida is ranked 41st nationally in the number of residency positions per 100,000 people (AAMC, 2019).

Currently, there are 11 MD- and DO-degree-granting schools in Florida, with 47 teaching hospitals and 3,945 residents in training (AAMC, 2020). The shortage of positions has pushed medical school graduates to hospitals in other states. Medical doctors tend to open practices in states where they complete their residencies, studies show. My job is to ensure that the relationship between HCA and USF is cordial and the academic resources that are delivered from

the six domains adhere to the affiliation agreement between the HCA and the University. These academic resources from the six respective domains are as follows include (1) USF shared grand rounds and resident educational conferences; (2) faculty development opportunities; (3) collaborative faculty appointments (non-compensated); (4) GME librarian services; (5) USF Health Center for Advanced Medical Learning and Simulation (CAMLs) programs; and (6) research opportunities. This is a five-year affiliation agreement, and we are currently entering the third year in 2020.

Annually, HCA pays USF a formulate amount of revenue to obtain access to the USF academic resources needed to maintain its accreditation status through ACGME. In return, through the expansion of GME programs, USF receives more employment opportunities through quality and quantity improvements. HCA West Florida is corporate and relatively new to the academic arena. Therefore, HCA GME programs require support in producing scholarly activity of both faculty and residents/fellows, which is a common program requirement per ACGME, and requires these educational resources to sustain their accreditation status. Among the academic resources, under the broad domain of faculty development opportunities, is the *Clinical Educator Learning Series*, which was created to develop and implement a program for fostering faculty's knowledge, skills, and attitudes to enhance teaching and learning opportunities and improve confidence in teaching. There is a need for comprehensive faculty development to address clinical leadership tasks and organizational development to promote postgraduate medical sustainability.

As a curriculum developer in the series, I have access to the funding and all stakeholders (faculty, lecturers, deans). Within my role, I understand the significance of this academic deliverable in alignment with the educational missions of the collaboration of the consortium. As

previously stated, I possess knowledge of GME through my prior working experience in higher education and medical education administration, therefore research biases are present since I have preexisting ideas and experiences closely related to the research topic and setting. I view the evaluation of the Clinical Educator Learning Series as necessary for the purpose of the consortium as an academic deliverable for both internal and external stakeholder. As the researcher, I acknowledge my proximity to the participants, clinical faculty from both USF and HCA, as many of the participants are familiar with me. While familiarity with the participants may be beneficial, it may have influence during the interpretation of data, therefore a researcher journal was used to mitigate and document the interventions.

Purpose of the Study

The purpose of this evaluation study was to support the development of the Clinical Educator Learning Series (CELS). The faculty development program is emerging in real time, therefore the developmental evaluation approach was used to adapt the complex role of clinical faculty and respond to their needs, while evaluating the curriculum of the program as its being delivered. The evaluation addressed the faculty development program. By using a developmental evaluation (DE) framework, I sought to respond to the complex reality of clinical faculty under a consortium; (1) to engage with multiple perspectives; (2) inform stakeholders; (3) to support the dynamic, evolving learning program; and (4) to provide timely feedback within the program to address gaps identified by the evaluation of the program. Following up on an initial needs assessment that was conducted in 2019 with all clinical faculty from USF and HCA, this evaluation included another needs assessment to establish the current needs of the newly formed organization. Additionally, the evaluation also included a review of formative assessments completed following CELS workshops to provide insight about ongoing curriculum

developments. Interviews of stakeholders involved in the consortium creation, oversight, and implementation was conducted to inform understanding of the current CELS needs and curriculum development. Under this framework, the evaluation supported the exploration and social innovation interventions to further support the ongoing developments in the program.

Inquiry Questions

This study used a developmental evaluation tool to evaluate the faculty development program. The Clinical Educator Learning Series is an ongoing faculty development program, which began with an innovation. What began as simply team meeting notes and a drawing board into a list of ideas and topics from a conversation with my supervisor to a fully developed series of professional learning program providing the space and opportunity for teaching and learning for medical educators within this new consortium. While adapting effective principles of practice to local contexts, the evaluation responded to needs of clinical faculty by enhancing the Clinical Educator Learning Series. While working in partnership with program decision makers, through this evaluation I examined the effectiveness of the Clinical Educator Learning Series, and I highlighted challenges and conditions of emerging relationships within the newly formed consortiums. In this evaluation study I explored the following questions:

1. According to program directors and clinical faculty, what elements of the curriculum are strong and should be maintained or enriched?
2. What opportunities exist to complement the curriculum with additional essential elements in the Clinical Educator Learning Series' current curriculum?
3. How do emerging collaborative relationships address program objectives?

With a focus on evaluation, the intent was to investigate the degree to which the program was accomplishing the intended goals. The study evaluated the Clinical Educator Learning

Series (CELS), currently hosted at the Morsani College of Medicine at the University of South Florida (MCOMUSF), an academic medical center. Participants included appointed clinical faculty from both community and teaching hospitals and executive board members, from both HCA and USF leadership, who oversee and manage all matters pertaining to development, financing, operations, and quality of the current consortium.

Data collected for this evaluation study included online surveys and interviews. Specifically, the study evaluated the stages of program development. New initiatives, such as the Clinical Educator Learning Series, evolve and develop simultaneously, and these responses from the stages of development often happen incrementally and informally. To help inform the innovation, I collected feedback from both the survey and interviews for the ongoing adaption and development of the CELS, specifically feedback about how program participants responded to the program. I reflected on participants' response to changes and on desired outcomes. Therefore, the assessment of social interventions was needed, which aligns with the eight essential development evaluation principles (Patton, 2016), which supported the ongoing development of the program during the curriculum evaluation.

Terminology

AAMC: Association of American Medical Colleges—a nonprofit organization responsible for the facilitation of medical students and residency programs. In addition, it administers the Medical College Admission Test (MCAT) and operates the American College of Application Services (AMCAS) and the Electronic Residency Application Services (ERAS).

ACGME: Accreditation of Council for Graduate Medical Education—a nonprofit organization responsible for accrediting all graduate medical training programs for physicians in the United States.

GME: Graduate Medical Education—the formal medical post-doctoral training following the completion of an M.D. or D.O. degree in the United States; this includes internships, residencies, subspecialties, and fellowship programs, which leads to board certification and state licensures.

MD: Doctor of Medicine—a medical degree awarded upon graduation from medical schools.

DO: Doctor of Osteopathic Medicine—a medical degree awarded upon graduation from an osteopathic medical school.

HCA: Hospital Corporation of America—a for-profit healthcare organization that is currently the largest graduate medical education sponsor in the United States, with 244 residency programs and more than 170 hospitals as training sites (HCA Healthcare, Graduate Medical Education, 2020)

HCA GME West FL: HCA West Florida Division currently includes nine hospitals, 44 programs, and over 600 residents. Presently, it is the largest HCA division in the state of Florida.

ACCME: Accreditation Council for Continuing Medical Education—the accrediting body for the educational activities and standards in physician continuing education (or lifelong learning) within the United States.

CME: Continuing Medical Education—the educational activities that serve to maintain competency and requirements for licensures and faculty appointment status.

Clinical Faculty: a clinician who is a teacher and a researcher—also referred to as teaching faculty, clinical professors, clinical educators, attending physicians, and teaching physicians. Clinical faculty can be either salaried or may teach as a volunteer.

Core Faculty: All physician faculty members who have a significant role in the education of residents and fellows. Core faculty spend at least 15 hours per week with a resident or 10 hours per week with a fellow in education and administration.

Specialty/Specialties: A branch of medical practice focused on a defined group of patients, diseases, skills, or a particular need.

Accredited Program: A residency or fellowship program that meets the criteria by the accrediting body, ACGME.

Medical Resident: An individual who has completed medical school and is in training to become a licensed physician. Residents generally train in a specialty for three to five years (some specialties require a preliminary year, commonly referred to as the intern year in general medicine training).

Primary Care Residents: Physicians-in-training in family medicine, internal medicine, and pediatrics—may also include obstetrics, gynecology, and geriatric medicine.

Specialty Residents: Physicians-in-training in a medical specialty outside of primary care (e.g., diagnostic radiology).

Medical Fellows: Physicians who have completed an initial residency in a specialty and are pursuing additional specialty training. For example, cardiology fellows complete three years of internal medicine during residency and move on to fellowships in general cardiology with an additional three years in the specialty. Some will be further specialized (e.g., interventional cardiology), which will require an additional one to two years of fellowship training.

Teaching Hospital: A hospital that offers one or more accredited residency (or fellowship) program and is thereby eligible for federal funding from the federal program for the GME program(s). Teaching hospitals are often affiliated with a medical school.

Academic Year: The year when residents are beginning their training or moving up to the next year beginning July 1 and ending June 30.

CHAPTER TWO: LITERATURE REVIEW

Introduction

There is ample literature demonstrating the physician shortage in the United States. However, the available research is limited concerning the increasing newly formed academic partnerships between teaching and community hospitals. As these alliances accelerate to address the needs of the physician shortage, achieving a deeper understanding of the changing roles and relationships of the teaching physician presents additional complexity to an already perplexing role. The demands of academic medicine continue to be another factor that places a strain on clinical faculty along with the complex reality of physicians with academic careers in newly formed consortiums. In response, the literature has suggested that the implementation of faculty development programs may support and facilitate the evolving role of faculty. However, current research is inadequate to inform stakeholders as to which direct changes may affect clinical faculty in diverse settings within these academic integrations.

The Role of Clinical Faculty

According to Steinert et al. (2019), clinical faculty, who are also referred to as clinical educators, teaching physicians, attending physicians, and clinical professors, are clinicians who are teachers, researchers, and leaders in academic medicine. Clinical faculty have a significant role in the clinical learning environment, such as teaching hospitals, medical centers, health systems, and outpatient, inpatient, and other clinical settings including medical students, residents, and fellows—all of whom are physicians-in-training. Employing universities have expectations for all appointed faculty to contribute equally to the tripod pillars that support the

educational mission: teaching, research, and administrative obligations (Coates et al., 2016). As clinicians, their clinical responsibilities supersede their educator identity, as they primarily identify themselves as physicians (Steinert et al., 2019). However, studies have indicated that teaching is an integral part of clinical teachers (Irby & O'Sullivan, 2018; Steinert et al., 2010, 2019). Teacher identity is important because it influences professional development opportunities, including their choice of career, private practice, or academic medicine, and their roles and responsibilities. Although clinical educators may develop a sense of identity as teachers, that identity is challenged by their identity as physicians and researchers, which can be influenced by the group and institution in which they practice teaching.

A lack of formal training in teaching can also discourage clinical faculty from pursuing or contributing efforts in curriculum and instruction. In the absence of formal teaching training, the majority of clinical faculty are likely to learn their trade on the job (Cantillon et al., 2019), learning to teach not through education in their content but rather through observing it being taught (Irby & Wilkerson, 1998). Furthermore, time constraints due to clinical obligations (Damp et al., 2016) may discourage effective teaching. Shulman (2005) argues the study of signature pedagogies is a way of systematically following teachers in the learning and using their feedback to redesign teacher education programs and professional development. This attests to the significance of how medical professionals, specifically clinical physicians, are trained for their professions and the forms of professional preparation. As a teacher, teaching in a clinical setting is one of the many responsibilities of the busy clinician (Damp et al., 2016).

All medical institutions have the responsibility to graduate competent health professionals into professional practices and, therefore, have an obligation to assure the quality and effectiveness of their students' clinical teaching (Blitz et al., 2018). As a result, there is

growing concern as to how to support clinical teachers. However, the lack of incentives, such as deficits in pay, may dissuade clinicians from prioritizing teaching. When health systems and organizations are driven on clinician revenue, their priorities are established, making it more challenging for the busy clinical physician to implement knowledge of teaching concepts and strategies or to instill confidence in their teaching. Clinical faculty are often overwhelmed by the high clinical demands that do not adequately account for reduced work capacity when teaching learners in various clinical settings. Several researchers have highlighted the complex demands of clinical faculty (Broderick & Nocella, 2012; Lake & Bell, 2016; Steinert et al., 2009; Steinmann et al., 2009). Steinert (2019) and Simpson et al. (2019) identified clinical faculty as serving a critical role in the education of future physicians. Without supporting the educator within the clinical faculty context, the quality of the clinical learning environment is unsustainable for future physicians-in-training

Clinical Faculty in Teaching Hospitals

A teaching hospital provides medical education and clinical training to current and future health professionals. Teaching hospitals are often affiliated with medical schools or a university and bring together state-of-the-art research, innovation, and the latest advances in medicine in an exceptional learning environment (AAMC, Teaching Hospital Sustainability, 2020). Teaching hospitals are also referred to as an academic medical center. All academic medical centers focus on patient care, teaching, and research (Health Research Institution, 2012). According to the American Association for Medical Colleges (AAMC), teaching hospitals provide care for patients' complex issues (AAMC, Teaching Hospital Sustainability, 2020), indigent populations, and underserved urban communities; they also represent the majority of level 1 trauma centers (Ayanian & Weissman, 2002) and transplant centers, giving the next generation of physicians a

more robust clinical training. Although teaching hospitals represent only one in five U.S. hospitals (AHA, 2018), they serve some of the nation's most vulnerable populations while also developing future health professionals. Clinical faculty in teaching hospitals play a significant role in patient care and the culture of medicine through their instruction, supervision, and leadership. These teaching physicians mold the attitudes and culture of the next generation by allowing learners to practice their education in the workplace, the teaching hospital.

Teaching hospitals rely on physician educators to produce competent and efficient physicians-in-training to sustain their medical and academic excellence. Physicians-in-training, also referred to as residents and fellows, are expected to complete their training during their GME tenure, which is the formal medical post-doctoral training in preparation for board certifications and state licensures to practice medicine. Clinical faculty are expected to teach residents and fellows, conduct research, and contribute to administrative tasks, all while maintaining clinician responsibilities. As institutions and individual disciplines strive to educate medical teachers, researchers, and administrators for their evolving and current responsibilities, the competencies of faculty members are continuously being redefined (McLean et al., 2008). Several studies (Blitz et al., 2018; Steinert et al., 2019, O' Sullivan & Irby, 2011) have highlighted the complex demands placed on clinical faculty, emphasizing the changing roles and work tasks related to healthcare reform. Emerging clinical faculty are often overwhelmed by high clinical productivity standards, which are not taken into consideration when accounting for decreased productivity when teaching learners in clinical settings.

Community Hospitals

Non-teaching hospitals include community hospitals. Community hospitals are recognized as serving a local area with a mission to provide primary or essential health services

to meet the medical needs of their respective communities. Generally, these hospitals are smaller, have limited space and resources, and are predominately in rural areas (Pitchford et al., 2017). Although community hospitals are not commonly recognized for medical advancements, they remain significant and vital to the entire healthcare system for geographically displaced communities. Community hospitals fill a critical and complementary role for the nation, accounting for approximately 80% of all hospital admissions each year and serving as the primary site for healthcare in most communities (Health Research Institute, 2012).

Recent health reform initiatives have ignited the trend of healthcare systems integration. The literature illustrates the consolidation and expansion of healthcare systems, such as teaching hospitals and community hospitals. For instance, Blitz et al. (2018) identified the expansion to rural communities as a response to the challenge of expanding clinical faculty from traditional academic teaching hospitals due to the impact on those community physicians with limited resources and the geographically distant education institutions they serve. The expansion and geographic location present additional barriers for community physicians' engagement and validity.

The recent trend of teaching hospitals and medical schools, also called academic medical centers, has embarked on new pathways, mergers, and partnerships with their community hospital peers in response to economic pressures and initiative efforts (Fleishon et al., 2017). However, community physicians differ from the clinical faculty associated with a teaching hospital, as community physicians are generally not interested in or concerned with the responsibility of non-medical day-to-day administrative tasks (Eskin, 1979). In addition, community hospitals are known as locations where physicians may mainly practice clinical medicine and refrain from being involved in education and research. Therefore, as health

systems between teaching and community hospitals continue to merge, a major challenge concerns how nonacademic clinical faculty from community hospitals and nonacademic hospitals, who once focused exclusively on patient care, are asked to transition into new education and academic roles (Topps & Strasser, 2010).

Community Physicians in Community Hospitals

Physicians in community settings are typically general practitioners and consider patient care their top priority, after which educational and research activities may follow. Topps and Stasser (2010) argued that the use of community hospitals as a critical and complementary role, serving as the primary sites for healthcare in most communities, in a strategic response can be successful with considerations. These include accounting for the institutional culture, human, physical, and financial resources, and support for ongoing educational activities. Emphasizing functional integration, Topps and Stasser (2010) also urged transparency, a collective spirit in strategic planning, and shared visions between non-university and academic medical centers. A call for supporting accredited education activities is also highlighted in the literature as a key component in shared visions. Clinical leaders and organizations must endorse educational activities (Baldwin et al., 2017) and the provision of educational tools (Steinert et al., 2009). For academic medical centers, these resources and tools are more accessible, as many university settings are equipped to develop and respond to educational initiatives, such as faculty development programs. Constant reminders and frequent contact in combination with precise, well-timed faculty development activities are required in non-university settings to encourage busy practitioners' buy-in to participate in teaching activities. Topps and Strasser (2010) illustrate the growing pains among the new territory for community hospitals in relation to the educational component. The academic component is not yet explicit for those community

physicians, as they mitigate their new role to adhere to the triple mission of clinical care, education, and research.

Along with the growing number of consortia agreements, employing universities provide faculty appointments to physicians in recognition of their contribution to the medical school's mission. As a faculty member of academic medicine, the expectations then transform a community physician into a clinical faculty member. Community physicians may need to upgrade educational and technical skill requirements (Topps & Strasser, 2010) to meet program-specific standards. Clinical faculty at community hospitals require a significant amount of support to embrace their new roles in medical education. However, physicians with many patient care responsibilities may have a difficult time meeting the promotion criteria due to limited support and/or time.

Faculty Development

Faculty development in medical education began in the 1950s (O'Sullivan & Irby, 2011) with the purpose of preparing academic faculty members for teaching. Traditionally, faculty development is believed to improve participants' teaching behaviors and effectiveness (Bar-on & Konopasek, 2014). Faculty development refers to any planned activities designed to improve an individual's knowledge, skills, and attitude in areas related to the roles and responsibilities of a faculty member (e.g., education, research, administration) at all levels, from the individual learner to the broader educational system. Faculty development sessions are delivered in the form of workshops (46%), seminar series (19%), short courses (11%), longitudinal programs such as fellowships (10%), or another format of e-learning (Cook & Steinert, 2013; Meyer, 2014; Steinert et al., 2009).

A review of the literature suggests that the educational component integration for community hospitals will be much easier if the partner organizations and communications focus on collaborative strategic planning and develop a shared vision (Topps & Strasser, 2010). Support for educational activities is essential for the development of a growing, integrated, community-engaged medical education. Faculty development is one mechanism for improving the institutional competencies of educators (O'Sullivan & Irby, 2011) and promoting coherence in academic excellence. Faculty development, or staff development as it is often called, refers to all activities that healthcare professionals pursue to improve their knowledge, skills, and behaviors as teachers and educators, leaders and managers, and researchers and scholars in both individual and group settings (Steinert, 2014). The general goal of faculty is to teach faculty members the skills relevant to their institutional and faculty position and to sustain their vitality (Steinert et al., 2009).

