Certificate in Applied Surgical Education Leadership

Leading transformational () change at your institution

2019 ABSTRACT BOOKLET

Become an educational leader.

Positively impact surgical education at the departmental, institutional, or national level.

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Certificate in Applied Surgical Education Leadership

Leading transformational () change at your institution

The American College of Surgeons (ACS) Division of Education plays a pivotal national leadership role in surgical education, which is exemplified by the Certificate in Applied Surgical Education Leadership (CASEL) initiative. A needs assessment, including a survey of past ACS Surgeons as Educators (SAE) Course participants, confirmed the need for this additional formal training to further develop and strengthen knowledge and skills necessary to be leaders in surgical education. A review of existing, related programs illustrates that the year-long CASEL program offers a unique educational experience with an emphasis on applied surgical education and leadership. Participants are provided content and skill building opportunities using a mentored, hybrid-delivery model, including didactic and enduring materials, independent work, online content and discussions, large and small group activities, and more. With an emphasis on applied learning, participants implement a relevant medical education project at their home institutions, furthering educational innovation and quality patient care.

The mission of CASEL is to promote excellence in surgical education leaders and improve the quality of surgical training and, ultimately, patient care.

The goals of CASEL are to:

- Provide participants with knowledge and skills for leadership roles in surgical education at a level that fosters the highest educational standards
- Improve surgical education at a departmental, institutional, and/or national level by promoting innovation and change
- Positively impact quality and patient safety through lifelong surgical education and training

The following abstracts represent the successful surgical education leadership projects carried out by the 2019 CASEL cohort. Individual projects are a fundamental part of the CASEL program, requiring participants to integrate CASEL educational content, robust mentor guidance, and continuous feedback from CASEL faculty and staff into a meaningful surgical education leadership project at their home institutions. Participant efforts culminate in a formal presentation to CASEL faculty, mentors, and the incoming CASEL class, and they serve as an example to future cohorts. We look forward to the CASEL participants' continued progress and are confident their enhanced knowledge and skills will make a lasting contribution to surgical education excellence.

Sincerely,



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Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME Co-Chair, Steering Committee of the ACS Certificate in Applied Surgical Education Leadership Director, Division of Education, American College of Surgeons



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TITLE:

Development of a Surgical Teaching Competency Framework

Introduction/Background:

Being an effective surgical educator is not innate. The qualities and skills of a highly competent educator of clinical surgery are not well defined. The goal of this study is to develop a competency framework for surgical teaching using the modified Delphi method. This methodology employs a group consensus strategy that systematically uses literature review and the judgment of experts using an iterative process to reach agreement. This is an effective process for determining expert group consensus where there is little or no definitive evidence. Once developed, this framework can inform future faculty development programs.

Methods:

A modified Delphi methodology will be used to identify the qualities of an effective clinical surgery educator. A survey was constructed based on a literature review and meeting with the PI, two associate PDs of residency, and the medical student. The survey was sent to a cohort of faculty and residents for feedback. Institutional review board approval is currently pending. The updated survey will be sent to surgical faculty and residents at University Hospitals Cleveland Medical Center. Based on the responses of the survey, the competencies under each subheading will be ranked. A second survey will be sent showing how the competencies were ranked by the initial survey results. The study participants will be asked if they agree, or wish to

re-rank the competencies. We will convene a meeting with a group of the major educators within the department to discuss the data from this iterative process, with the goal of developing a surgical teaching competency framework.

Results:

None yet.

Discussion:

A competency framework will be developed at a single institution. The next steps will be to validate these findings in a further study querying a group of nationally recognized surgical educators.

Limitations:

Single Institution study

Conclusion:

Once developed, this framework can inform future faculty development programs.