Based on the research conducted by Steinert (2009, 2011, 2014), faculty development can provide individuals with knowledge and skills in teaching and learning as well as reinforce or alter attitudes and beliefs in leadership and administration, research, and scholarly competency. The domains of faculty development include teaching effectiveness, leadership and management, research capacity building, academic and career development, and organizational change (Steinert, 2014). To meet the mission and goals of the institution in terms of its social and moral responsibility to the community it serves, McLean et al. (2008) argued that a more comprehensive definition of faculty development at an institutional level in the 21st century will include the personal and professional development of teachers, clinicians, researchers, and administrators.

Faculty development can promote a culture of change by helping to develop institutional policies that support and reward excellence, recognize innovation and scholarship, and enable career advancement.

Graduate Medical Education

Over 125 years ago, formal education was not required for the practice of medicine. In 1875, there were no requirements for medical physicians' licensing (Joyner, 2004) before the American Association of Medical Colleges was founded in 1876. William Halsted created the first American surgical residency program in 1889 at the Johns Hopkins School of Medicine. Medical trainees were called "residents" or "house staff" because they were required to live in the hospital. The reference has carried on to today's clinical settings, as physicians-in-training are still referred to as residents and house staff.

Simultaneously, the American Medical Association (AMA) was founded in 1847 and incorporated in 1897 as the largest association of physicians and medical students in the United States (AMA, 2019). The AMA's mission is to promote the art and science of medicine and the betterment of public health. To regulate the medical industry, the AMA commissioned Abraham Flexner to review medical schools in the United States and Canada, and he undertook the investigation for the Carnegie Foundation for the Advancement of Teaching. Flexner was a Johns Hopkins graduate, had received a German-style research education with intensive laboratory work (Stahnish & Veroeff, 2012), and produced the Flexner Report (1910). This report provided a commendatory status of the condition of medical education in the early 1900s, which is recognized as a part of today's medical education curriculum.

Regulation and Accreditation

Preceding the implementation of formalizing medical education, resident regulations began. The accidental death of Libby Zion in 1984 due to a medical error at the hands of an intern, a physician-in-training in a teaching hospital in New York, initiated the system of training and supervising young doctors that has continued to come under the scrutinizing eye of the public. The young doctor was on the 18th consecutive hour of being on-call when they responded to the patient. The incidental death of Andy Warhol, who died in his post-operative sleep, also caused some concerns, as an intern was later confirmed to be the cause of the failed reevaluation of medical history. Coincidentally, Andy Warhol's death occurred at the same teaching hospital as the notable case of Libby Zion. The American public had become increasingly displeased with the incompetence of doctors who were graduating from accredited residency training programs (Joyner, 2004). Eighty years after the start of formalized medical school training, in 1981, the Accreditation Council for Graduate Medical Education (ACGME) was established, following the Liaison Committee for Graduate Medical Education's (LCGME) creation in 1972, with the mission to improve healthcare and population health by evaluating and advancing the quality of resident education through accreditation.

With the mission of ensuring quality, ACGME endorsed the Outcome Project Advisory Committee's proposal in 1999 to identify six general core competencies in response to the need for developing methods for assessing competency-based learning objectives: (1) patient care, (2) medical knowledge, (3) professionalism, (4) systems-based practice, (5) practice-based learning, and (6) interpersonal and communication skills (Kavic, 2002). This enforcement of the core competencies shifted the learning environment in residency programs by creating competency parameters to demonstrate the learning achievement through educational outcome assessments.

ACGME has continued to shift the educational experience of residents and fellows by implementing duty-hour limits for intellectual stimulation and satisfaction with faculty metrics.

Residency Positions

The stagnant number of resident positions is also related to the cap on federal funding, which has been frozen at a level similar to the year 1997. Medicare covers the majority of the cost that teaching hospitals pay in training medical residents and has historically paid for 21% of overall training (AAMC, 2019). Since residency positions has been limited, hospitals have been responsible for the paying the bill. However, hospitals cannot pay the entire cost of residents' education (estimated at about \$171,855 per year per resident on average according to AAMC data). Recently, a House bill known as the Resident Physician Shortage Reduction Act of 2019 (H.R. 1763) was introduced with the goal of increasing the number of residency positions that would be eligible for graduate medical education payments under Medicare for qualifying hospitals. This bill allows for an aggregate increase of 3,000 positions per fiscal year for five years (116th Congress, 2019–2020).

The 2019 Main Residency Match was larger than the years preceding it, according to the National Resident Match Program (NRMP); a record-high total of 38,376 applicants submitted program choices for 35,185 positions. Approximately 8.3% of medical students did not fill a residency slot. However, the number of those available for the first year, the Post-Graduate Year (PGY-1), demonstrated a slight increase of 6.5% (1,962) from 2018 (NRMP, 2019). The data reflects the discrepancy between the supply in medical school graduates and the demand for residency slots. A bill that would potentially provide 15,000 Medicare-supported residency positions starting 2021 awaits action in both the Senate and House (GovTrack, 2020). The legislation would prioritize the supply of new residency positions to teaching hospitals as

follows: hospitals in states with new medical schools or branch campuses; hospitals exceeding their graduate medical education residency slot cap; hospitals affiliated with Veterans Affairs medical centers; hospitals that emphasize training in community-based settings or hospital outpatient departments; hospitals that operate an approved “rural track” program in a non-rural area; and then all other hospitals (AHA, 2019). The 2019 Main Residency Match was larger than the years preceding it, according to the National Resident Match Program (NRMP); a record-high total of 38,376 applicants submitted program choices for 35,185 positions. Approximately 8.3% of medical students did not fill a residency slot. However, the number of those available for the first year, the Post-Graduate Year (PGY-1), demonstrated a slight increase of 6.5% (1,962) from 2018 (NRMP, 2019).

ACGME

Clinical faculty are critical to the success of the education of residents and fellows. They strengthen the training programs’ leadership in developing, implementing, and assessing curriculum and in guiding the progress of physicians-in-training toward achieving competence in the specialty. Faculty members are the most important resource, as they invest in students’ growth and development, which is essential for promoting innovation and excellence at all levels of the educational continuum (Steinert et al., 2016). The value in faculty development is recognized by the ACGME, the sanctioning body responsible for all graduate medical training programs for physicians in the United States. The ACGME (2018) Common Program Requirements are standards put in place to sustain program accreditation for training and preparing future physicians. ACGME (Common Program Requirements, 2020) mandates opportunities for faculty engagement in program and faculty professional development, including that faculty members must: (a) be role models of professionalism; (b) demonstrate a

commitment to the delivery of safe, quality, cost-effective, patient-centered care; (c) demonstrate a strong interest in the education of residents/fellows; (d) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; (e) administer and maintain an educational environment conducive to educating residents/fellows; (f) regularly participate in organized clinical discussions, (grand) rounds, journal clubs, and conferences; and (g) pursue faculty development designed to enhance their skills at least annually. The last requirement is a new requirement, effective as of July 2019, necessitating that faculty pursue development designed to enhance their skills as educators. Being a content expert is no longer sufficient for faculty roles (Irby & Wilkerson, 1998); now, the expectation for accreditation is a response to the ever-changing evolution of medicine and the need for enhancements in clinical competencies as clinical educators.

While accreditation drives professionalization as a regulation, institutions still need to ensure their faculty development programs are providing adequate and practical best practices for ensuring effective training, learning outcomes, and opportunities. To support the evolving roles and expectations of educators, the accrediting body has recognized the need for faculty development. ACGME acknowledges, recognizes, and supports the clinical faculty identities and purposes that a clinician educator must integrate into faculty development efforts. Steinert et al. (2019) emphasized the importance of the educator role as an essential part of clinical faculty. Within this multi-faceted initiative, faculty development activities must, therefore, address not only the skill acquisition needed for new curricula but also tackle the changing attitudes and organizational culture (Carraccio et al., 2002). O'Sullivan and Irby (2011) shows that the strengthening of educator roles will require an understanding of the institutional and organizational culture. This observation is an additional call for faculty development efforts in

addressing organizational culture. A broader focus would benefit both individual clinical faculty and the organization in which they work for both community and teaching institutions.

Organizational Culture and Clinical Leadership

O'Sullivan and Irby (2011) proposed a model for research on faculty development grounded in social systems and focused on two communities of practice: the faculty development community and the workplace community. Instead of maintaining an exclusive focus on individual faculty members, the focus should be placed on the context (or environment) in which faculty members work (O'Sullivan & Irby, 2011). Another study conducted a national survey of faculty development programs in the departments of medicine of U.S. teaching hospitals and found an emerging theme of culture (Clark et al, 2004). Central to the concept of culture was how faculty and institutions supported and valued teaching. The study suggested that culture was both a barrier and enabler based on responses.

As described, the demands for clinical productivity and the lack of recognition for teaching efforts were viewed as noteworthy barriers to faculty development for teaching and non-teaching hospitals. Although, the literature specifies that many teaching hospitals with a primary medical school affiliation were more likely to have ongoing faculty development than non-university hospitals (Clark et al., 2004). The reason for institutional inertia in professional programs derives from the university status and accessible resources; however, studies suggest non-teaching, community physicians may experience multiple barriers in participating in faculty development, which include the timing of activities (Damp et al., 2016), supervisor attitudes about participation (Clark et al., 2004), lack of incentives (Muganlinskaya et al., 2019), and geographic dislocation (Blitz et al., 2018). This suggests that faculty development programs should employ strategies to reach these groups. In addition, this presents opportunities for

implementing and improving academic partnerships' faculty development programs. Critical areas of attention include institutional cultures and organizational leadership. The literature highlighted the importance of ensuring strong support from all levels of leadership with a commitment to protecting time for participation in programs and incentives.

The organizational culture either supports or inhibits educational change through the enacted values of the organization (O'Sullivan & Irby, 2011). Few studies have examined the incentives and support of teaching and leadership through the organization and culture of teaching and non-teaching hospitals. Understanding the relationship between organizational factors and quality of care in teaching and non-teaching hospitals could help guide efforts to improve quality in both types of hospitals (Ayanian & Weissman, 2002). Calls for change in medical education have recognized culture as a powerfully influential force in institutional leadership. McLean et al. (2008) referred to faculty development as change requiring an open and cooperative organizational culture of learning and responding to needs. Strong leadership and institutional support in shifting attitudes toward the value of and the need for incentives are recognized in the literature as necessary for further success in faculty development efforts (Clark et al., 2004; Irby & Wilkerson, 2003). Faculty development programs can have a positive effect on organizational culture as well as on individual faculty values (Steinert, 2014). Therefore, faculty development programs must address the competencies needed for new curricula while also tackling a change in attitudes and organizational culture.

Curriculum Planning and Faculty Development Program

Curriculum building is a dynamic, evolving learning process of ongoing evaluation and modification (Chandran et al., 2017). A program refers to the curriculum, content, activities, and experiences of the faculty development opportunity. O'Sullivan and Irby (2011) recommended

that faculty development programs be guided by best evidence and by needs assessments. There is evidence that suggests the relevance of curriculum planning in faculty development programs. Studies indicate that one of the early stages of curriculum change should focus on addressing organizational culture and assessing the need for change (Steinert, 2011). Research has shown that to build a sustainable program, curriculum planning needs to involve the participants who drive the learning. Chandran et al.'s (2017) national longitudinal study on faculty development curricula suggested a successful curriculum needs not only a sound and principled design but also well-built educational tools to help learners plan, organize, and document their efforts.

Further conclusions can be drawn from the literature, for instance, it is recommended to create a systematically planned and implemented planning process program (McLean et al., 2008; O'Sullivan & Irby, 2011; de Carvalho-Filho et al., 2018) that is learner-centered while promoting educational scholarship (Baldwin et al., 2017) and the value of creating a developmental and integrated curriculum for moving faculty development into scholarship. As an additional benefit, participants involved in faculty development often collaborate with other teachers or staff members, where relationships and networks are formed in the workplace and align with a community of practice model for scholarship generation from faculty development efforts. Evidence shows that implementing a community of practice for faculty development may offer an effective and sustainable approach to knowledge management and the implementation of best practices for educators. Communities of practice support the notion that learning is a social enterprise (Wenger, 1996). Within this social innovation, participation in faculty development programs will offer an entry into a new social and intellectual community. The support from establishing a community of practice for faculty development, as Steiner (2010) explained, can improve faculty development further and change the culture toward evidence-informed

educational practice. Through the literature, there is convincing evidence that innovative initiatives improve learning and teaching satisfaction (Cohen et al., 2000; Irby & Wilkerson, 2003). To support educational innovation, curriculum development will need to support a dynamic, evolving learning program that is based on evaluation and feedback from stakeholders. Based on multiple studies, program development in curriculum planning is described as an iterative process, including working communities, continuous efforts in assessing learner needs and achievements, and documenting outcomes of the program while adapting to the complex changes of the evolving roles and responsibilities of learners in a strategized developmental initiative.

Influential Factors

Communities of teaching and networks of relationships, as discussed in the literature, are greatly influenced by the culture and leadership of an organization on all levels. The outcomes and impacts of faculty development are situated at various levels, ranging from the individual to the institutional and cultural levels (Fernandez & Audétat, 2019). Kogan (2017) suggested that change can be successful only when individuals are committed to executing the change in their practice and are convinced by the relevance and benefit of what they have learned. Change agents are supported when participants significantly improve their self-perceived identities. Internal influences on curriculum development include participants' participation, engagement, and contribution throughout the development of clinical teacher identity. Nurturing faculty educators as scholars strengthens future clinical leaders and facilitators of faculty development. Furthermore, as indicated by Cruess et al. (2014), the tripartite professional identity of educator, scholar, and clinician is in constant development while responding to the current healthcare transformation pressures and demands.

External Factors

Cultural evolution in medical education is inevitable, and external pressures in curriculum reforms are unavoidable. Creating a sense of belonging through faculty development in the shared identity of educators and leaders, the social enterprise creates a space of generated knowledge and meaningful practices. Communities of practice are significant at the individual level, motivating and contributing to the teacher identity (Steinert et al., 2019). Additionally, it creates a community of practice among educators, peers, and co-creators. The goal of the faculty development community of practices is to provide a collaborative atmosphere. External influence in curriculum development for programs influences the institutional culture in a way that embraces and supports the improvement of educational practices.

Moreover, organizational context has a considerable influence on faculty development programs (Baldwin et al., 2017). Individuals who participate in faculty development need to be supported within their institutions. Steinert (1998, 2014) argued that assessing learners' needs in curriculum planning as well as identifying the elements of effective leaders within their own organization utilizes both internal and external perspectives and is recommended as part of the developmental process. This requires strong advocacy to create changes in academic reward and support policies, provide a clear career trajectory for educators using learning analytics, expand programs for faculty development, support healthcare professionals' educational scholarship units and academies of medical educators, and create mechanisms to ensure high standards for all educators. Steinert (2011) highlighted this constant evolving role for clinical faculty and how it occurs at multiple levels. Within this adaptive developmental process of support at the individual level, there are limitations to the evaluation component. Program evaluation models fail to consider the multiple and unpredictable changes that occur while developing the program

(Fernandez & Audétat, 2019). Thus, the evolving nature of faculty development programs as they adapt to curriculum reform and innovation requires a better evaluation model that captures its complexity.

Theoretical Framework

In an educational scope, programs require instructional development, such as curriculum planning and evaluation, while managing and stimulating curricula change (Irby & Wilkerson, 1998) and promoting educational improvement at the institutional level. A repeated theme in the literature on faculty development programs is the limitation of real-time evaluation (Irby & Wilkerson, 1998; Steinert et al., 2006; McLean et al., 2008) and the lack of supportive data for ongoing outcomes. Some studies have reported the use of Kirkpatrick's (1987) model of evaluation in the deployment of a program evaluation plan. One example (Baldwin et al., 2017) demonstrated that a faculty development program embedded within a national professional organization had a unique impact and achieved Kirkpatrick's highest level of program evaluation—namely, results. Steinert et al.'s (2006) systematic review of 53 studies on the impact of faculty development programs on teaching effectiveness found that 74% of the study outcomes were classified as reaction outcomes according to Kirkpatrick's framework (Kirkpatrick & Kirkpatrick, 2006). However, there is a need to evaluate faculty development outcomes at the higher levels of Kirkpatrick's (1987) model of evaluation (Steinert et al., 2006). Evaluating the impact of faculty development is important and trying to develop a program that demonstrates the value and a confident answer to whether it works is one of the nuances identified in the literature. Haji et al. (2013) argued that the standard program evaluation, as the dominant approach to assessing programs' merit or worth, should not be a stand-alone method; rather, it should move beyond asking whether it worked or not and engage in the process to

generate a sound understanding of the relationships and evolving contexts.

There is little understanding about how, why, and in what circumstances the Kirkpatrick (Kirkpatrick, 1987) framework and self-report outcome measures capture the extent of the ambiguity of evaluation in complex interventions. Knowledge gains and other self-reported metrics have been shown to be biased methods with questionable validity. Some studies have described how formative evaluations guide curriculum refinement and process improvement. Additionally, summative evaluations have shown that faculty were satisfied with programming. The literature also supports the proposal of post-program evaluations with the intent to measure the curriculum's impact, administration, satisfaction, content relevance, and applicability to clinical practice (Fornari et al., 2018). The evaluation literature for these programs provides some guidance in expectations and implementation. However, learning from the implications of earlier programs is imperative and necessary in development. Hatem et al. (2009) summarized ten strategic steps in developing a program:

1. Defining an operating philosophy, values, and goals.
2. Establishing a curriculum that reflects the roles and responsibilities of fellows and faculty.
3. Employing a basic approach to adult learning.
4. Striving to achieve a balance between stated objectives and openness of discussion.
5. Creating optimum learning opportunities for the fellows to acquire and practice skills delineated in the curriculum.
6. Fostering interdisciplinary communication, team development, and the creation of a learning community.
7. Developing mindfulness and critical self-reflection.
8. Systematically reviewing each session.

9. Evaluating fellowship outcomes.

10. Planning for the future.

Designing a program that allows for analysis of the multiple facets of intervention is important to understanding the potential interaction between the intervention and the context in which it is implemented. Process evaluation is well suited for understanding how the intervention interrelates with the specific context, conditions, or change. Furthermore, Fernandez and Audétat, (2019) emphasizes the importance of evaluating programs not occasionally but continuously to assess that the needs of the participants and the institutional environment are met. Evaluation can be used as a pulse check for innovative initiatives and the developmental relevance in a program; therefore, the evaluation literature supports the importance of the ongoing process of continuous improvement.

The need for a rapid response based on evaluation is not only for stabilizing the program's relevance and innovative purposes but for providing leaders and institutions with real-time data supporting the contributions of programs at the individual and organizational levels. The argument for developing a longitudinal faculty development program is included in the literature (Steinert, 2014) as the acknowledgment of establishing the vitality of learners and communities of practice in addition to the collective spirit of organization support for educational suitability. Developing a longitudinal faculty development program is important for incorporating a more comprehensive curriculum that addresses the need to produce well-rounded healthcare professionals and leaders. Studies have suggested that although empirical evidence has been shown to support the necessity, the diversity among hospitals, institutions, stakeholders, and outcomes highlights the need for further evaluation and flexible methods to capture the complexity of the impact of faculty development.

Adaptations are largely driven by new learning and by changes in participants, partners, and contexts (Gamble, 2011). Therefore, participants should play a significant role in goal setting in programs; however, participants change as well as the learning, conditions, and context. Navigating the changing waters in developing and designing a program requires reengineering and creating in a flexible approach that supports diversity outcomes and development changes. Using a developmental evaluation (Patton, 1994, 2011) for navigating through developments to support the collaborative purpose and adaptive nature may also support innovation within the context of uncertainty. Within this methodology, the evaluator is immersed in the developments, which takes more of a responsive, collaborative, adaptive approach to evaluation. This capacity supports innovation development to facilitate adaptation to emergent and dynamic realities in complex environments.

Developmental evaluation is a disposition by nature that seeks to design goals and ask what works for whom and in what circumstances (Gamble, 2006). Developmental evaluation introduces innovation and mutual adaption through the processes of asking evaluative questions, applying, and evaluating logic, and gathering and reporting data to inform stakeholders in real-time (Patton, 2008). The evaluator collaboratively works with facilitators and designers, and the role of the evaluator extends beyond data collection and analysis, as the evaluator actively intervenes to construct the developing course. In addition, the role at minimum requires a level of credibility, elements of leadership, an understanding of the relationships and the culture of stakeholders, and strategic and analytical skills (Gamble, 2011). Along with an intention to drive the purpose and serve the initiative, an evaluator will have a better position in developing a design.

The evaluation of educational programs requires a very different skillset than typically possessed by designers, teachers, or educators (Patton 2008); it requires a multi-faceted grasp of the impact the variables may have on the outcomes of an educational program.

Evaluation and Assessment of Needs

In this context, the recommendations, and principles of good practice for faculty development that have emerged highlight the need for broader and sustainable impacts on programs. Recommendations include a broader range of teaching methodologies for the evolving learner as the clinical faculty role continues to become more diversified. Faculty development programs need to be longitudinal and subject to continuous quality improvement. However, despite considerable resources, little is known about the effect of faculty development programs' impact on clinical teaching in specific learning environments. Several studies of health science programs have concluded the importance of gaining a holistic view of a program to better clarify the relationship between interventions, multiple outcomes, and broader impacts (Haji et al., 2013; Frye & Hemmer, 2012). Real-time implementation to identify potential influences of contextual factors on the progress of development is also relevant information for program sustainability. Thus, evaluation-design-based research can provide valuable contributions to the field of innovative initiatives.

Faculty development is essential for renewing and assisting faculty in maintaining instructional effectiveness and adapting to innovations in evolving healthcare reforms. Clinical faculty face multiple systemic challenges, including healthcare reforms and pressures, and there is a high degree of uncertainty about the path forward. The role of clinical faculty is always in a state of change, but change is not necessarily linear nor a response to progress; instead, it is adaptation. The ongoing developmental process of incremental change, informed by real-time

data and judgment, has led to significant cumulative evolution of programming, which impacts the learning organization (Patton, 2008). The achievement of educational excellence fundamentally depends on the effectiveness of educators. To maintain faculty vitality and fidelity to home institutions, it is imperative to offer faculty development opportunities. For this purpose, McLean et al. (2008) emphasized the importance of a need's assessment as a part of the process of curriculum planning for faculty development programs. Needs assessment data is essential to inform the curriculum, not only developing but driving the curriculum as a part of the continuous quality improvement initiative. Needs assessment data is also critical to consider the array of learners that arrive from various backgrounds in clinical learning environments. In this context, needs assessments are a useful approach to accurately identifying the knowledge and skill gaps among trainees (Cox et al., 2010). They provide information in real-time for justifying contributions from educational institutions' investments in faculty development to support multiple missions.

Promoting excellence in the delivery of healthcare education is a priority for health professionals but can be challenging. To address this challenge, a longitudinal endeavor that enacts cultural change in a linear and systemic approach is not enough. Well-designed needs assessment strategies are essential elements of effective professional program planning. Ongoing program evaluation research assessing quality and impact is also necessary; however, it may insufficiently capture the complexity of the outcomes and impact of faculty development. A more adaptive assessment concept, such as developmental evaluation, may provide critical information related to the program's content and delivery for program implementation.

Furthermore, within an academic partnership, a faculty development program presents an interactive platform where shared purposes and ideas can be expressed. The fundamental

principle of training together may lead to a better understanding of the respective roles and support enactment of collaborative practice. Therefore, enabling a collaborative environment and evaluating faculty development have a far-reaching and complex impact on how professionals interact with each other while working at their respective healthcare institutions. There is a call for a new practice evolution model for the utilization of adaptive evaluation that embraces the evolving clinical faculty at the individual level in addition to contributing to shaping the intuitional norms and practices. Their mutual impact cannot be ignored, and the evolving relationships, roles, and resources subjected to shifting demands of reforms add another layer of complexity for the clinical faculty. The literature illustrates the impact faculty development programs have at the individual and organizational levels, potentially playing a critical role in cultural change; in addition, emphasize the call for research to assess the individual and institutional outcomes as a social inquiry. Further research is needed on the use of an evaluation initiative as not simply a part of quality assurance but as a key in feedback and developmental design. Evaluating programming with the goal of developing is a process that may provide practical benefits, challenges, and best practices in implementing innovative programs with multiple complex variables.

Overview of the Current State

Given the complex context, the role of clinical faculty has steadily evolved into a discipline of its own. Further, the development of the clinical faculty role within the various clinical learning environments, such as teaching and community hospitals, has changed even more so. Academic integrations between academic medical centers and community hospitals is trending as a response to the national physician shortage (AAMC, 2019). Through these new academic partnerships, clinical faculty from both sides are expected to join forces to assemble a

team of educators and leaders. While academic medical centers are familiar with the educational component in academic success, community hospitals may struggle with the new territory of academic expectations. Little research is available on these new academic partnerships, specifically as they relate to the clinical faculty. The literature has highlighted the significance of the role of clinical faculty within individual enterprises; however, there are limitations related to newly formed consortiums.

Implications from the literature suggest that the creation of faculty development programs crafts a collaborative space and an educational pillar for future educators and leaders. Studies have shown that sustainable implementation depends on the constant assessment of stakeholder experiences and the monitoring of outcomes through meaningful feedback and program changes as needed. Throughout all stages of implementing a course, as the process is the outcome, an evaluator plays a significant role in the program's development. Specifically, developmental evaluation positions the evaluator as a change agent in sustaining innovation through complexity. The evaluator aids by helping inform decision making and facilitates learning. In support of the longitudinal endeavor, complexities of the healthcare profession context, evolving realities, and shifting demands call for a developmental orientation to design and evaluation.

Future Directions

The call for a comprehensive faculty development program in response to the reforms in medical education and the evolving role of clinical faculty in education is apparent. Implementation information plays a critical part in the accurate interpretation of evaluation outcomes. Therefore, implementation studies can be powerful in designing and developing change. While faculty development programs that improve teaching and educational behaviors

show promise, to make effective use of them and receive support across all levels in an organization, program development may benefit from a needs assessment to determine which particular skills associated with the learner need to be enhanced. Furthermore, Steinert et al. (2006) indicated that the context in which the faculty development program is offered is a key element in producing desired outcomes. The context in this regard refers to curriculum planning specifically designed to match the needs of groups of faculty members.

Medical institutions are investing in a wide range of faculty development programs to boost confidence and sustain the academic careers of their faculty (Irby & Wilkerson, 2003). Through the literature, there is convincing evidence for innovative initiatives to improve teaching and learning satisfaction (Cohen et al., 2000; Irby & Wilkerson, 2003). In support of educational innovation, curriculum development in faculty development will need to support a dynamic, evolving learning program that is based on evaluation and feedback from stakeholders. To answer whether the program is designed and set up to do what it is supposed to do, an analysis of the need's assessment in support of the developmental evaluation orientation is necessary. The needs assessment process proposes the utilization of fine-tuning curricula and adapting the program to the specific needs of the two diverse learning organizations involved. Institutions can greatly benefit from such studies by learning what skills are required by the faculty; then, programs can be designed and developed to address those needs, resulting in the effective use of funding and resources.

Designing and developing a program to tailor the needs of the individual and organization's profitability, as reviewed in the literature, is central for institutional planning, funding, support, and change. Rather than accepting the developers' and leaders' decisions on objectives, the learner needs to contribute to the potential for assessing actual outcomes.

Therefore, evaluation should support managing and improving programs through a developmental orientation as a systemic approach. This is particularly necessary within the context of the evolution of academic partnerships between community and teaching hospitals for clinical faculty. Addressing the needs of the two enterprises could identify the nuances of the medical practices within these diverse clinical environments and populations. Generally, needs assessments provide a baseline through systemic educational planning, from setting priorities to ranking goals; evaluation systemically assesses the significance of the program as a pulse check. By gathering data from a range of stakeholders, opportunities, assets, and strengths and can be identified. The key functions of developmental evaluation are to support real-time learning, development, and decision making. These practices can support future program planning in faculty development.

Summary

A review of the literature provided information on the following topics: the roles of clinical faculty, the distinction between community and teaching hospitals, defining faculty development and its purpose, its relevance to curriculum planning, and influential factors. While an overview of developmental evaluation was presented as a theoretical framework, it serves as an initial evaluation to support innovative initiatives. The literature also revealed the significance of needs assessments in facilitating orientation in program development. As indicated through the literature, the complexity of capturing interventions among diverse stakeholders is challenging. There are gaps in the literature as it relates to newly formed academic partnerships, especially for the clinical faculty who fall under these consortiums. The multiple variables and settings involved require well-designed interventions in an adaptive learning organization that supports longitudinal and ongoing continuous endeavors.

Therefore, the mitigation of change over time should be considered in addition to developing a program concerned with learners' needs as well as implementing evaluation for refined goals and delivery.

CHAPTER THREE: METHODS

Introduction

The purpose of evaluation studies is to contribute to organizational decision making. Specifically, this study focused on the use of evaluation of the Clinical Educator Learning Series for clinical faculty from both HCA and USF. By gathering data from a range of stakeholders from both HCA and USF, opportunities, assets, and strengths were identified. The methods section includes the procedures used to design the instrument, a description of the participants, and a description of data collection procedures and the data analysis process. This study may provide insight to clinical faculty developers, curriculum designers, learning facilitators, and stakeholders at academic medical centers, specifically with affiliations with community physicians regarding professional program development.

This study was guided by the following evaluation questions:

1. What elements of the curriculum are strong and should be maintained or enriched?
2. What opportunities exist to enhance the Clinical Educator Learning Series' current curriculum?
3. How do emerging collaborative relationships address program objectives?

It is important for an evaluation to include a needs analysis based on the clinical faculty's development to inform the innovation. Rossi et al. (2004) articulated a comprehensive program evaluation process that includes assessments of programs' theories and outcomes.

Program theory can be implicitly or explicitly articulated and can be supported through its alignment with scholarly literature. Additionally, a learning-centered paradigm may support the development of evaluation.

Study Design

Qualitative methods are often used in evaluations because they tell the program's story by capturing and communicating the participants' stories (Patton, 2002). In a classical evaluation paradigm, an evaluation program might evaluate a program only based on whether initial outputs and outcomes were carried out on a given timeline. Patton (2002) argues that this paradigm ignores the process in which these outputs and outcomes occurred. While using a more developmental approach—which facilitates a holistic understanding of not just the activities, outputs, and outcomes but also the core elements that might affect decisions—the political environment, stakeholder needs, management and leadership, and communication and coordination factors may all affect outcomes. Complexity concerning the topic of clinical faculty development programming manifests itself in different ways. The use of a process informed by developmental evaluation is to appraise innovation. Using this paradigm as well as employing evaluation activities, there was a need to identify the process to further develop the following emergent evaluation questions:

- 1) What are stakeholders' needs in the faculty development program?
- 2) How can we incorporate stakeholder insights?

Developmental principles were used to evaluate a new, complex project to adapt to needs identified as work progress. Thus, the evaluation plan used elements of developmental evaluation by applying an evaluation perspective during all stages of the project, from discussions to decision making, allowing the evaluation process to adapt despite a non-linear process and

continuing innovations within the project (Patton, 2011). Leveraging the potential influence of faculty development programs requires the identification of expected outcomes and a rationale for why programs expect to achieve those results (i.e., program theory) as well as an assessment of the impact or the extent to which the desired results are attained (Rossi et al., 2004).

The validity of a faculty development program's theory— described by Rossi et al. (2004) as the “assumptions and expectations inherent in a program's services and practices” (p. 168)—may be supported through assessing clinical faculty's effectiveness and trainee learning outcomes. How can academic partnerships/health institutions assess the role of clinical faculty from a learning-centered perspective? Without a clear program theory or an effective evaluation process, the elements of the clinical faculty's actual practice were not relevant to the consortium. However, evaluation can include an effort to judge or enhance human effectiveness through systematic data-based inquiry. This study also included a retrospective evaluation based on previously collected surveys from CELS workshops.

The needs assessment addressed programming needs through the perceptions of past and current participants and instructors. CELS hosted a total of eight sessions in 2019-2020 academic year and three sessions in the 2020-2021 academic year, with five sessions in 2020. The topics selected for the series were generated from an informal needs assessment distributed during the first 'Meet and Greet' meeting in June 2019, with HCA and USF faculty coming together for the first time since the creation of the affiliation agreement in October 2017. In this Meet and Greet meeting, there were 45 participants from HCA and USF and from various specialties (Emergency Medicine, General Surgery, Cardiology, Internal Medicine) and roles (Program Directors, Associate Program Directors and Teaching Faculty). At the end of the meeting, a survey link and QR code was disseminated. This was presented as an optional survey for input in

the development of a faculty development workshop. Approximately a third of participants responded (15 in total), and the results were sufficient to extract topics of interest (Appendix B). For those that responded, 60.00% (9 participants) were Teaching Faculty and 27% were Program Directors. To our surprise, there was interest in the many topics that were presented. Eighty-nine responses were received from 15 participants. From these responses, eight topics were identified and selected by my supervisor and me, which became the curriculum of the Clinical Educator Learning Series.

Developmental Evaluation Principles

This evaluation reexamines the program's initial efforts with an intent to further develop the emergent, changing needs of medical educators while working with internal stakeholders to identify program activities, outputs and outcomes, and understanding how factors affect these changes. The concern of evaluation fidelity is presented as an argument concerning the extent to which a specific evaluation sufficiently incorporates the core characteristics to justify its labeling. Under the developmental evaluation (DE) framework, Patton (2016) presented eight essential principles for guiding the evaluation design: (1) developmental purpose, (2) evaluation rigor, (3) utilization focus, (4) innovation niche, (5) complexity perspective, (6) systems thinking, (7) cocreation, and (8) timely feedback. With the intended purpose to inform the innovation, the eight essential principles systematically guides the process and track the implications of adaptations through the developments.

Systems Thinking and the Complexity Perspective

Thinking systemically is fundamental to developmental evaluation. In term of relationships, systems thinking includes the understanding of interrelationships, engaging with multiple perspectives and stakeholders and reflecting on interaction consequences (Patton, 2016).

As a result, interventions become multi-faceted with a more complex interior. This complexity is the result of many different elements, which makes it difficult to predict effects.

Thus, complexity concepts are summarized as non-linear, emerging, dynamical systems, uncertainty, adaptiveness, and chaos.

The task is to supply comprehensive understanding of the complex realities surrounding the program. Observing innovation through the lens of complexity adds another way of framing, studying, and evaluating social innovations. These two dimensions, the degree of uncertainty and the degree of disagreement, define the zone of complexity (Patton, 2011). Shulman (2005) argued that in the context of teaching, specific practitioners' knowledge prepares students to perform the role of practitioner in a professionally grounded and situated manner and that professionalism is ethically based and service oriented. Additionally, Shulman defines signature pedagogy as types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions. Arguably, the study of signature pedagogies is a way of systemically following teachers in the learning process and using their feedback to redesign professional development programs. For this evaluation study, semi-standardized interviewing and survey analysis are utilized to answer the research questions.

Setting and Participants

This section provides the criteria for the interview and survey, the number of participants, and the site(s) related to this evaluation study.

Participants

The evaluator sought to recruit clinical faculty members from both USF and HCA to participate in a needs assessment. Clinical faculty recruitment included a range of ranks (assistant professors, associate professors, professors) and various roles (program directors,

associate program directors, core faculty), but all must have held a faculty appointment through the university and been affiliated through the consortium. Participants were identified from a) a directory maintained by the USF Health Office of Faculty and Academic Affairs and b) appointed Program Directors from the Department of Medical Education.” Individuals may be in the process of securing an appointment but may have attended the series; therefore, individual names and emails were extracted from a Microsoft Teams Attendance list from previous workshops. These individuals held valuable perspectives and were included in the evaluation. There were 60 HCA faculty members and 23 USF faculty members who met the criteria above and an additional 39 individuals in the process of becoming appointed at the time of participant recruitment.

Demographics

This section describes the participants in the study. Table 1 summarizes the demographic information of the participants for the survey. Out of the 33 participants, 11 (35.48%) were Program Directors, 15 (48.39%) were Teaching Faculty, three (9.68%), Associate Program Directors and two (6.45%) identified as others and indicated both were Research Coordinators. From the total responses, six (18.18%) identified as faculty from USF/TGH, 24 (72.73%) HCA Faculty, and three (9.09%) faculty from Moffitt Cancer Center. The six interview participants included faculty members from both HCA and USF, including the Designated Institutional Officers (DIO) from both HCA and USF, both who are current Executive Board members. All six interviewees participated in the Clinical Educator Learning Series as a participant.

Table 1

Summary of survey participants' demographic information

Participants	Total
Program Directors	11 (35.48 %)
Associate Program Directors	3 (9.68%)
Teaching Faculty	15 (48.39%)
Other	2 (6.45%)
USF/TGH Faculty	6 (18.18%)
HCA Faculty	24 (72.73%)
Moffitt Cancer Center	3 (9.09%)

In addition, there are eight executive board members, all of whom oversee all matters pertaining to the development, financing, operations, quality, and other aspects of the consortium. Among these board members, I solicit participation of the following members to participate in interviews: Designated Institutional Officers (DIO) from both HCA and USF, Additionally, I sought participation of four faculty; all participants and one lecturer for the Series--two from HCA and two from USF--to participate in interviews about the CELS.