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Burt Cagir, MD, FACS

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TITLE:

Targeted Training Using Laparoscopic Ventral Hernia Repairs (LVHR) to Improve Resident Autonomy

Introduction/Background:

In the surgical community, there is growing concern regarding a lack of preparedness of general surgery graduates due to inadequate operating room autonomy and competence. Several contributing factors have been identified, including the 80-hour work rule, need for shift work, milestones, new and evolving surgical technologies, legal limitations due to patient safety, and public expectations and opinion. Progressive resident autonomy fluctuates significantly depending on experience and flexibility of the faculty, the resident's knowledge and training level, and their relationship with the faculty member. This pilot study has been designed to evaluate the success of the targeted faculty development and planned progressive resident training in order to improve resident autonomy and readiness in common general surgery procedures.

Methods:

Laparoscopic ventral hernia repairs (LVHR) will be utilized for this 3-phase study. The self-determination theory is used to prepare multiple matching surveys to measure autonomy, competence, and relatedness. This pilot study utilizes matching surveys, the System for Improving and Measuring Procedural Learning (SMPL) app, and Accreditation Council for Graduate Medical Education (ACGME) case logs for numbers and role to monitor residents' progression and autonomy. The initial step involves collection of historic resident data, educational grand rounds, and resident training to improve their skills in the laboratory settings. In the execution phase, residents will be performing a minimum of three LVHR under faculty supervision. The resident and faculty surveys and new SIMPL data will be collected, including the final surveys. Comparisons will be done to measure the progress of resident competence, autonomy, and relatedness.

Results:

The study has not started yet; therefore there are no reportable results. T-tests and analysis of variance (ANOVA) will be used for evaluation and comparison of the survey results. Additionally, SIMPL data comparisons will be completed comparing the institutional results and the national results of the previous two years.

Discussion:

This pilot study is to implement and evaluate the success of a planned progressive resident training program to improve residents' competence, autonomy, and readiness in common general surgery procedures. This will be complemented with additional faculty development. If this is successful, we will expand this program to an additional 10 common general surgery procedures. This will help surgical educators to assess how skills lab training should be incorporated into the procedural training.

Limitations:

Completion of all resident and faculty surveys and the SIMPL evaluations will be the biggest challenge, including short faculty evaluations after each procedure.

Conclusion:

This study is a good stepping stone for Entrustable Professional Activity (EPA)-based education. Residents are supervised at every level for observable and measurable progress and safe surgical practice while increasing their competence and autonomy in the operating room.

(This study is not a true EPA because it does not include initial diagnosis and decision making for treatment, but that that can be added for future residency training.)

—BURT CAGIR, MD, FACS

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TITLE:

Video Recording and Editing of Procedures Improves Surgical Competency and Safety

Introduction/Background:

Video review has been validated for objective assessment of skill (Bowles et al. 2014). Video-based coaching targets judgment and decision making (Hu et al. 2012). Video-acquired data review provides feedback for real-time improvement and skill modification. Review aids in the identification of errors (Gambadauro 2012). This study aims to determine whether video review of surgical cases improves recognition of critical errors, goal-directed learning, and confidence.

Methods:

This is a prospective case-matched controlled trial. Six residents determine if video recording, editing, and presentation improves performance. Groups are tested on: laparoscopic cholecystectomy, laparoscopic inguinal hernia repair, and robotic Nissen fundoplication. Groups receive pre- and post-testing with Objective Structured Assessment of Technical Skills (OSATS), Global Operative Assessment of Laparoscopic Skills (GOALS) and the Zwisch scale. Videos are presented at resident conference for review of technical steps and safety are scored by faculty.

Results:

Participants routinely use videos to learn prior to cases; only one had edited video. Adequately powered video review pairs were not available at time of data analysis. Pre- and posttest surveys (N=4) revealed no significant difference using paired sample t-test. Preliminary data from the Zwisch scale demonstrate a trend toward passive supervision in the study group with regard to recognition of critical steps.

Discussion:

Video-based feedback promises to effect practice change by identifying gaps in knowledge and skill in order to accelerate operative autonomy and competency. Study participants gain knowledge in the critical steps of the procedure, and insight into error recognition.

Limitations:

Limitations of the study design include selection bias and a lack of blinding by the principal investigator. Other limitations include a low sample size for study and control subjects.

Conclusion:

Video editing and review before a panel of faculty promotes instructional coaching to guide self-reflection and modeling behavior. These behaviors incorporate practice changes that can accelerate achievement of competency and promote patient safety.

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TITLE:

The Development of a Coordinated Residency Education Curriculum for a Geographically Dispersed Surgery Residency Program

Introduction/Background:

All residency programs must function under one sponsoring institution (SI), as mandated by the Accreditation Council for Graduate Medical Education (ACGME). It is common for residents to perform rotations away from the SI, making it difficult to maintain a cohesive academic curriculum due to distance and varied clinical responsibilities.

The Louisiana State University surgery residency is divided between three geographically distinct cities across southern Louisiana. As no unified curriculum exists, the residents are left to study what they think is most pertinent for their assigned rotation.

We sought to create a sustainable, uniform academic curriculum, using videoconferencing technology such that a weekly didactic conference could be attended by all residents. We hypothesize that such a video-based curriculum would be positively received by both residents and faculty.

Methods:

A weekly 1-hour academic curriculum was developed using the SCORE curriculum as the framework. An assigned resident is responsible for didactic content, with a faculty supervisor. The lectures take place using Zoom videoconferencing technology.

An identical survey was sent to all of the residents and participating faculty at the midpoint of the academic year. The survey consisted of five open-ended questions regarding thoughts and suggestions about the academic curriculum.

Results:

Several themes emerged from the surveys. Both faculty and residents liked the flexibility that the videoconferencing provides. The residents found the curriculum helpful and felt that faculty involvement was one of the more useful components. The faculty liked the curriculum but felt that more resident involvement and participation is necessary.

Discussion:

It is feasible to initiate a well-received videoconferencing academic curriculum for geographically dispersed training programs.

Limitations:

This is a single institution study, evaluating only a single academic year.

Conclusion:

Teleconference technology allows residents to have a standardized, uniform educational conference regardless of geographic limitations. A videoconference curriculum is positively received by both faculty and residents.

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TITLE:

Into the Void - or How to Run a Virtual Surgery Clerkship

Introduction/Background:

The COVID-19 pandemic brought unprecedented challenges to surgical educators, and rapidly immersed surgical clerkships into an unfamiliar environment that was inconducive to traditional models. As schools were faced with the decision to either postpone clerkships entirely or forge ahead into the virtual environment, many clerkship directors (CDs) boldly led students into the void and created novel distance learning activities that enabled students to achieve clerkship requirements undaunted. Considering no universal guide exists to instruct CDs in this effort, the aim of this work is to disseminate practical knowledge to create a virtual surgical clerkship (VSC).

Methods:

Module-based educational learning videos were created to inform clerkship directors on all requisite aspects of completing an entirely VSC experience.

Results:

Not applicable

Discussion:

The creation of an entirely VSC was an unexpected and profoundly challenging event in surgical education, forcing traditionally "hands-on" learning to be in a virtual "hands-off" environment. Despite this, several existing educational methods were harnessed to allow students to complete the clerkship while in their own physical spaces. Though it is hopeful that the necessity to remove students entirely from physical learning spaces will not come again, the uncertainty of the COVID-19 pandemic cements the necessity for modules such as these.

Limitations:

Several limitations beset an undertaking of this nature; most notably, the entirety of the VSC was created iteratively in a prospective fashion without the opportunity for testing and validation of methods prior to deployment. As a result, activities were created and executed in real time. Additionally, as mentioned previously, there was no luxury of precedent to provide a suggested structure or approach. Therefore, reliance on retrofitting traditional clerkship activities into the virtual environment in hopes of efficiency was likely favored over truly novel methods that could achieve commensurate results.

Conclusion:

Video-based education modules are provided to allow the creation of a Virtual Surgery Clerkship.

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TITLE:

Pain Education in Graduate Medical Education: A Multidisciplinary Needs Assessment

Introduction/Background:

Education in pain management is essential for all physicians. However, data suggest insufficient attention to pain education at multiple levels of physician training. The purpose of this study is to evaluate graduate medical learners' knowledge and attitudes, confidence, and perspectives regarding pain education.