For qualitative research, there is not a specific number required to sample; however, the goal is to reach saturation (Patton, 2002). Purposeful sampling was used for this inquiry study. Purposeful sampling involves a selection criterion to ensure the participants provides meaningful information relevant to the study (Patton, 2002, p. 230). In qualitative interviews, it is recommended to engage with six to eight interviewees (Creswell & Creswell, 2018). Within this scope, I sought a sample size of at least 60 responses out of 74 faculty survey responses to make

a generalization at the 95% confidence level, and up to eight for interviews. The purpose of this purposive sampling is to ensure substantial information is obtained based on time, money, location, availability (Merriam, 2009, p.79), as relevant to the evaluation study. Although the intent was to interview up to eight interviews, the actual number of participants interviewed was six due to timing constraints for several individuals. The number satisfies the recommended qualitative interviews for this evaluation.

Needs Assessment

For the needs assessment, after three emails were sent to 99 recipients, 33 (33%) responded to the needs assessment. The survey was open for a total of 31 days, and multiple reminders were sent out with both the survey link and QR code to recipients. In addition to the needs assessment, the formative data for each CELS session in the 2020-2021 AY was concluded and collected. A total of nine sessions, with a total of 26 responses for the post optional surveys for the 2020-2021 year, were collected. This secondary data collection is considered along with the 2019-2020 post-optional survey response, for a total of five sessions with 32 responses.

Setting

This study evaluated the Clinical Educator Learning Series, which was hosted at the Morsani College of Medicine at the University of South Florida (MCOMUSF), an academic medical center. The series was fully funded through the consortium agreement between the academic medical center and a for-profit corporate health organization, Healthcare Corporate of America (HCA). The series was created in spring 2019 and ran its first workshop on June 6, 2019 with a formal needs assessment using Qualtrics. The goal was to generate topics to discuss and guide future programming. The topics that were selected were based on previous experiences

from past workshops and personal experiences based on past learning. There were 15 responses submitted from clinical faculty from both USF and HCA: a mix of program directors, associate program directors and core faculty from various specialties (Internal Medicine, Emergency Medicine, General Surgery, OB_GYN, etc.). From the responses topics were identified and prioritized based on the count number.

Thus, a total of eight topics were extracted from data to create the Clinical Educator Learning Series (CELS) 2019-2020. As indicated in Table 1, the selected topics included providing effective feedback (11.24%), stimulating self-directed learning (11.24%), teaching at the bedside (10.11%), and evaluating learners (7.87%). Due to time constraints for the busy clinicians and considering the provision of a faculty incentive, the series was submitted to the USF Health Office of Continuing Professional Development and received continuing medical education (CME) accreditation in fall 2019, prior to the first workshop in the 2019 series. This was the beginning of the faculty development program within the newly formed consortium between the academic medical center and a corporate organization.

Due to COVID-19, the Clinical Educator Learning Series was converted to an entirely online format for the April and May workshops; the March workshop was canceled. The earlier workshops in October through February were hosted in person at the Center for Advanced Medical Learning and Simulation (CAMLs) auditorium in downtown Tampa. During the duration of 2019–2020, participants were sent a survey at the end of each session. This survey, viewed as formative feedback, was intended to secure a better understanding of the ongoing activity, such as whether the workshop was working, moving forward, or in need of an immediate response. The intent was to demonstrate that the activities facilitated were meeting stakeholders' interests and that the program was achieving its desired outcomes. Across a total of

seven workshops, an average of 12 participants participated from both organizations, resulting in 38 anonymous survey responses via Qualtrics.

Table 2

Faculty Development: June 2019 Needs Assessment Topics Generated

Item #	Responses	%	Count
1	Providing effective Feedback	11.24%	10
2	How to stimulate self-directed learning	11.24%	10
3	Teaching at the Bedside	10.11%	9
4	Using Simulation in Medical Education	8.99%	8
5	Evaluation of learners	7.87%	7
6	Effective small group teaching strategies	6.74%	6
7	Teaching Evidence-Based Medicine	6.74%	6
8	Curriculum Design-writing goals and objectives	6.74%	6
9	Understanding learner motivation	5.62%	5
10	Teaching with technology	4.49%	4
11	Ways you can flip your classroom	4.49%	4
12	Program Evaluation	4.49%	4
13	Effective large group teaching strategies	3.37%	3
14	Team-Based Learning techniques	3.37%	3
15	Incorporating peer observation and self-reflection for evaluation of teaching effectiveness	2.25%	2
16	Writing and Analyzing multiple choice questions	2.25%	2
Total		100%	89

The same survey (see Table 2) was disseminated following each workshop and included questions on quality using a scale of 1 to 5 (1 = *poor*; 2 = *needs improvement*; 3 = *as expected*; 4 = *better than expected*; and 5 = *exemplary*). The evaluator sent the link to the optional survey to all workshop participants; survey responses were anonymous. See Table 3 for the responses rates collected from formative assessment collected following CELS workshops to date.

Table 3*Clinical Educator Learning Series: Assessment of Learners (January 2020 Workshop)*

Item #	Question	1=Poor	2=Needs improvement	3=As expected	4=Better than expected	5=Exemplary	Total					
1	Pre-workshop and communication	0.00%	0	0.00%	0	30.00%	3	70.00%	7	10		
2	The relevance of goals and objectives to practice	0.00%	0	0.00%	0	33.33%	3	66.67%	6	9		
3	Organization of the workshop (clarity, agenda, delivery)	0.00%	0	0.00%	0	20.00%	2	30.00%	3	50.00%	5	10
4	Amount of time spent in interactive group sessions	0.00%	0	0.00%	0	20.00%	2	30.00%	3	50.00%	5	10
5	The usefulness of content, tools, and resources	0.00%	0	0.00%	0	10.00%	1	40.00%	4	50.00%	5	10
6	The session design (i.e. materials and learning activities) encourages my participation and engagement)	0.00%	0	0.00%	0	10.00%	1	20.00%	2	70.00%	7	10
7	Catering	10.00%	1	0.00%	0	60.00%	6	0.00%	0	30.00%	3	10
8	Overall learning experience	0.00%	0	0.00%	0	10.00%	1	50.00%	5	40.00%	4	10

This preliminary stage of creating the Clinical Educator Learning Series was a productive establishment for innovation as the faculty development program evolves from a broad idea in the consortium agreement to a more fully specified action plan. Our current affiliation agreement

is funded in a five-year cycle. The results of the informal needs assessment informed the creation of the faculty development series. This study has evolved to include the more traditional evaluation tasks (i.e., formative feedback) while adapting to the needs identified as the work progresses. Thus, this evaluation study used developmental evaluation elements by applying an evaluation perspective through all stages of the project, including decision making, allowing the evaluation process to adapt despite non-linear functions and continuing innovations within the complex program.

Table 4

CELS Topics: 2019-2020 and 2020-2021

Year	Item #	Topic	Responses	Response Rate
2019-2020	1	Teaching at the Bedside & EBM Assessment	6	13.33 %
	2	Providing Effective Feedback	7	58.33 %
	3	Assessment of Learners	12	85.71 %
	4	Study Design: Choosing Wisely	3	27.27%
	5	Self-Reflection an Introduction to Coaching to Lifelong Learning	4	18.18%
2020-2021	1	Fundamental Skills in the Art of Effective Feedback	7	23.33%
	2	Searching and Evaluating Medical Literature	3	20%
	3	Time is Ticking! Tips for Efficient Clinical Teaching	4	36.36%
	4	Promotion Process: Signed, Sealed and Delivered & How to Write a Letter of Recommendation	4	19.05%
	5	Formulating Research Questions and Designing Studies	1	3.23%
	6	Proactive and Responsive Approaches to Racial Bias in Clinical Learning	1	5 %
	7	An Overview of Racism in Medicine	1	2.94%
	8	Teaching Challenges: Guiding the Difficult Learner to Success	2	7.69%
	9	Reflection on Steps and Trends in Effective Course and Curriculum Development	4	14.82%

Interview Protocol

Appendix B, Interview Question Samples/Protocol, includes the questions, which were used in the semi-structure interviews. This protocol includes multiple areas related to the evaluation study. The interview questions were organized into two parts: part one was designed for the Executive Board members; while part two was designed for participants, lecturers, and the workshop facilitator.

Data Sources, Collection, and Analysis

This qualitative evaluation used an online survey to collect a needs assessment (see Appendix A) and virtual interviews of stakeholders (see Appendix B). The needs assessment addressed programming needs through the perceptions of participants and stakeholders. Qualtrics is a survey-based data collection tool widely used for academic research at the university involved and facilitates the collection and storage of data with login credentials. Qualtrics has been used in the past for the learning series. Therefore, it was used for this survey. Interviews are used to discover information that we cannot directly observe (Patton, 2002). Through interviews I sought to gain an in-depth understanding of clinical faculty's perspectives and experiences with the learning series and the impact of collaboration.

Due to the global pandemic, interviews were conducted via an online platform (Teams, Zoom, or WebEx) during a meeting that was synchronous, preplanned, recorded, and one-on-one. According to Lichtman (2013), there are general interviewing issues, including both technological and substantive matters. Due to the transition to online learning during COVID-19, many clinical faculty members accepted the unexpected and learned the basics of some online platforms. Therefore, before setting up the individual interviews, the participants were given the option to select their software preference. The level of rapport between the researcher and

participants was established before evaluation. For this study, the researcher had personal knowledge of the participants and the consortium, which may have influenced the way the interview data was interpreted. However, the personal connection with the participants may be a strength of the study. A romantic conception of the interview establishes rapport and empathic connection, which may produce an in-depth interpretation of the participant's experiences (Roulston, 2010). A level of communication and trust was already established, which may have provided the space of openness between the researcher and participant.

The informal needs assessments conducted at the first 'Meet and Greet' meeting in June 2019 were drafted to pulse-check the level of interest from faculty. These four questions were created in Qualtrics, with one multiple-choice question as a list of 16 various topics (see Appendix C). These topics were selected collectively, based on the suggestions from my supervisor, the Designated Institutional Officer (DIO), o, who has first-hand knowledge of relevant content from past experiences as notable topics. The survey was presented as a QR code at the end of the first workshop, title "HCA/USF Consortium Meet & Greet-Faculty Development Workshop." This 2-hour meeting was the first meeting for HCA and USF Faculty to meet while using that time to provide an educational activity workshop. The reason was to utilize their time as a networking opportunity productively and promote the start of the new beginning, the Clinical Educator Learning Series.

The analysis included a review of data collected from open-ended items on the needs assessment as well as analysis of transcripts generated from recordings of the interviews. The evaluator identified patterns, generated codes, and developed themes (Patton, 2002). Interpretation involves making sense of the data (Creswell & Poth, 2018), in which the organization of the codes into categories, which was maintained in a spreadsheet, along with

written summaries of the categories. The summaries included categories, identified themes, along with examples or quotes from transition.

Developmental Evaluation Principles

Patton (2016) presented eight essential principles for guiding the evaluation design that must be explicitly addressed, as follows: (1) developmental purpose, (2) evaluation rigor, (3) utilization focus, (4) innovation niche, (5) complexity perspective, (6) systems thinking, (7) co-creation, and (8) timely feedback. The extent to which they are addressed depends on the context and situation. Nonetheless, these principles serve as “sensitizing concepts,” which Patton suggests must be implied or applied contextually. Innovations lack detailed implementation plans and predetermined indicators (Patton, 2016) while occurring in complex dynamic systems where both indicators and the work evolve and often change. These principles are merely guiding evaluative components to organize the essentials in a true developmental fashion.

Table 5

Developmental Evaluation Principles, Process and Products Principles

Developmental Evaluation Principles	Process	Product
Developmental Purpose: the evaluation program is designed to be dynamic considering innovation		
Evaluation rigor: data collection, analysis, evaluative questioning		
Utilization focus: the goal of the evaluation is that it is issued by those who developed it.		
Innovation niche: adaptations and flexibility for program innovations are encouraged		
Complexity perspective: recognition of the complexity of program components are taken into consideration during the evaluation process		
Systems thinking planning and executing work in the context of interlock systems		

Table 5*Developmental Evaluation Principles, Process and Products Principles (Continued)*

Cocreation: a collaborative approach, working with staff and leadership in developments and designing evaluation processes

Timely feedback: results and recommendations are presented to stakeholders in a timely fashion.

Clinical faculty are committed to academic and clinical responsibilities, and the demands on their time continue to evolve. The expectations of academic relationships will continue to rise to meet the needs of the physician shortage. Thus, supplying a comprehensive faculty development will be the foundation for providing relevant and applicable knowledge, tools, and best practices for Clinical Faculty to meet the evolving graduate medical community.

Table 5 can incorporate multiple stakeholders' perspectives in both the process and product components to inform innovation through developmental evaluation. Applying the DE principles and activities to evaluate the faculty development program comprises various views and avenues that make up the series. The table is used in the evaluation to collectively gather and organize the data collected from surveys and interviews as a part of the data analysis and to inform stakeholders while supporting the innovation. The DE principles are design to bring rigor to evaluation while working in complexity and uncertainty, with emergent approaches. While analyzing and documenting both the process and product, the evaluator used this table to engage with key stakeholders while outlining key themes. This initiative's development, including discussions and knowledge of interventions at each level, is significant to balancing stakeholder needs, management and leadership, communication, and coordination.

CHAPTER FOUR: FINDINGS

Introduction

The purpose of this study was to evaluate the Clinical Educator Learning Series, a new faculty development in a new academic partnership. This chapter contains an analysis of the data collected through the surveys and interviews. A successful evaluative inquiry includes an interpretation of the findings, including the coding processes of both the interviews and surveys (Patton, 2002). Collected data were analyzed using three phases of coding: open coding, axial coding, and selective coding (Miles et al., 2014). This chapter contains a description of the needs assessment survey results and interviews. Data were analyzed in relation to each of the processes posed within data collection. Then, the overall findings are summarized, followed by a detailed analysis for each evaluative question. All data were collected from individuals who participated in the Clinical Educator Learning Series (CELS) evaluation survey and from six interviews.

Data Analysis: Coding

The collected data were analyzed using three phases of coding: open coding, axial coding, and selective coding. The first phase comprised “open coding” of the data to develop the descriptive themes (Miles et al., 2014) and similar categories and to assign category titles. This phase included the selection of specific words and phrases from the content for titling purposes. The second phase is defined as “axial coding” for the exploration of patterns or emerging themes. In this phase begins the organization, clustering, and eliminating, retitling categories. The third phase is defined as “selective coding,” in which data is interpreted and synthesized.

New themes may be created when the coding content is compared, and additional merging and elimination of categories may be necessary.

Categories Created from the Interview Protocol and Survey

Two sets of questions were provided for the interviews of executive board members and clinical educator faculty participants/lecturers (see Appendix B), and one set of questions was compiled from the survey file via Qualtrics (see Appendix A). The survey and interview protocol consisted of twelve questions each. Coding refinement resulted in twenty-four coding reports.

Coding Process

Six transcribed interviews from Landmark Associate and one survey from Qualtrics were prepared and imported into NVivo qualitative analysis software. Each line was manually read and coded using contextual content according to the twenty-two categories. Multiple subcategory nodes relating to the interview questions were created as the content was read, and the coding was refined with the categories.

Needs Assessment

The following section will focus on the survey questions. Questions 6, 9, 13, and 14 were not on file as questions and were thus omitted before dissemination (see Appendix A). A summary of the findings for each open-ended question is provided in the following section. Data from a need's assessment is essential for effective program planning, therefore will be used to inform the development of the faculty development program.

Change Behavior and Practices as a Clinical Educator

One of the program's goals is building the individual's personal commitment to change and structuring the learning environment around teaching improvement. Anticipated changes in teaching behaviors and practices through the development of the program's curriculum is a focal

point. With that, participants were asked if attending the series has led to or will lead to changing any behaviors and/or practice as an educator. Thirty-three responses were received for item one; 28 (84.85%) respondents indicated yes, attending the series has led to or will lead to changed behavior and practice as an educator, and five (15.15%) respondents indicated no. Those who indicated yes provided 38 comments about these changes in behavior/practice. Table 6 provides a summary of two categories that were then identified by the evaluator using information from the responses: networking and skills and knowledge. Skills and knowledge were expanded into 14 codes to represent the opinions of the respondents based on changes in behaviors and practices as an educator. Table 6 displays the responses organized into categories based on their frequency and codes.

Table 6

Responses to Survey Question: Examples of Changes of Behavior/Practice

Examples of Change of Behavior/Practice	Responses
Networking	1
Skills and knowledge	37
Social issues, diversity	7
Feedback	6
Teaching methods	5
Assessment, evaluations	4
Knowledge of learning styles	4
Creating presentations	2
People skills, soft skills	2
Case reports	1
Education barriers	1
Evidence-based medicine	1
Implement newly acquired knowledge	1
In general, different aspects	1
Redesign surveys	1
Research process	1
Total Number of Comments	38

Skills and Knowledge

The themes that emerged most often among participants concerning examples of changed behavior and practices were skills and knowledge, specifically, social issues, diversity, and feedback, which may illustrate the multiple topics presented in diversity and providing effective feedback. Additionally, teaching methods, assessment, evaluations, and knowledge of learning styles were areas that received four or more comments. There have been two topics presented on diversity and equity and three topics on providing feedback from 2019 to the present time in the series.

Table 7

Responses to the Survey Questions: Examples of Changed Behavior & Practices

Skills and Knowledge Category	# of Comments
Social issues, diversity <i>“Have a better understanding of diversity issue”</i> <i>“Diversity teaching and recognition”</i> <i>“I’m more aware of education barriers”</i> <i>“Foundation knowledge in DEI”</i> <i>“I am more sensitive to potential minorities sensitive subjects”</i> <i>“Understanding implicit bias and training program regarding racism”</i> <i>“Attending has educated me as to the social dilemmas facing students and faculty so that I may be more aware of them and pay attention to my biases.”</i>	7
Feedback <i>“Skills for feedback are improved”</i> <i>“Giving better feedback”</i> <i>“Manner in which I deliver feedback”</i> <i>“Feedback to learners and colleagues”</i> <i>“How to give feedback”</i> <i>“I more adept at assessing residents and providing feedback”</i>	6

Elements of Participation and Motivation

When participants were asked why they were attending the program, 23 comments were received. The majority of the responses noted that participants attended the program to improve

and update their skills and knowledge. Regarding why they attended the CELS, various participants indicated that they wanted to enhance their leadership and mentoring opportunities, stay involved, and be aware of current trends in medical education; meanwhile, others claimed interest in improvement as educators and expansion of their teaching skillsets. There was also a genuine interest in personal growth as an educator, with a few participants expressing the desire to learn, as a new program director “needs every bit of help available.” A summary list of the categories was identified by the evaluator using information from the responses. The generated list shows the respondents’ perceptions of why they attended the series in Table 8. The responses were identified and ordered based on their frequency and organized according to their coded category.

Table 8

Reasons why Respondents Attended the CELS

Reasons	Responses
Improve and update skills and knowledge	23
Networking, collaboration	4
Personal growth	3
Mentoring, leadership	2
Program director	1
Faculty requirement	1
CME	1
Total Number of Comments	35

The elements of the curriculum highlighted as importance are topics and areas of practical and relevance competency. Improve and update skills and knowledge are noted as a prime stimulating participation factor. It is worth noting the relevance of networking and collaboration along with personal growth as a means of motivation to attend the series.