Methods:

This is a survey-based study of graduate medical education (GML) across 36 training programs in an academic integrated health system. Descriptive and quantitative statistics were used to analyze responses.

Results:

A total of 133/495 learners participated (26.9 percent); 39.1 percent reported that their program provided a pain management curriculum. Most trainees rated pain education as "important" (50 percent) or "very important" (27.3 percent), yet only 37.6 percent thought their current education was adequate for their professional work. Only 18 percent of respondents passed the Knowledge and Attitudes Survey Regarding Pain. Only 15.8 percent reported feeling "confident" and <1% "very confident" in Knowledge and Attitudes Survey Regarding Pain (KASRP) performance. Of the "confident" respondents, only 1/3 passed KASRP. The only factor associated with passing KASRP was a pain management curriculum provided by the training program (p=.03). Among learners who reported their program provided a pain management curriculum, 61.9 percent passed. Trainees who passed had significantly higher mean confidence scores in specific pain management abilities (t(114) = -2.85, p = .005). There

was no significant difference in confidence on KASRP performance based on passing KASRP.

Discussion:

While medical education exists along a continuum, our results demonstrate the need to improve pain education specifically at the graduate medical education level.

Additionally, learner competence in pain management may need to be assessed independent of learner confidence.

Limitations:

The KASRP has not been validated in GML. The study population was limited to a single health system and may not be generalizable.

Conclusion:

Pain education in graduate medical education is inadequate. Existing curricula should be expanded and modified for best practice, to meet learner needs and improve patient outcomes.

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TITLE:

Faculty Moderation for Surgical Conferences and Change in the COVID Era

Introduction/Background:

Resident educational conferences routinely have faculty content experts. However, the level of involvement with the development of resident presentation and the comfort the faculty has with asking appropriate questions is variable, leading to inconsistent educational quality of the conference. Furthermore, our residency is the largest in the country, making training each faculty member to effectively perform mock oral questions difficult.

Methods:

We recruited six surgical faculty members to function as the conference facilitators. They reviewed the presentation several days before the conference to ensure it followed the required structure. They attended the resident conference, making sure it stayed on target, and performed the mock oral question to start each conference if the faculty content expert was uncomfortable performing it. Residents were surveyed at the end of each conference on efficacy based on a 5-point Likert scale.

Results:

Eight lectures were conducted on general surgical topics with mock orals beginning each conference. Junior and senior residents all found most conferences to be level-appropriate for them. Most found the oral board sessions very helpful. The responses to the conference format varied by topic and resident level. The most common request was for the conference to be longer, with more time for questions. Survey responses dropped after initial starting of surveys, but increased towards the end.

Limitations:

COVID changed the way the conference was conducted midway through the study. Survey fatigue started to impact the number of responses.

Conclusion:

Residents enjoyed mock oral questions during the conference and found them useful. While subject to survey fatigue, adjusting the format of resident mock orals throughout the year may lead to more resident participation.

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TITLE:

Surgical Advocacy Curriculum - Step 1 - Critical Needs

Introduction/Background:

As public health issues and surgical problems become increasingly intertwined, advocacy is a growing part of the role of a concerned activist surgeon. But many surgeons are not well-prepared for this endeavor as there is no advocacy component to surgical training.

Methods:

Surgical advocacy experts were identified from the American College of Surgeons and other surgical advocacy groups. Interviews were collected via email and anonymously gathered. Common themes were identified using a qualitative analysis method and the NVivo software.

Results:

There were almost unanimous concerns that there are a lot of myths and misconceptions about advocacy. The strongest need mentioned was to better understand the structure of the government at all levels, how it works, and how to be effective working through the structure. There also was a need to recognize the role a surgeon has and how their voice is respected. An understanding of advocacy was the third most-cited topic, and strategies for being effective and successful at advocacy was also considered highly important.

Discussion:

Surgeons do not engage in advocacy due to common myths and misconceptions about advocacy. Additionally, they have knowledge gaps due to this topic being outside the usual part of medical school and residency curricula. By identifying the areas considered most important by experts, we can design a needs assessment for residents and surgeons and then build a curriculum around these areas.