However, three respondents indicated the reasons they attend included the guidance of their program director, as a mandate requirement per program, and the offering of CME credit.

Improve and Update Skills and Knowledge

The theme that appeared most often among the participants regarding why they attended the series was connected to improving and updating their skills and knowledge among the seven subcategories identified. The series addressed general topics on teaching and learning, including topics in curriculum development, bedside teaching, and giving and receiving feedback. These topics were intended to set the stage for faculty development for the various roles in a multi-professional context among clinical faculty in both teaching and community hospitals.

Clear Objectives and Expectations

Thirty-three responses (100%) respondents indicated yes, the series clearly explained what they were expected to learn from the sessions (i.e., learning objectives), and no respondents indicated no. This may suggest that communication on the topics and their learning objectives were clear.

Effectiveness, Engagement, Relevance, Accessibility, and Satisfaction

The participants were asked to rate the following: (1) How effective was the series at helping you reach those learning objectives? (2) How engaging you did you find the series? (3) How relevant are the topics to your own professional development?; (4) How would you rate the accessibility to the series?; and (5) I'm satisfied with the investment my organization makes in education and professional development. Participants were asked to rate each question on a scale from 1 (not at all) to 5 (very). Table 9 displays the rating scale for the survey questions.

Table 9*Responses: Effectiveness, Engagement, Relevance, Accessibility, and Satisfaction*

	Not at all	1 <i>n</i>	2 Not Very	3 <i>n</i>	3 Mediocre	4 Quite	5 Very	<i>n</i>	Total <i>N</i>		
(1) How effective was the series at helping you reach those learning objectives?	0%	0	0%	0	6.06%	2	39.39%	13	54.55%	18	33
(2) How engaging you found the series?	0%	0	0%	0	12.50%	4	40.63%	13	46.88%	15	32
(3) How relevant are the topics to your professional development?	0%	0	3.03%	1	6.06%	2	33.33%	11	57.58%	19	33
(4) How would you rate the accessibility to the series?	0%	0	0%	0	6.06%	2	45.45%	15	48.48%	16	33
(5) I'm satisfied with the investment my organization makes in education and professional development	0%	0	0%	0	3.03%	1	42.42%	14	54.55%	18	33

The majority (93.94; $n = 31$) of the respondents claimed they were very satisfied or quite satisfied with the series concerning its effectiveness in reaching the learning objectives. When asked about the engagement of the series, 87.51% ($n = 28$) of the respondents rated the series as quite or very engaging. When asked about the relevance of the topics to their professional development, more than 90% ($n = 30$) of the respondents rated them as very or quite relevant.

Nearly 94% ($n = 31$) rated the series as quite or very accessible. Interestingly enough, the majority of the respondents were satisfied with their organization's investment in professional development, with nearly 97% ($n = 32$) indicating that they were quite satisfied or very satisfied.

Timing and Emphasizes on Topics

Twenty-one responses were received for the questions on topics to be enhanced. For topics to be omitted, a total of 13 responses were received, where 12 respondents indicated no, unsure, or N/A, and one respondent specified by stating the lecture on teaching millennials was not well structured. Research development received the most notable comments, followed by equity and cultural competence issues. A total of 14 sub-categories were labeled and organized in Table 10, with both categories representing a third of the comments. The organization involves the identification of words that align with the emerging theme. Then, Table 11 presents the responses and how they have been coded and aligned with the identified theme.

Research Development and Equity and Cultural Competence Issues

The themes that appeared most often among participants in response to which topics they wished to see included research development, equity, and cultural competence issues. There have been a total of

Table 10

Topics Respondents Would Like to See in the Series or Need More Time

Topics	Responses
Research development	4
Equity and cultural competence issues	3
Remediation	2
Women equity issues in healthcare	2
Assessments	1
Burnout prevention	1
Concept of 'life-long learning'	1
Expectations private physicians ACGME	1
Feedback	1

Table 10*Topics Respondents Would Like to See in the Series or Need More Time (Continued)*

Grants and proposals	1
Innovations	1
Leadership techniques for GME	1
Learning styles	1
Performance improvement plans	1
Total of Comments	21

Table 11*Research Development, Equity, and Cultural Competence*

Research Development, Equity, and Cultural Competence	# of Comments
Research Development	4
“ Research Development ”	
“ Research methods, how to do research, how to get published (choosing/ finding a journal) ”	
“ Clinical Research ”	
“ Deep dive into qualitative research as it pertains to MedEd ”	
Equity and cultural competence issues	3
“ Building equity and cultural competence in teaching material, equity in assessment of learners, incorporating EPAs in assessment ”	
“ Female undervalue in the healthcare system ”	
“ Challenges of motherhood with the physician world ”	

four research topics in the span of two years, and two topics in diversity and equity. It is no surprise that participants requested more research and diversity/equity-related topics, as all members are clinical faculty members affiliated with the university, and most participants are assistant and associate professors. For junior faculty and community physicians, enhancing the research curriculum is imperative, as their skillsets may be limited. The demand for diversity, equity, and an inclusive curriculum is on rise. The desire for supporting education and stimulating awareness—thereby providing tools for DEI—of clinical educators in both teaching and community hospital settings is recognized.

There was only one comment for the survey question concerning which topics/subject should be omitted. One participant noted that the lecture on teaching millennials was not well structured and needs to be more organized. This participant was referring to a topic in a providing feedback session. I was able to interview this participant, and they elaborated on the need to differentiate learners from undergraduate medical education (UME) and graduate medical education (GME).

Improvement Ideas for Instruction

Participants were asked for ideas to improve the series, and 12 comments were reported. The comments were identified and organized into nine subcategories, as depicted in Table 12.

Table 12

Responses to Survey Question: Ideas to Improve Series

Ideas to Improve Series	Responses
Class format – More live classes, combo	4
Ask me in 2 years – I’m new	1
Develop overall plan	1
More attendees	1
More detailed slides for downloading	1
More topics for private physicians in ACGME environment	1
MS Teams	1
On-demand recordings	1
Signup process is onerous	1
Total Number of Comments	12

Class Format/Hybrid Model

An area of series improvement that was identified focuses on the class format, specifically more live classes or even a combination hybrid model. When compared to the original needs assessment collected in June 2019, the participants were asked about the modes of delivery that work best for faculty development workshops/grand rounds. At the time, 11 (73.33%) participants indicated face-to-face sessions.

Participants from the interviews also shared recommendations on improving the CELS program, which included the majority suggesting in-person sessions and resuming traditional classroom settings with the possibility of hybrid sessions.

In summary, out of 33 responses (35.48% identified as program directors and 48.39% as teaching faculty, with the majority of respondents [72.73%] identifying as HCA faculty), the following themes were identified. Skills and knowledge were noted as examples of changed behavior and practices. The participants attended the CELS to improve and update their skills and knowledge. The participants wished to see more topics in research development and equity and cultural competence issues. Last, areas for improvement included the class format/hybrid model.

Interviews

Six interviews were conducted between May 2021 and June 2021 with various members from HCA and USF. Six interview files were transcribed and prepared for coding. Table 13 summarizes the demographic information of the participants for the interviews and the six-document list.

Table 13

Interview Participants' Demographic Information & Interview Document Listing

Label	Affiliation	Role	Document Listing
# 1	HCA	Clinical Educator Faculty	I-HCA_Faculty_I1
# 2	USF	Clinical Educator Faculty	I-USF_Faculty_I2
# 3	USF	Clinical Educator Faculty	I-USF_Faculty_I3
# 4	HCA	Clinical Educator Faculty	I-HCA_Faculty_I4
# 5	USF	Executive Board	I-USF_Executive Board_I5
# 6	HCA	Executive Board	I-HCA_Executive Board_I6

These semi-structured interviews utilized an interview guide with questions that addressed each area of the evaluative inquiry, including the opening question. This format allows the interviewer flexibility for creating a more open space to further co-construct, asking for clarification through follow-up questions (Lichtman, 2013). By using the interview protocol as a guide, two sets of questions were provided for the interviews: one for the clinical educator faculty and one for executive board members. Each interview was conducted on various virtual platforms—Microsoft Teams, Zoom, and WebEx—recorded, and transcribed. Each transcription was listed and labeled with a document title for coding, and categories were then created from the interview protocol. Codes were created in NVivo (2020) qualitative analysis software for alignment with the questions in the interview protocol. Multiple subcategory codes relating to the interview questions were created as the content was read, and coding was refined with the nodes. In total, there were a total of ten questions that corresponded to the questions in the interview protocol for both sets. Table 11 displays the final node titles for the interview questions, the emerging codes, and the themes, along with the frequency counts from the total number of participants (out of 6). The following section will provide an analysis of each interview question.

Relationship with USF and HCA

The participants were asked to describe the relationship with USF and HCA. All six interviewed participants acknowledged the GME partnership between the two organizations. Each individual was able to provide an understanding of the infrastructure between the teaching and community hospitals by describing the shared academic resources. In the examples, one of the participants detailed:

Yeah, so my understanding is that HCA has really blossomed as a clinical entity in the West Florida region, and as they've blossomed, they've taken on GME programming

throughout the region. They've got a bunch of new—relatively new programs with relatively new leadership within those GME programs. My understanding is what they've really been searching for is support for those program directors. That's a central support system, and they thought that we, as an academic institution, might partner well with them to provide that support for the faculty development, and to create a community of practice, and to give some professional growth opportunities for their program leadership, as well.

Based on the responses from all participants, there is evidence of the mutual academic partnership, share vision, and understanding of the expectation with the consortium to expand GME programs to meet the state's need in the physician workforce while enhancing the learning environments within each local entity.

CELS Workshops Attended and Thoughts about These

The participants were asked about their involvement in the program and feedback based on their participation. The majority had attended at least three sessions in the previous two years. Half of the participants recognized the value of the CELS providing essential knowledge, especially about teaching. One executive member elaborated on the need to develop post-assessments for faculty applying knowledge in their work context:

I think when we teach faculty how to be an educator in these didactics, we're giving them knowledge information about maybe how to do something, how to approach something. We have not really developed the second half of the program where you are given the opportunity to have somebody come out and watch you teach, and give you feedback on your application of content. It doesn't have to be direct. It can be here is a way for us to do it where you video tape yourself. We'll be happy to watch it and give you feedback on this. That part of it is something that I think could be enhanced to really look at outcomes.

What Did CELS Attendees Enjoy the Most and Least?

The participants were asked what they thought of the series. Half of the participants indicated that they enjoyed attending the program for networking, sharing knowledge, experience, and reflection opportunities. Two participants noted research as their area of greatest interest, as both participants—who were HCA faculty—have suggested a lack of exposure and utilization and expressed their desire to improve. Networking, including sharing knowledge/experience, was reported by an HCA faculty member:

I enjoy just being a part of a group of people who are interested in education and who have an interest in making me or making educators better. I've enjoyed that aspect because when I started, I thought I was on my own, so having people that I can call on to say, "Hey, you know what? What's the best way to conduct a research project? What is the best way to assess a resident, or if I'm having difficulty reaching a resident?" Having someone available to bounce these ideas or these concerns from.

Reflection opportunities were noted in one response from a USF faculty member:

As a participant, what I really love—and since having this reason to talk about some of these things, I've—I experience—if I'm seeing 15 patients a day with my team of 4 residents and 3 students and a bunch of pharmacists and a bunch nurses—we're having 15 different experiences times the 7 people that are my trainees with me, and that's a lot to digest, and by the end of the day I'm exhausted, and I don't think about or reflect on, but I don't always get that time to reflect on some of these things, so I really appreciate having the time to devote to reflection. There's a lot of reflective practice, I think, these workshop that I really appreciate.

Responses to their least favorite in the series concerned the technological glitches, timing, and limitations of the online learning environment. One HCA faculty member recognized the benefits of the online environment as a convenience for those who were geo-physically displaced but also preferred to reduce the duration of the online content:

For me, Zooms and WebEx's are great. An hour's a lot of time to commit. If you had things that, you know, maybe you reduce it to 15 minutes and, in a fashion, I know that interactive nature is good, you know? Say a 15-minute video that could be thrown into a faculty meeting if you do show up for faculty meeting. How do you increase the participation?

Why Participants Attended CELS Workshops

The participants were asked why they believe participants attend the series. A third of the responses were related to attendance, CME credit, knowledge, and career advancement. Both executive board members stated that they regularly encourage their faculty to attend the CELS, as they recognize the value and the quality, especially as an additional incentive to obtain and maintain a faculty appointment through the university:

There's gonna be motivations that are gonna be different based on certain roles and stuff like that. I do think that the quality of the programming is excellent. I really, really welcome it. Those that have now gone down a pathway of going down a faculty appointment, I do actually kind of insist that they participate. You've got a faculty appointment. You should be tapping into these particular sessions more so, but I'd like the other ones, and we do have others that don't have faculty appointments, to actually see what they might be missing as a result of it. I think both of those things are true...

Members from both the USF and HCA equally recognized that those who were genuinely interested in education showed up to the series, a sentiment that was shared across both organizations:

I think there's a small percentage that truly wants to do it and not because they want—they know what they don't know, and they see this as a way of learning how to get to a certain level. If they truly want to invest their professional career for the next several years in education, then they need that.

The Impact on the Evolving Clinical Educator

The participants were asked how the series might impact the clinical educator. Half of the participants noted the CELS' impact on clinical educators through increasing efficiency and self-confidence and updating the participants' skills and knowledges. This is evident from an HCA faculty member's response:

How does it impacted it, makes me be a better teacher, can see more confidence in what you're doing... it motivates me to read more, to be more up to date to some of the newer studies, to be abreast as the new research and the new studies that are coming out.

Additionally, a USF faculty member responded to the same question:

I think these faculty development sessions serve the clinician educator really well. They're practical. They're addressing concerns that most people are experiencing day to day, and they're things that I think—the topics that we've done so far, I think are topics that you could repeat over and over again, and even if the same people came to it, they would still learn something new 'cause there's layers to this.

Furthermore, an executive board member indicated the program's impact on the clinical educators in their organization via the added value of knowing policies, requirements, and responsibilities:

That's where the training comes in. That's where these lectures I think are absolutely essential, having clarity in processing, having clarity about aligning themselves with your organization, with our organization.

This is what faculty development is, really the most important part of it, and it's great when you bring in knowledge-based areas where they just don't know about it.

The value of faculty development was recognized by the participants as a representation of the organization's culture; specifically, the CELS was noted as a complementary addition.

Effect of CELS on the Consortium Relationship

Participants were asked if they believe if the series made an impact on the academic partnership. There were various responses to this question, as it was unanimously recognized as a new and evolving relationship; however, three participants provided clear responses to the question, which included foundational resources for faculty development, sharing learning, delivering 'hidden' curriculum, and alignment with missions. An HCA faculty member noted: To me, it just seems naturally a part of it (academic partnership); I don't know if it has changed anything at all, but I definitely see it as a great benefit.

Both executive board members agreed with the connection of the CELS and the academic partnerships, for example:

I think it's foundational to what people look for in terms of when you're joining a institution where you are going to be teaching learners, that you have the resource for faculty development. I think it aligns with the USF mission, and the mission of the [consortium] agreement...I think it's a bond that bonds us in the consortium model for sure.

One of the USF faculty members noted the significance of the hidden curriculum in this partnership as the program's potential influence on shared learning and its impact on the community of educators.

Yeah. I think the question you're really asking is what is the hidden curriculum that is being delivered, right, so I think a lot of that is really just—yeah, learning from each other. What we don't control as far as personality.

Ways the CELS Affects Participants' Behaviors and Practices

Participants were asked if they believe if the series made an impact on the academic partnership. The majority of responses noted the ways the CELS affects participants' behavior and practices, including sharing, authentic experiences, and engagement through awareness on various aspects/topics. An example of this comes from an active HCA faculty member who stated:

I have attended, they are addressing various aspects of the clinical educator so as far as assessment of the resident, as far as how to conduct research, identifying racial biases, you guys are discussing topics that are important to the educator or at least important to me in identifying those topics and discussing them, the best ways to address them. Then, when you guys have the small group formats, it helps to identify other educators there that say that the experience that you're having is shared or is common among educators and getting the different input from other members or participants in the series.

Specific Topics/Areas/Categories that Should Be Included in the Series

Participants were asked about specific offerings should be included in the series. Half the participants requested various teaching methods and strategy topics, including topics on how to create lectures, write learning objectives, write test questions, employ assessment and evaluation

tools, and use basic teaching pedagogies. The topics of bedside teaching should include different preceptor models (i.e., one minute preceptor) as they relate to providing effective feedback within time constraints. An HCA faculty member provided an example in his response:

Well, you have to know how to do a preceptor model. What is the one minute, three-minute, five-minute preceptor model? How do you organize your time at the bedside?"

This is an area that our doctors struggle with.

Addressing general topics on teaching for both teaching and community faculty members can enhance the common knowledge that ties clinical faculty to their learning environments by providing resources to support the education activities of both organizations.

How can the Series be Improved

Participants were asked for ideas to improve the series. Regularly creating a faculty development curriculum based on faculty evaluations and/or needs assessment data has been noted as an area of improvement. As noted by the executive board members, here is an HCA perspective:

More and more and more the HCA has made it crystal clear that they're invested tremendously in the educational components of what's needed. The more we see citations, the more we see opportunities and evaluations by the resident's surveys, etcetera, the more focused HCA gets towards what is it that we need to do across our enterprise. There is that little bit of that competing entity... Getting to the point of how our faculty welcomes it, I think, is that a great handful of people probably, and I can't give a real percentage of the dedicated people that are constantly looking for the USF lectures and offerings compared to what they do with the competing HCA sessions...

Here is another explanation from a USF faculty member:

I think, again, if you truly wanna make an impact, you gotta ask them, "What do you need?"

What are the tools you need?” We have to have a better understanding what their needs are and then work on working towards their needs. Then, maybe there’s gonna be more meaningful impact.

Jointly, the emphasis on including diverse faculty members in planning and partnering up with subspecialty colleagues to teach faculty development sessions has been recognized.

Ways the CELS can Provide a Community of Educators

The participants were asked to identify ways in which the series could provide a community of practice. The faculty development program seeks to create a community of educators through workshops and seminars across a continuum of teaching and learning. The objectives of this program are to (1) provide a forum for the community of practice, (2) enhance confidence in clinical teaching, and (3) offer strategies and resources for the improvement of teaching practices. Providing the resources and tools to support the education activities of clinical faculty is recognized as one way to foster a community of educators. Participants expressed the challenges of engagement in the online learning environment. As an HCA faculty member noted:

If you’re really looking for that community, I think we need a hybrid of both of those activities. Communication should be done—and I always insist on doing this on camera. I really get very discouraged when we do meetings and everybody is off camera, and I’m the only one on camera. I said how are we supposed to engage? How are we supposed to interact if we’re not even seeing each other, we’re not having that kind of live kind of activity. I think those are essential.

Evidently, it is challenging to form relationships for clinical faculty, given the time and space constraints and limited “down time” that is often filled in with open socializing.

The goal of these programs is to provide a collaborative atmosphere for clinical faculty.

Recognizing this challenge, one USF faculty member suggested:

I think it's the timing between those workshops. That there is an opportunity for us to create some bonding in the community, and I'd be curious to see if there's a way we can utilize that. What I mean by that is, if we have a workshop on managing difficult learners, maybe creating a space where people send in some kind of homework or something.

Another idea about creating a community of educators was to create an accessible depository of educational content with defined programs per role and a database of educators with specialties and interests, as suggested by an HCA faculty member:

This may be available, but I'm not—I maybe not be aware of it, but if there is like an accessible database of educators and what their particular specialty is, if it's research, if it's education, if it's resident training, if it's medical, but then that way we can send them questions or send them—ask them for advice. I don't know if that—and they can respond if they want, but just so that we have a database of who we can contact for different questions.

A USF faculty member also commented on defined programs per role:

I mean, I would just say that one of the things that is helpful is to have actually defined programs per Role within the institution. If you're an educator, here is a set of curricula that we think is necessary, it's kinda foundational to that Role. Versus if you're an APD, versus if you're a MD, versus if you're a clerkship director and working with medical students. I think it's also helpful in terms of professional development because the thought would be that you're adding advanced curricula with each level of educational leadership for the junior faculty who may be interested in a higher-level leadership role.

This is something that they can think, “Okay, I’m gonna complete that. I can add that to my CV as I completed that program.” I think that is helpful.

The significance of establishing a community of educators derives from the creation of the consortium—a reflection of the significance of consortium’s institutional leadership and culture. The vision is to create a community of educators who can serve as the core group for faculty development programming, encouragement, and inspiration for rising junior faculty member. Organizational culture is the most important aspect of fostering a faculty development program; therefore, institutional leadership ought to set clear expectations for faculty in the areas of teaching and learning for clinical educators. Participants from teaching and community hospitals have an opportunity to learn from each other, share resources, and collaborate.

Developmental Evaluation Principles

Traditionally, the role of an evaluation program is to emphasize accountability, established for newer entities to demonstrate that activities generated by their programs are meeting stakeholders’ needs and interests while achieving desired outcomes (American Evaluation Association, 2016). Nevertheless, multi-faceted projects, such as supporting an innovative faculty development program within a new academic partnership, require coordination with multiple stakeholders and engagement with diverse perceptions. The intent is to infuse Patton’s (2016) eight essential principles for guiding the developmental evaluation process. The principles are used to evaluate and construct the faculty development program for the upcoming academic year. The evaluation plan uses elements of DE by applying an evaluation perspective during all stages of the project, from discussions to decision-making, allowing the evaluation process to adapt despite a non-linear process and to continue innovations within this scope.

These principles merely guide evaluative components to organize the essentials in a true developmental fashion to inform. In the use of a process informed by developmental evaluation to appraise innovation using this approach as well as evaluation activities, there is a need to identify the process to further develop the following emergent evaluative questions: (1) what are stakeholder needs in the faculty development program, and (2) how can we incorporate stakeholder insights? The innovation process describes the path of translating new and/or existing knowledge into sustainable solutions. Thus, the eight essential principles are used as a framework that structures and systematically gauges the development of new processes, products, and services, which supports organizations' understanding of innovation goals as overarching components of an innovative process.

The following steps to inform and construct the curriculum in the program were taken under this framework. Applying developmental evaluation means being more systematic about subjecting data and observations to interpretation and judgment. Using evaluative methods allows evaluators to make changes in needs assessments; further, baselines and benchmarks can be revised and updated as information emerges during the evaluation. One change observed was the need to increase timely feedback, thereby expanding internal operations committees. This includes forming a faculty development subcommittee between HCA and USF and a research subcommittee between the two enterprises, including members from academic medical centers and community hospitals. These groups will provide more in-depth reports for each area regarding the scope of opportunities and improvement, as well as how to utilize the CELS platform for outreach efforts. In a true complexity perspective, the participatory process with stakeholders, which aligns the principles of cocreation and systems thinking, will perform a detailed needs analysis and involve faculty in development program planning and delivery.

Developmental evaluation takes a rigorous approach to understanding strategic operational challenges, leading to better-informed options for adaptation and continuous improvement.

Summary

In this chapter, the findings from the data analysis were presented in response to the evaluation questions. The evaluation was conducted using interviews and a needs assessment survey.

Table 14

Developmental Evaluation Principles in the Clinical Educator Learning Series

Principles	Description	Participants/Steps
Developmental purpose	Identify presenters and topics in a group of faculty developers who consist of experienced, dedicated, and productive professionals (minimum of three).	Design team; creation of a blueprint of the curriculum; scheduled planning meetings
Evaluation rigor	The team works with presenters and leaders to co-develop a framework for measurement; evaluation reports are generated monthly at the conclusion of every session and are to be reported and reviewed bi-annually.	Data collection and review; annual needs assessment
Utilization focus	Key intended users identified from both sides (i.e., program directors; junior faculty); ensure all activities align with the needs of the group(s); the evaluation is designed explicitly for utilization data.	Clear pathways/programs for intended users and facilitating communication with the targeted audience
Innovation niche	Fostering reliable communication tools; identify delivery methods and inventory for accessibility content to maintain flexible hybrid learning.	Creating a website with clear expectations and a depositary; direct calendar of events with virtual platform options
Complexity perspective	With a complex environment and diverse perceptions, the team and leadership must maintain focus on providing rigorous content and stimulating engagement with an effort to cultivate the community of educators.	Directory of educators; outreach to stakeholder community committees; annual hospital/program-level leadership meetings

Table 14

Developmental Evaluation Principles in the Clinical Educator Learning Series (Continued)

Systems thinking	Generated knowledge/experience from the program objectives; creating specific pathways/programs deprived of the CELS, including mentorship and journal clubs.	Specific programs/working groups with particular interest/clearer outcomes for junior faculty connected to the CELS objectives
Cocreation	Fostering collaboration with leaders from both sides to develop relevant and convenient best practices. Continuously working with stakeholders to prioritize content and topics and create the best strategies for engagement and interaction.	Data from needs assessments; discussions from meetings with stakeholders; facilitating clear communication
Timely feedback	The team will continue to meet monthly to review the progress of the program using data previously received from recent workshops/seminars.	Quarterly reports shared with internal/external stakeholders; local base committees

Based on the findings presented in this chapter, creating and implementing a comprehensive faculty development curriculum that aligns with continuous faculty needs assessments can add fidelity to the series; therefore, development evaluation as a tool should use a framework of faculty development in an academic partnership between teaching and community physicians. The following chapter presents the discussion and conclusions of the study.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

Statement of the Problem

With the increasing formation of new academic partnerships to address the physician shortage crisis in the United States, clinical faculty from both teaching and community hospitals are expected to join forces by sharing academic resources. While the expectation for integration and efficiency has been set, it remains to be seen whether clinical faculty from both teaching and community hospitals can jointly promote academic excellence in a teaching and learning community. Thus, whether faculty development initiatives are enough to form a consortium of clinical educators through the integration of these two distinct enterprises was investigated herein.

Purpose of the Study

The study's purpose is to support the development of the Clinical Educator Learning Series (CELS). The program is emerging in real time; therefore, the developmental evaluation approach was used to adapt and support the complex role of clinical faculty and respond to their needs while evaluating the program's curriculum. This evaluation study addresses the faculty development program within a newly formed academic partnership between teaching and community physicians.

Evaluation Questions

To conduct an evaluation of the program's opportunities, strengths, and assets, this study was guided by the following evaluation questions:

1. According to program directors and clinical faculty, what elements of the curriculum are strong and should be maintained or enriched?
2. What opportunities exist to complement the curriculum with additional essential elements in the Clinical Educator Learning Series' (CELS) current curriculum?
3. How do emerging collaborative relationships address program objectives?

Method

The evaluator used a developmental evaluation to answer the evaluation questions and inform the programming innovation. One-on-one, semi-structured interviews were conducted with six consortium faculty members who participated in the workshop series. The interviews were transcribed using a transcription company. During the interviews, the participants were asked questions related to the evaluation. Appendix B contains the interview questions that the evaluator posed to each interviewed participant. Two sets of questions were provided for the interviews, as each member represented a different group: faculty member participants/lecturers or executive board members. The survey questions focused on the scope of opportunities and improvement and how to utilize the CELS platform for outreach efforts for both teaching and community faculty within this new academic partnership. The interview questions were arranged to allow the participants to provide details about their perspectives as participants in the series regarding the role they play.

Additionally, a survey was sent to past and present CELS participants; Appendix A contains the needs assessment survey. A total of 33 responses were received. Survey results were analyzed, and open-ended responses were coded. One of the challenges related to qualitative evaluation is the large volume of data (Merriam, 2009). Due to the amount of data, the evaluator synthesized the participants' responses to each interview question.

After the synthesis, the evaluator completed a theme and frequency analysis. The responses were analyzed based on the themes and analysis that emerged from both the survey and interview data for each evaluation question.

Discussion

Evaluation Question One

The first evaluation question focused on the elements of the curriculum: What elements of the curriculum are strong and should be maintained or enriched? The questions associated with the elements of the curriculum were asked in the survey and the interviews. The theme with the highest frequency emerging across multiple questions relating to the curriculum elements emphasized skills and knowledge, specific enhancements in teaching strategies, evaluation, effective feedback, research engagement, and diversity and inclusion. The Accreditation Council for Graduate Medical Education (ACGME) has identified the significance of addressing cultural diversity as part of its professionalism competency (Like, 2011). The need to prepare residents to care for increasingly diverse populations emphasizes the importance of providing clinical faculty with the training and tools to become more culturally competent. Practical applications and relevant content to operationalize these topics into meaningful faculty development should continue to provide clinical faculty with critical appraisal skills, increase exposure to rapidly evolving medical education, promote awareness of educator skills, encourage research, and promote collaboration.

As suggested by Steinert (2012), faculty development should target all faculty members' roles, including teachers, educators, leaders, managers, researchers, and scholars, on both the individual level and in group settings, and should not be limited to a focus on teaching and education. The curriculum elements are integral to all levels of the educational enterprise;

moreover, the program should promote learning that occurs in authentic contexts (Steinert, 2011), rather than solely the development of colleagues. This was evident in the evaluation, as the participants reported that improving skills and knowledge were reasons for participation in the series, which included the elements of program evaluation, leadership and administration, and research and scholarship. This view of knowledge has important implications for faculty developers' understanding of programming needs for knowledge translation for faculty vitality and the institutions in which they work.

Evaluation Question Two

The second evaluation question focused on the enhancements in the program: What opportunities exist to enhance the CELS current curriculum? The survey asked questions associated with curriculum opportunities, and the interviews were related to improvements and effective feedback. The themes with the highest frequencies emerging across multiple questions related to class format, delivery methods, and more explicit faculty expectations. The transition to online learning during COVID-19 has allowed the CELS to carry on. New technology trends have been on the rise for some time, and the CELS forum has embraced online learning and teaching to reach out to those who are geographically distributed or have time constraints. Participants from both the interviews and survey expressed a preference to resume in-person sessions but were also open to blended learning. The use of technology to deliver faculty development content has been highlighted in the literature (Cook & Steinert, 2013). The findings indicate support for a hybrid format, including synchronous and asynchronous learning, for the CELS. Similarly, in a study conducted about using a needs assessment in the development of an interprofessional faculty development program, regarding program delivery options, the majority of respondents indicated a preference for a hybrid format (Bigbee et al., 2016). Online faculty

development offers potential solutions to the challenges of scheduling and physical location and may help promote communities of practice (Cook & Steinert, 2013). In the face of Covid-19, adaptability and innovation in online teaching and learning are critical. The pandemic has imposed a suppletive curriculum and instruction for education systems worldwide. Blended learning experiences with both in-person and online learning approaches can capitalize on the strengths of both. Faculty development can provide faculty with flexibility in learning and applying and can be a powerful tool in developing a community of practice among members for collaborative learning, networking, and mentoring opportunities.

In addition to the class format and delivery method, the teaching faculty's formally defined career expectations have been identified as another theme in the evaluation. Participation in faculty development can be deemed valuable for academic promotion or good citizenship within hospitals/departments (Donnelley et al., 2021). Establishing concrete expectations and goals for faculty and continuing CME as additional incentives can be employed as motivators for faculty engagement. Additionally, a need for mentorship was identified; mentorship can provide instrumental support for faculty development beyond traditional instructional needs (Sambunjak et al., 2006). Clinical educators develop their competence as faculty members, including participation in formal workshops or programs; for others, learning may occur in informal ways, as Steinert (2014) depicted in practical experiences in the workplace. Participants, particularly from HCA, requested a directory of academic medicine faculty with strong backgrounds in remediation, evaluation, and research. This suggests an opportunity for authentic and meaningful learning through informal approaches, as supported by the literature, work-based learning, communities of practice, and reflective learning (Steinert, 2009, 2010, 2014). The formation of such relationships, such as mentorships, can potentially lead to new initiatives and collaborations

that may not otherwise be available. Though unconventional, faculty development partnerships can promote organizational substantiality between new academic consortiums through mutual goal setting and cultural bridging.

Evaluation Question Three

The third evaluation research question focused on collaborative relationships: How do emerging collaborative relationships address program objectives? The CELS brought together academic leaders, educators, and researchers from both teaching and community hospitals. The evaluation study demonstrated that involvement in a community of educators through the CELS is only beginning to take form. The CELS has been recognized as a faculty learning community that elevates the prominence of the educational mission for the consortium and as a representation of each organization's institutional culture.

The social and intellectual space where the CELS operates includes an approach to knowledge management and implementing best practices for educators from teaching and community hospitals. Supporting a community of practice for faculty development (Steinert, 2010) can further improve faculty development and change the culture toward evidence-informed educational practice. Networking is key to relationships often formed within the community of practice models for scholarship production via faculty development efforts. The findings from the evaluation elevates the notion of the evolution of a community of practice amongst the clinical faculty. The use of these alternative practices (Steinert, 2006) as the literature alludes to, emphasizes the importance of the hidden curriculum in naturally the establishment of a community of interested educators, increases motivation, self-directed learning, peer coaching and mentorship.

The development of creating the space for such members, can promote the educator identity for those physicians, while sharpening the knowledge and skills needed to perform for their multiple roles.

Implications

As the environment was both complex and shifting, the iterative DE process enabled the evaluator to engage with key stakeholders, incrementally testing out ideas in practice, including discussions with key internal stakeholders during follow-up meetings post-assessment. I received feedback and adapted plans, such as creating a journal club within the CELS forum as a separate, more advanced group at the start of the new academic year. During the creation of new topics to account for newly emerging information and previously overlooked programming needs.

The learning and actions derived from the assessment were guided by data analysis that drew on data collected as part of the DE and stakeholder's experiences and feedback. The evaluator interpreted the collected data further to co-create strategies and actions to address emerging issues. This evaluative data analysis approach provided immediate, useable feedback to engage clinical faculty from both teaching and community hospitals in co-creating solutions, thus reflecting some of the principles of developmental evaluation (Patton, 2016).

Recommendations

The Role of the Evaluator

The evaluator plays a key role in the faculty development program, as the evaluator is the facilitator of development, progress, and products. Consistent with a DE approach, the evaluator is embedded within the innovation and not detached. This allows for changes, responses, directions, and evaluations based on feedback, insights, learning, and conversations between stakeholders and evaluations to be responded to as needs emerge.

Timely Feedback

Due to rapid expansion with multiple perspectives in a new academic partnership, it is imperative to review feedback to ensure evaluation data is used to strengthen the developments, and to ensure change decisions are accounted for within faculty development construction and production.

Transfer of Knowledge

In addition to reflecting the eight principles by Patton (2016), it is noteworthy that when evaluating the innovation platform developmentally, the approach allows the evaluator to acknowledge new knowledge and skills through multiple interactions with stakeholders. This learning through knowledge exchanges aligns well with one of the key elements of innovative initiatives, which entails co-creation with the ongoing development of the learning organization and culture.

Cocreation

When this survey is compared to the original needs' assessment conducted in June 2019, providing effective feedback, engaging learners, and clinical teaching were highlighted as the most interesting to participants. The survey illustrates that this remains true, as noted in the example responses. The rationale of the curriculum intends to ensure that the program is useful for intended users; thus, the process of focusing on utilization by reviewing the initial needs assessment as it relates to the curriculum elements. A faculty development program within a new consortium between two organizations should embrace input from both sides.

Conclusion

The purpose of the evaluation was to provide a practical example of a developmental evaluation outlining the methods applied to support the faculty development program in a new

academic partnership. As outlined above, to define when an assessment can be called developmental, Patton (2016) developed eight defining principles that should be evident in an evaluation for it to be considered authentically and fully developmental. The DE approach is a resource for program planners in faculty development seeking to roll out an intervention with a new academic partnership between teaching and community physicians. The significance of leadership buy-in as part of organizational readiness is imperative to support innovation initiatives, especially when establishing a faculty development program within a new academic partnership. Furthermore, the use of developmental evaluations can support the accountability of learning, adaptation, and transparent integrity between organizations undergoing rapid social change.

REFERENCES

- Association of American Medical Colleges. (2018). <https://www.aamc.org/news-insights/inspiring-next-generation-academic-physicians>
- Association of American Medical Colleges. (2019) New Findings Confirm Predictions on Physician Shortage. <https://www.aamc.org/news-insights/press-releases/new-findings-confirm-predictions-physician-shortage>
- Association of American Medical Colleges. (2020). <https://www.aamc.org/news-insights/today-s-residents-numbers>
- Association of American Medical Colleges. (2020). <https://www.aamc.org/news-insights/press-releases/new-aamc-report-confirms-growing-physician-shortage>
- American Hospital Association. (2019). <https://www.aha.org/news/headline/2019-02-06-aha-supported-bill-would-add-15000-medicare-funded-residency-slots>
- American Medical Association. (2020). <https://www.ama-assn.org/about/ama-history/ama-history>
- ACGME. (2018). *ACGME Common Program Requirements (Residency)*. <https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2019.pdf>
- Ayanian, J. Z., & Weissman, J. S. (2002). Teaching hospitals and quality of care: A

review of the literature. *Milbank Quarterly*, 80(3), 569–593.

<https://doi.org/10.1111/1468-0009.00023>

Baldwin, C. D., Chandran, L., & Gusic, M. E. (2017). Building sustainable professional development programs: Applying strategies from implementation science to translate evidence into practice. *Journal of Continuing Education in the Health Professions*, 37(2), 106–115. <https://doi.org/10.1097/CEH.0000000000000151>

Baldwin, C. D., Gusic, M. E., & Chandran, L. (2017). The Impact of a national faculty development program embedded within an academic professional organization. *Academic Medicine*, 92(8), 1105–1113.

<https://doi.org/10.1097/ACM.0000000000001496>

Baldwin, C., Chandran, L., & Gusic, M. (2011). Guidelines for evaluating the educational performance of medical school faculty: Priming a national conversation. *Teaching and Learning in Medicine*, 23(3), 285–297.