Limitations:

At this point, only half of the experts have been interviewed so we may be missing some fundamental concerns or areas of need.

Conclusion:

There are many myths and misconceptions about surgical advocacy. Furthermore, there is a lack of knowledge about how to get involved in this critical endeavor. A surgical advocacy curriculum for surgery residents and practicing surgeons would address these gaps and increase participation in this critical area.

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TITLE:

The Shalane Flanagan Surgery Club - Increasing Female Faculty Scholarly Activity and Learner Engagement in Research

Introduction/Background:

The Department of Surgery at Wake Forest School of Medicine has 37 surgeon faculty members, ten of whom are female. Of female faculty members, seven are at the assistant professor rank and three at the associate professor rank. There are no female surgeon professors in our department. Wake Forest School of Medicine currently has promotion guidelines that heavily rely on publication numbers as a measure of scholarly activity. Recent publications about COVID-19 indicate that the research productivity of female surgeons has suffered during this challenging time. We are in the process of developing and implementing a faculty development program for female surgeons with a goal of increasing overall scholarly activity for these faculty as well as learners in the department.

Methods:

An informal needs assessment was performed to determine the scope of the project. The program developed based on this assessment will feature an accountability group with monthly educational sessions to tackle research-related topics with internal/outside speakers (as well as some specific topics that are more relevant during the COVID era). The group members will set specific goals and provide accountability on a regular basis, modeling our team environment on the supportive environment described in articles about Shalane Flanagan and the U.S. women's marathon team. The success of the team demonstrates how competitive individuals functioning at a high level can support each other for overall improved performance. Didactic sessions will alternate monthly with accountability sessions.

Results:

No results to analyze at present. Analysis will be quantitative (pre/post evaluations of each session, attendance, and publications prior to/during/after the year of the program, promotion metrics) and qualitative (analysis of participant goal-setting exercise).

Discussion:

Pending based on results obtained.

Limitations:

This is a single-center study based only on the needs of female surgical faculty at a single institution.

Conclusion:

Pending based on results obtained.

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TITLE:

UCSF Surgical Curriculum Improvement Project

Introduction/Background:

The focus of this project was to improve the weekly didactic curriculum for surgical residents in the University of California San Francisco (UCSF) General Surgery Program. The focus of this project was the postgraduate year 1 (PGY1) curriculum, although the other curricular tracks (PGY2/3, PGY4/5) were also affected by these efforts.

Methods:

We began with an assessment of our current curriculum, the needs of our learners, and identification of gaps. We assembled a team of stakeholders, including program leadership, a small group of dedicated faculty, our departmental educator, education chief residents, and our curriculum administrator in the surgical education office. We identified areas for improvement, and implemented changes to the curriculum. Assessment of these changes was made based on surveys of the residents, as well as other metrics.

Results:

When compared to the PGY1 curriculum during academic year (AY) 18-19, 20 out of 40 scheduled curriculum slots were either filled or modified in the subsequent AY19-20, with additional changes in AY20-21. American Board of Surgery In-Training Examination (ABSITE) scores from January 2020 were significantly improved compared to 2019. Participation and organization of resident-led quality improvement projects improved significantly. Residents responding that they were "extremely satisfied" with the curriculum rose from 54 to 73 percent. Attendance improved from 73 percent in AY18-19 to 94 percent in AY19-20. Accreditation Council for Graduate Medical Education (ACGME) survey questions regarding balance between education and other clinical demands improved from 55 to 83 percent; while faculty and staff interested in

education rose from 75 to 83 percent. Quality of teaching received was 97 percent.

Discussion:

A team-based approach to curriculum development and assessment has led to significant improvements in the overall efficacy of the didactic curriculum. One major aspect of this project was reorganizing the administration and execution of the curriculum, as there was a lack of coordination and overall goals, leading to lost sessions, cancellations, and poor attendance. Engagement of program leadership and rotation leaders improved the protected time for residents to attend didactics. Involvement of multiple stakeholders (residents, educators, faculty) helped identify learners' needs, so that the curriculum could be designed to meet these needs. Engaged faculty members and subject experts were essential to success.