<https://doi.org/10.1080/10401334.2011.586936>

Bar-on, M. E., & Konopasek, L. (2014). Snippets: An innovative method for efficient, effective faculty development. *Journal of Graduate Medical Education*, 6(2), 207–

210. <https://doi.org/10.4300/jgme-d-13-00362.1>

Bigbee, J. L., Rainwater, J., & Butani, L. (2016). Use of a needs assessment in the development of an interprofessional faculty development program. *Nurse Educator*, 41(6), 324–327. <https://doi.org/10.1097/NNE.0000000000000270>

Blitz, J., De Villiers, M., & Van Schalkwyk, S. (2018). Implications for faculty

development for emerging clinical teachers at distributed sites: A qualitative interpretivist study. *Rural and Remote Health*, 18(2).

<https://doi.org/10.22605/RRH4482>

Borges, N. J., Navarro, A. M., Grover, A., & Hoban, J. D. (2010). How, when, and why do physicians choose careers in academic medicine? A literature reviews. *Academic Medicine*, 85(4), 680–686.

<https://doi.org/10.1097/ACM.0b013e3181d29cb9>

Broderick, P. W., & Nocella, K. (2012). Developing a community-based graduate medical education consortium for residency sponsorship: One community's experience. *Academic Medicine*, 87(8), 1096–1100.

<https://doi.org/10.1097/ACM.0b013e31825d63ae>

Browne, J., Webb, K., & Bullock, A. (2018). Making the leap to medical education: a qualitative study of medical educators' experiences. *Medical Education*, 52(2).

<https://doi.org/10.1111/medu.13470>

Bryk, A. S., & Gomez, L. M. (n.d.). *Getting ideas into action: Building networked improvement communities in education* Carnegie foundation for the advancement of teaching foundation for the advancement of teaching.

<http://www.carnegiefoundation.org/spotlight/webinar-bryk-gomez-building-networked->

Buckley, H., Steinert, Y., Regehr, G., & Nimmon, L. (2019). When I say ... community of practice. *Medical Education*, 53(8), 763–765.

<https://doi.org/10.1111/medu.13823>

Burke, L. G., Frakt, A. B., Khullar, D., Orav, E. J., & Jha, A. K. (2017). Association

between teaching status and mortality in US hospitals. *Journal of the American Medical Association*, 317(20), 2105–2113.

<https://doi.org/10.1001/jama.2017.5702>

Butts, G. C., Johnson, J., Strelnick, A. H., Soto-Greene, M. L., Williams, B., & Lee-Rey, E. (2008). Diversity in academic medicine no. 4: Northeast consortium: Innovation in minority faculty development. *Mount Sinai Journal of Medicine*, 75(6), 517–522. <https://doi.org/10.1002/msj.20082>

Campion, M. W., Bhasin, R. M., Beaudette, D. J., Shann, M. H., & Benjamin, E. J. (2016). Mid- career faculty development in academic medicine: How does it impact faculty and institutional vitality? *The Journal of Faculty Development*, 30(3), 49–

64.

<http://www.ncbi.nlm.nih.gov/pubmed/27942418><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC5145005>

Cantillon, P., D'Eath, M., De Grave, W., & Dornan, T. (2016). How do clinicians become teachers? A communities of practice perspective. *Advances in Health Sciences Education*, 21(5). <https://doi.org/10.1007/s10459-016-9674-9>

Cantillon, P., Dornan, T., & De Grave, W. (2019). Becoming a Clinical Teacher. *Academic Medicine*, 94(10), 1610–1618.

<https://doi.org/10.1097/ACM.0000000000002403> Chandran, L., Gusic, M. E.,

Lane, J. L., & Baldwin, C. D. (2017). Designing a National

Longitudinal Faculty Development Curriculum Focused on Educational

Scholarship: Process, Outcomes, and Lessons Learned. *Teaching and Learning in Medicine*, 29(3), 337–350.

<https://doi.org/10.1080/10401334.2017.1282370>

Clark, J. M., Houston, T. K., Kolodner, K., Brand, William T., Levine, Rachel B., Kern, David,

E. (2004) Teaching the teachers: national survey of faculty development in departments of medicine of U.S. teaching hospitals. *J Gen Intern Med*, 19(3), 205–214.

Cook, D. A., &Steinert, Y. (2013). Online learning for faculty development: A review of the literature. *Medical Teacher*, 35(11), 930-937. <https://doi.org/10.3109/0142159X.2013.827328>

Dall, T., Reynolds, R., Consultant, S., & Jones, K. (2019). *The Complexities of Physician Supply and Demand*.

Damp, J. B., Dewey, C. M., Wells, Q., Horn, L., Kroop, S. F., & Mendes, L. (2016). Faculty development on clinical teaching skills: An effective model for the busy clinician. *Journal of Medical Education and Curricular Development*, 3, JMECD.S40798. <https://doi.org/10.4137/jmeecd.s40798>

Davis, P. H. (2000). Council on graduate medical education: The effects of the balanced budget act of 1997 on graduate medical education. A cogme review.

de Carvalho-Filho, M. A., Tio, R. A., & Steinert, Y. (2020). Twelve tips for implementing a community of practice for faculty development. *Medical Teacher*, 42(2), 143–

[149. https://doi.org/10.1080/0142159X.2018.1552782](https://doi.org/10.1080/0142159X.2018.1552782)

Drowos, J., Baker, S., Harrison, S. L., Minor, S., Chessman, A. W., & Baker, D. (2017).

Faculty development for medical school community-based faculty: A council of academic family medicine educational research alliance study exploring institutional requirements and challenges. *Academic Medicine*, 92(8).

<https://doi.org/10.1097/ACM.0000000000001626>

ECFMG (2012). Acgme core competencies. <https://www.ecfmg.org/echo/acgme-core-competencies.html#:~:text=The%20six%20ACGME%20Core%20Competencies, stages%20of%20their%20medical%20training.>

Eskin, F. (1979). Function of the community physician. *British Medical Journal*,

1(6155), 58. <https://doi.org/10.1136/bmj.1.6155.58-b>

Fernandez, N., & Audétat, M.-C. (2019). Faculty development program evaluation: a need to embrace complexity. *Advances in Medical Education and Practice*, 10, 191–199.

Fleishon, H. B., Itri, J. N., Boland, G. W., & Duszak, R. (2017). Academic medical centers and community hospitals integration: Trends and strategies. *Journal of American College of Radiology*, 14, 45–51.

<https://doi.org/10.1016/j.jacr.2016.07.006>

Fornari, A., Torte, L. M., Lay, M., Hirsch, B., Tanzi, D., Friedman, I., Ricardo, A.

P., Pekmezaris, R., & Branch, W. (2018). A mixed-methods approach to humanistic interprofessional faculty development. *Journal of Continuing Education in the Health Professions*, 38(1), 66–72.

<https://doi.org/10.1097/CEH.000000000000184>

- GovTrack.us. (2020). S. 348 — 116th Congress: Resident Physician Shortage Reduction Act of 2019. Retrieved from <https://www.govtrack.us/congress/bills/116/s348>
- Grady, E. C., Roise, A., Daniel Barr, M., Lynch, D., Bao-Shian Lee, K., Timothy Daskivich, M., Dhand, A., & Butler, P. D. (n.d.). *Defining Scholarly Activity in Graduate Medical Education*. <https://doi.org/10.4300/JGME-D-12-00266.1>
- Grover, A., Slavin, P. L., & Willson, P. (2014). The economics of academic medical centers. *New England Journal of Medicine*, 370(25), 2360–2362. <https://doi.org/10.1056/NEJMp1403609>
- Haji, F., Morin, M. P., & Parker, K. (2013). Rethinking programme evaluation in health professions education: Beyond “did it work?” *Medical Education*, 47(4), 342–351. <https://doi.org/10.1111/medu.12091>
- Health Research Institute. (2012). *The future of the academic medical center: Strategies to avoid a margin meltdown*. PWC.
- Irby, D. M., & O’Sullivan, P. S. (2018). Developing and rewarding teachers as educators and scholars: remarkable progress and daunting challenges. *Medical Education*, 52(1), 58–67. <https://doi.org/10.1111/medu.13379>
- Irby, D. M., & Wilkerson, L. A. (2003). Educational innovations in academic medicine and environmental trends. *Journal of General Internal Medicine*, 18(5), 370–376. <https://doi.org/10.1046/j.1525-1497.2003.21049.x>
- Jordan Cohen, F. J., Fox, D. M., Whitcomb, M. E., Ludmerer, K. M., Kirkland, R. T., Irby, D. M., Wile, M. Z., Kent Smith, C., & Koeppen, B. M. (2000). *The education of medical students: ten stories of curriculum change table of*

contents the authors responsive curriculum reform: continuing challenges.

Joyner, B. D. (2004). An historical review of graduate medical education and a protocol of accreditation council for graduate medical education compliance. *Journal of Urology*, 172(1), 34–39.

<https://doi.org/10.1097/01.ju.0000121804.51403.ef>

Kanter, S. L. (2008). What is academic medicine? *Academic Medicine*, 83(3), 205–206. <https://doi.org/10.1097/ACM.0b013e318168e828>

Kavic, M. S. (2002). Competency and the six core competencies. *JSLS: Journal of the Society of Laparoendoscopic Surgeons/Society of Laparoendoscopic Surgeons*, 6(2), 95–97.

Korschun, H. W., Redding, D., Teal, G. L., & Johns, M. M. E. (2007). Realizing the vision of leadership development in an academic health center: The Woodruff Leadership Academy. *Academic Medicine*, 82(3), 264–271.

<https://doi.org/10.1097/ACM.0b013e31803078b5>

Leonard, S. N., Fitzgerald, R. N., & Riordan, G. (2016). Using developmental evaluation as a design thinking tool for curriculum innovation in professional higher education. *Higher Education Research & Development*, 35(2), 309–321.

<https://doi.org/10.1080/07294360.2015.1087386>

Like, R. O. C. L. (2011). *Functional Mentoring: A Practical Approach With*. 28(3), 157–164.

<https://doi.org/10.1002/chp>

Medscape (2019). The physician's role in a changing health care system. Medscape National Physician Burnout & Depression Report.

<https://www.medscape.com/slideshow/2019-lifestyle-burnout-depression-6011056>

- Menendez, R. (2019). *S.348 - 116th Congress (2019-2020): Resident physician shortage reduction act of 2019*.
- Meyer, K. A. (2014). An analysis of the cost and cost-effectiveness of faculty development for online teaching. *Journal of Asynchronous Learning Network*, 18(1), 93–113. <https://doi.org/10.24059/olj.v18i1.389>
- Miles, M. B., Huberman, A. M, & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Morris, C., & Swanwick, T. (2018). From the workshop to the workplace: Relocating faculty development in postgraduate medical education. *Medical Teacher*, 40(6). <https://doi.org/10.1080/0142159X.2018.1444269>
- Muganlinskaya, N., Detterline, S., & Fargahi, F. (2019). Exploring faculty development opportunities and strategies in departments of medicine of U.S. community-based teaching hospitals. *Journal of Community Hospital Internal Medicine Perspectives*, 9(5), 410–412. <https://doi.org/10.1080/20009666.2019.1677205>
- O’Sullivan, P. S., & Irby, D. M. (2015). What motivates occasional faculty developers to lead faculty development workshops? A qualitative study. *Academic Medicine*, 90(11). <https://doi.org/10.1097/ACM.0000000000000767>
- O’Sullivan, P. S., & Irby, D. M. (2011). Reframing research on faculty development. *Academic Medicine*, 86(4), 421–428. <https://doi.org/10.1097/ACM.0b013e31820dc058>

- Patton, M. Q., McKegg, K., & Wehipeihana, N. (2016). *Developmental evaluation exemplars: Principles in practice*. Guilford.
- Patton, M. Q. (2011). *Developmental evaluation. Apply complexity concepts to enhance innovation and use*. The Guilford Press.
- Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). SAGE.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*. (3rd ed.). SAGE
- Patton, M. Q. (1994). Developmental evaluation. *American Journal of Evaluation*, 15, 311–19.
- Pitchforth, E., Nolte, E., Corbett, J., Miani, C., Winpenny, E., van Teijlingen, E., Elmore, N., King, S., Ball, S., Miler, J., & Ling, T. (2017). Community hospitals and their services in the NHS: identifying transferable learning from international developments – scoping review, systematic review, country reports and case studies. *Health Services and Delivery Research*, 5(19), 1-220. doi: 10.3310/hsdr05190
- Robert, S., Donald, B. J., Richard, C. L., Sylvia, C. R., Mary Ellen, M., & Yvonne, S. (2020). *Title: Clinical Teachers' Perceptions of Their Role in Professional Identity Formation*.
<https://doi.org/10.1097/ACM.0000000000003369>
- Roscoe, L., English, A., & Monroe, A. (2014). Scholarly excellence, leadership experiences, and collaborative training: Qualitative results from a new curricular initiative. *Journal of Contemporary Medical Education*, 2(3), 163-167.
- Rossi, P., Lipsey, M., Freeman, H. (2004) *Evaluation. A systematic approach* (7th ed.). SAGE
- Roulston, K. (2010) *Reflective interviewing. A guide to theory & practice*. SAGE.

- Shahian, D. M., Liu, X., Meyer, G. S., & Normand, S.-L. T. (2014). Comparing teaching versus nonteaching hospitals. *Academic Medicine*, 89(1), 94106. <https://doi.org/10.1097/ACM.0000000000000050>
- Staiger, D., Auerbach D., Buerhaus P. (2010) Trends in the work hours of physicians in the united states. *JAMA*.;303(8):747–753.
doi:10.1001/jama.2010.168
- Shulman, L., (2005) Signature pedagogies in the professions. *Daedalus*, 134, 3, 52-59.
- Stevens, R. A. (1978) Graduate medical education: a continuing history. *Journal of Medical Education*, 53(1), 1-18.
- Steinert, Y. (2014). Faculty development in the health professions: A focus on research and practice. In *Faculty Development in the Health Professions: A Focus on Research and Practice*. Springer Netherlands.
<https://doi.org/10.1007/978-94-007-7612-8>
- Steinert, Y., Macdonald, M. E., Boillat, M., Elizov, M., Meterissian, S., Razack, S., Ouellet, M.-N., & McLeod, P. J. (2010). Faculty development: if you build it, they will come. *Medical Education*, 44(9), 900–907.
<https://doi.org/10.1111/j.1365-2923.2010.03746.x>
- Steinert, Y., McLeod, P. J., Boillat, M., Meterissian, S., Elizov, M., & MacDonald, M. E. (2009). Faculty development: A “Field of Dreams”? *Medical Education*, 43(1), 42–49. <https://doi.org/10.1111/j.1365-2923.2008.03246.x>

- Steinert, Y., O'Sullivan, P. S., & Irby, D. M. (2019). Strengthening teachers' professional identities through faculty development. *Academic Medicine*, 94(7), 963–968. <https://doi.org/10.1097/acm.0000000000002695>
- Steinmann, A. F., Dy, N. M., Kane, G. C., Kennedy, J. I., Silbiger, S., Sharma, N., & Rifkin, W. (2009). The modern teaching physician-responsibilities and challenges: An APDIM white paper. *American Journal of Medicine*, 122(7), 692–697. <https://doi.org/10.1016/j.amjmed.2009.03.020>
- Thompson, R. C. (2002). The future of academic medicine or is academic medicine to be determined by technology? *The Iowa Orthopaedic Journal*, 22, 116–119. <http://www.ncbi.nlm.nih.gov/pubmed/12180604>
- Topps, M., & Strasser, R. (2010). When a community hospital becomes an academic health centre. *Canadian Journal of Rural Medicine: The Official Journal of the Society of Rural Physicians of Canada*, 15(1), 19–25. <http://www.ncbi.nlm.nih.gov/pubmed/20070926>
- Torbeck, L., & Dunnington, G. (2019). Designing a comprehensive professional development program in a surgery department: process, measures, and lessons learned. *Journal of Surgical Education*, 76(3), 727–737. <https://doi.org/10.1016/j.jsurg.2018.09.008>
- Wilkerson, L., & Irby, D. M. (1998). Strategies for improving teaching practices: A comprehensive approach to faculty development. *Academic Medicine*, 73, 387–396. http://journals.lww.com/academicmedicine/Abstract/1998/04000/Strategies_for_improving_teaching_practices_a.11.aspx

APPENDIX A: CLINICAL EDUCATOR LEARNING SERIES NEEDS ASSESSMENT

Start of Block: Thank you for your participation in the Clinical Educator Learning Series.

Q13 Dear Clinical Educator: We are committed to providing a high-quality educational program for your professional development. Please take a moment to complete this survey for your input in the Clinical Educator Learning Series (CELS). All past or future CELS participants are invited to take this survey.

Q1 Has attending the series led to/will lead to you changing any of your behavior and/or practice as an educator?

Yes (1)

No (2)

Q2 If yes, please give examples.

Q3 Why do you attend the Clinical Educator Learning Series?

Q4 Did the series clearly explain what you were expected to learn from sessions (i.e. give learning objectives)?

Yes (1)

No (2)

Q5 Please rate the following:

	Not at all (1)	Not Very (2)	Mediocre (3)	Quite (4)	Very (5)
How effective was the series at helping you reach those learning objectives? (1)	<input type="radio"/>				
How engaging you found the series? (2)	<input type="radio"/>				
How relevant are the topics to your own professional development? (3)	<input type="radio"/>				
How would you rate the accessibility to the series? (4)	<input type="radio"/>				
I'm satisfied with the investment my organization makes in education and professional development (5)	<input type="radio"/>				

Q7 Are there specific topics you wish you could see/learn in this series? Topics/subjects should be given more time?

Q12 Are there topics/subjects that should be omitted?

Q10 Do you have any ideas how we could improve the series? (i.e. topics, delivery method, timing, resources?)

Q11 Please rate the quality of the overall program (please select one):

▼ 5= Excellent (1) ... 1= Very Poor (5)

Q8 Did attending the series exceed your expectations?

Yes (1)

No, please explain: (2) _____

Q15 What is your role?

- Program Director (1)
 - Associate Program Director (2)
 - Teaching Faculty (3)
 - Other: (4) _____
-

Q16 Affiliated faculty from which location?

- USF (TGH, MCC, JAHVA, BPVA, ACH) (1)
- HCA (2)
- Other: (3) _____

End of Block: Thank you for your participation in the Clinical Educator Learning Series.

APPENDIX B INTERVIEW QUESTION SAMPLES PROTOCOL

Interview Question Samples Protocol

Introduction to the interview

Thank you for taking time to meet with me today to discuss this topic. My study is focused on evaluating the Clinical Educator Learning Series within the Consortium between USF and HCA. I will be asking that you to describe your perception of the series and the relationship. Please feel free to be honest as I will not be disclosing person information in the study. You are free to stop me at any time or if you need further clarification to the question.

Part I. Executive Board Members

- a) How would you describe the relationship with USF and HCA?
- b) How does faculty development program impact the clinical educator from your own experience?
- c) What effect has the CELS had on the consortium relationship?
- d) How can the CELS faculty development program be improved?
- e) In what ways can CELS affect participant behaviors and/or practices?
- f) Why do you think participants attend the CELS?
- g) Are there specific topics/area/categories that should be added to the series?
- h) What are some ways in that the CELS can cultivate a community of educators?

Explore Topics:

- i. Probe improvement series
- ii. Probe on quality of curriculum
- iii. Probe affiliation relationship

Part II. Clinical Educator Faculty Participant/Lecturer

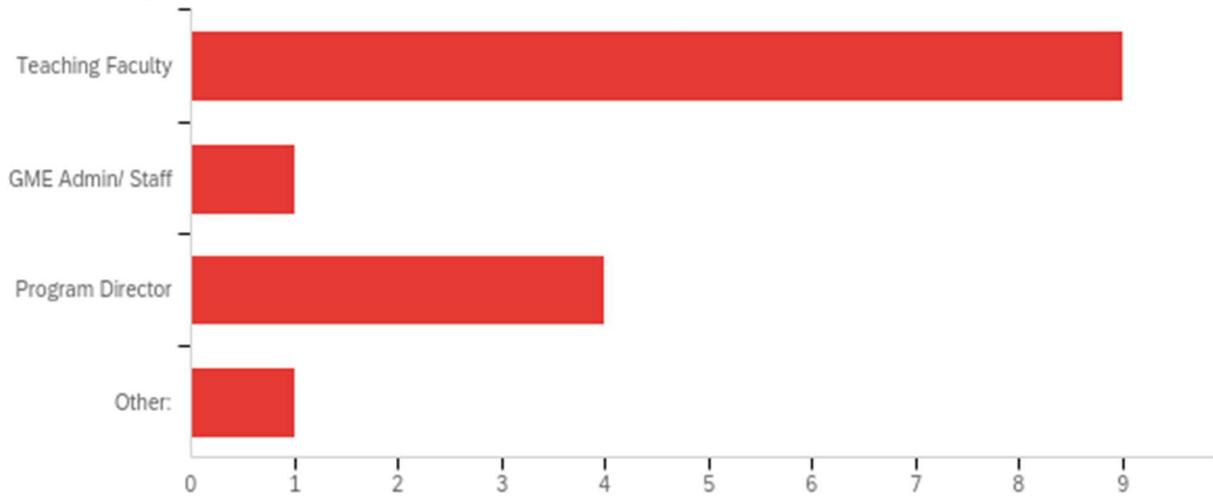
- a) Describe the relationship with USF and HCA.
- b) Have you attended any of CELS workshops? What did you think of it?
- c) How does faculty development program impact the clinical educator/researcher from your own experience?
- d) In what ways can CELS impact participants behavior and/or practice as an educator?
- e) Why do you think participants attend the CELS?
- f) Tell me from your experience as a lecturer and a participant in the series, what did you enjoy the most from it? Least?
- g) Are there specific topics/area/categories that we should include in the series?
- h) What ideas do you have to improve the series?
- i) What are some ways in which the CELS can provide a community of educators?
- j) Tell me if you believe the CELS has been impact on the consortium relationship? If so, how? If not, how can we improve?

Explore Topics:

- i. Probe improvement
- ii. Probe on quality
- iii. Probe on collaboration

APPENDIX C: FACULTY DEVELOPMENT: NEEDS ASSESSMENT
HCA/USF Consortium Meet & Greet-June 6, 2019

Q2 - What is your role?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your role? - Selected Choice	1.00	4.00	1.80	1.05	1.09	15

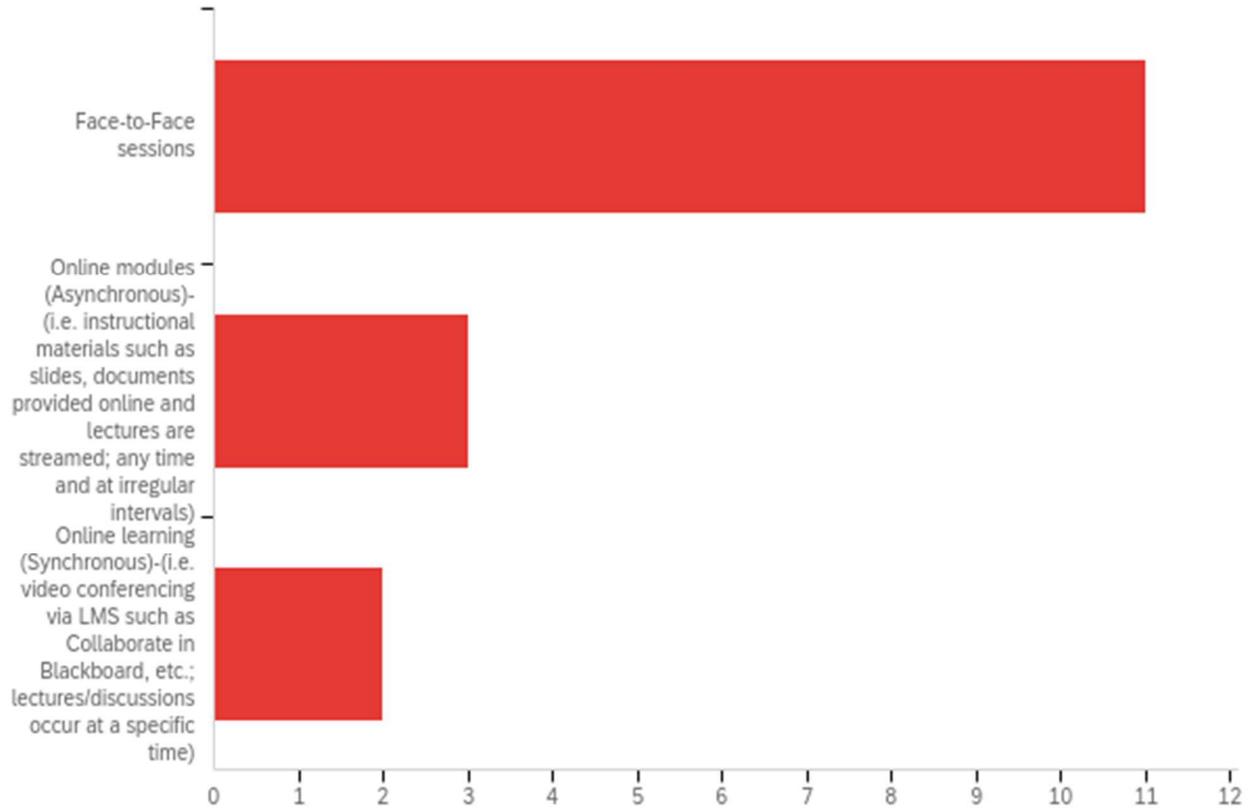
#	Answer	%	Count
1	Teaching Faculty	60.00%	9
2	GME Admin/ Staff	6.67%	1
3	Program Director	26.67%	4
4	Other:	6.67%	1
	Total	100%	15

Q2_4_TEXT - Other:

Other: - Text

DIO

Q3 - Please indicate the modes of delivery that work best for faculty development workshops/ grand rounds?

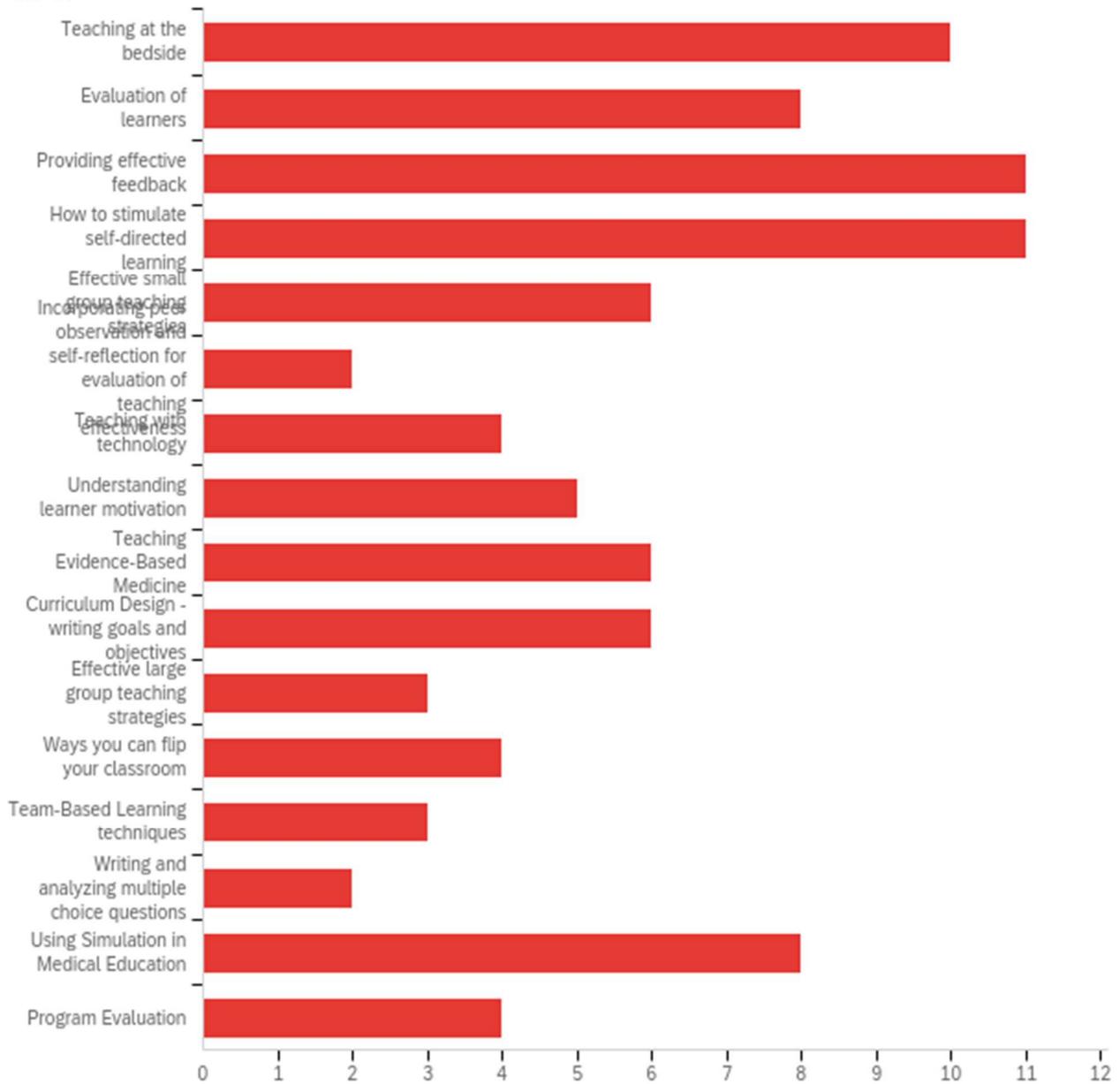


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please indicate the modes of delivery that work best for faculty development workshops/ grand rounds?	1.00	3.00	1.44	0.70	0.50	16

#	Answer	%	Count
1	Face-to-Face sessions	68.75%	11
2	Online modules (Asynchronous)- (i.e. instructional materials such as slides, documents provided online, and lectures are streamed; any time and at irregular intervals)	18.75%	3

3	Online learning (Synchronous)- (i.e. video conferencing via LMS such as Collaborate in Blackboard, etc.; lectures/discussions occur at a specific time)	12.50%	2
Total		100%	16

Q1 - Please indicate the topics you are most interested in learning about. (Check all that apply).



#	Answer	%	Count
1	Teaching at the bedside	10.75%	10
2	Evaluation of learners	8.60%	8
3	Providing effective feedback	11.83%	11
4	How to stimulate self-directed learning	11.83%	11
5	Effective small group teaching strategies	6.45%	6
6	Incorporating peer observation and self-reflection for evaluation of teaching effectiveness	2.15%	2
7	Teaching with technology	4.30%	4
8	Understanding learner motivation	5.38%	5
9	Teaching Evidence-Based Medicine	6.45%	6
10	Curriculum Design - writing goals and objectives	6.45%	6
11	Effective large group teaching strategies	3.23%	3
12	Ways you can flip your classroom	4.30%	4
13	Team-Based Learning techniques	3.23%	3
14	Writing and analyzing multiple choice questions	2.15%	2
15	Using Simulation in Medical Education	8.60%	8
16	Program Evaluation	4.30%	4
	Total	100%	93

APPENDIX D: INTERVIEW CODING REPORT
NODE LISTING OF INTERVIEW CODING REPORTS
Total: 12 coding reports with 119 subcategories
Titles sorted alphabetically

Interviews

1. IQ00. Introduction

2. IQ01. Describe relationship with USF HCA (6 subcategories)
 - Comparison - academic vs. corporate (4 subcategories)
 - Chain of command models
 - Challenges - adaptive change (8 subcategories)
 - Aligning curriculum
 - Communication modalities
 - Competing entities
 - EVU vs. CVU
 - Models of compensation
 - Private practice mentality
 - Structure for change (C-suite)
 - Unwillingness to adapt
 - Medical education, in general - vetting candidates
 - Motivation to teach
 - Current role
 - Educational GME partnership
 - Interviewee background
 - Network relationships - mutual respect
 - Resources (2 subcategories)
 - HCA Webinars
 - USF access - CELS - research data

3. IQ02. Attended CELS workshops – Thoughts (9 subcategories)
 - Accommodating to faculty
 - Attendance
 - CME - accreditation - essentials
 - Generated positive blast email from attendee
 - Knowledge - transfer of knowledge
 - Level of engagement video vs. live
 - Mind-opening
 - Networking
 - Number of workshops attended

4. IQ03. Enjoyed the most and least (3 subcategories)
 - Least (4 subcategories)
 - Anxiety
 - Group participation
 - Last year's study designs
 - Technological glitches
 - Most (5 subcategories)
 - Facilitating - creation piece, relationships
 - Networking
 - Reflection opportunity
 - Research - case reports
 - Sharing knowledge, experience
 - Other (2 subcategories)
 - Adapting to workshop learning styles
 - Equal footing

5. IQ04. Why participants attend CELS (10 subcategories)
 - CME, GMEC, MedHub, faculty appointments
 - Do not share reasons with each other
 - Encourage engagement
 - Knowledge for application, advancement
 - Learn medical education teaching methods
 - Learn policies, requirements, responsibilities
 - Networking for career development purposes
 - Power of persuasion, notifications to attend
 - Recommend survey to gauge interest
 - Research aspect

6. IQ05. How CELS program impacts clinical educator (9 subcategories)
 - Adds value knowing policies, requirements, responsibilities
 - Definitions educators, scholars, researchers
 - Develops community-based care team
 - Gap needs addressing for medical education scholars
 - Increases efficiency, self-confidence
 - Needs assessment should be done
 - Provides 'toolbox' of support
 - Series for clinician researchers
 - Updates skills and knowledge

7. IQ06. What effect CELS on consortium relationship (7 subcategories)
 - Aligns with mission
 - Bandwagon effect
 - Bonding experience

- Foundational resource for faculty development
 - Great benefit, natural, always has been there
 - Recordings motivate follow-through
 - Shared learning, delivering 'hidden' curriculum
8. IQ07. Ways CELS affects participant behaviors, practices (7 subcategories)
- Addresses adult learning styles
 - Awareness various aspects, topics
 - Cohort of community educators
 - Learn 'nuances' of teaching
 - Motivates accountability
 - Potential for expanding network
 - Sharing, authentic, engaged
9. IQ08. Include in series – topics, areas, categories (9 subcategories)
- CCC, PEC
 - Differentiated toolbox for diverse learners
 - Handling escalating issues, personal conflict management
 - IT initiatives
 - Professional development
 - Professionalism
 - Research methodologies
 - Shifting roles, multi-tasking
 - Teaching methods, strategies (6 subcategories)
 - Assessment, accountability strategies
 - Bedside teaching strategies
 - Classroom management - motivation, behavior
 - Planning lectures and presentations
 - Questioning techniques
 - Writing goals, learning objectives
10. IQ09. How improve CELS program (14 subcategories)
- Advancement in academia
 - Assessment of program application
 - Basic resources, toolbox
 - Co-teaching in-person sessions
 - Defined programs per role
 - Incentives - CME, MOC
 - In-person social setting format
 - Interaction, engagement
 - Motivating engagement by provocation
 - Needs assessment
 - Research methodologies
 - Scheduling, timing

- Topic planning for GME & HCA groups
- Zoom, recordings, videos

11. IQ10. Ways CELS cultivate provide community of educators (7 subcategories)

- Database directory of community
- Defined programs per role
- Facilities, equipment
- Needs assessment
- Networking, interaction, engagement
- Providing resources, tools
- Strategic planning to create bonds

12. IQ11. Anything else (7 subcategories)

- A nice hefty toolbox
- EPAs - establishing trust
- Informal teaching training during residency
- Measuring success
- Remediation teacher program - mentoring
- Why academia as a community physician
- Wrap-up

APPENDIX E: SURVEY CODING REPORT
CATEGORY LISTING OF SURVEY CODING REPORTS
Total: 12 coding reports with 48 subcategories
Titles sorted alphabetically

Survey

1. SQ01. Series changes behavior or practices (graph, tables)
2. SQ02. Examples changed behavior and practices (2 subcategories)
 - Networking
 - Skills and knowledge (14 subcategories)
 - Assessment, evaluations
 - Case reports
 - Creating presentations
 - Education barriers
 - Evidence-based medicine
 - Feedback
 - Implement newly acquired knowledge
 - In general, different aspects
 - Knowledge of learning styles
 - People skills, soft skills
 - Redesign surveys
 - Research process
 - Social issues, diversity
 - Teaching methods
3. SQ03. Why you attended CELS (7 subcategories)
 - CME
 - Faculty requirement
 - Improve and update skills and knowledge
 - Mentoring, leadership
 - Networking, collaboration
 - Personal growth
 - Program director
4. SQ04. Series gave learning objectives (graph, tables)
5. SQ05. Rate the following (graph, tables)

6. SQ07. Topics you wish you could see in series or need more time (14 subcategories)
 - Assessments
 - Burnout prevention
 - Concept of 'life-long learning'
 - Equity and cultural competence issues
 - Expectations private physicians ACGME
 - Feedback
 - Grants and proposals
 - Innovations
 - Leadership techniques for GME
 - Learning styles
 - Performance improvement plans
 - Remediation
 - Research development
 - Women equity issues in healthcare
7. SQ08. Did series exceed expectations (graph, tables)
8. SQ10. Ideas to improve series (9 subcategories)
 - Ask me in 2 years - I'm new
 - Class format - more live classes, combo
 - Develop overall plan
 - More attendees
 - More detailed slides for downloading
 - More topics for private physicians in ACGME environment
 - MS Teams
 - On-demand recordings
 - Signup process is onerous
9. SQ11. Rate quality of overall program (graph, tables)
10. SQ12. Topics that should be omitted (2 subcategories)
 - Lecture on teaching millennials not well-structured
 - No, unsure, NA
11. SQ15. Your role (graph, tables)
12. SQ16. Affiliated faculty location (graph, tables)