Limitations:

The efficacy of many aspects of the curriculum have been difficult to measure. To frame in the Kirkpatrick model: 1) Reaction—although limited by survey response rate, overall this has been positive; 2) Learning: as measured by ABSITE, there has been improved performance, but other metrics of learning have been somewhat lacking; 3) Behavior—implementation of quality improvement (QI) project and preparation for research years have been two measurable behaviors that have been affected by changes in the curriculum; 4) Results—this has been difficult to ascertain as it speaks to improvements in the clinical skills of the residents, which is affected by multiple factors outside the curriculum.

Conclusion:

Improvement of the curriculum requires engagement of multiple stakeholders, regular monitoring, engagement of faculty and learners, and regular assessment.

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TITLE:

Advanced Clinical Skills Course for M2 Students with Identified Clinical Skills/Clinical Reasoning/Medical Knowledge Deficiencies

Introduction/Background:

Students that struggle with clinical skills can be identified early in their medical education. They continue to struggle throughout their clinical years of medical school and into residency, resulting in extra hours and effort by clinical faculty. Knowing this, we decided to preemptively take a group of students and offer a special course designed to augment their clinical skills prior to the start of their clinical years. In our institution, students take up to four 1-week electives during their M1 and M2 years during weeks between courses. These 1-week electives are often clinical electives in specialties that they are interested in, but also may be medical education electives.

Methods:

M2 students were identified by their clinical skills and basic science instructors as needing some assistance with medical knowledge, communication, physical examination, and/or clinical reasoning skills. Many of them had failed objective structured clinical examination, (OSCEs) during their M1 or early M2 years. Some had difficulty in their basic science courses. Most had had difficulty with both clinical skills/reasoning and medical knowledge. They were offered an elective in advanced clinical skills during their M2 year. Twelve students were identified. Five agreed to take the course, and an additional student requested the elective, resulting in a total of six students.

The course encompassed one clinical week. The opening session focused on clinical reasoning, including identifying a differential diagnosis, pertinent questions to ask while taking the history, relevant physical examination findings, and basic workup for common presenting complaints. The basic science faculty also led a session focused on clinical correlation to basic science tenants. Each student was

assigned one half day of outpatient experience and one half day of inpatient experience.

The students also had three sessions with standardized patients with OSCEs. During the first session, the students were paired. They discussed the case planning worksheet together prior to entering the room. One student took the history and performed the physical examination. The other student observed. At the end of the interaction, the student that observed the interaction gave an oral presentation of the encounter. The student that performed the history and physical examination wrote the Supplemental Offer and Acceptance Program (SOAP) note. For the three other cases of the day, they took turns observing and performing the history and physical exam. During the second session, each student completed the case planning worksheet and the OSCE independently. The student wrote an SOAP note and gave a patient presentation for two standardized patients. The final examination was one OSCE at the end of the week. The students were not given the case planning worksheet but were encouraged to use what they had learned throughout the week to assist them with their patient encounter. The students wrote a final SOAP note after this OSCE. There was a brief focus group and all students were encouraged to participate in a standard interview.

Results:

At the end of the course the students were asked if they found it valuable, and overwhelmingly the responses were positive. The OSCEs are in the process of being graded to determine whether students improved clinically throughout the course. Postcourse surveys and course evaluations were also obtained and are being evaluated for statistical significance. As they progress through their clinical years, the students may also be compared to their peers that did not take the course, or

compared to students who would have been identified in a similar manner in previous cohorts (failed OSCEs).

Discussion:

One of the specific problems identified for all medical students includes the reliance on the "OPPQRST" history and communication skills during their OSCEs. Several faculty members have noticed that instead of taking a few moments to compose themselves and consider a differential diagnosis for the patient prior to entering the exam room, the students read the chief complaint and immediately rush into the room to introduce themselves. During the planning of this elective this problem was discussed, and the decision was made to create a case planning worksheet for the students. This included space for a differential diagnosis, relevant history questions, and pertinent physical exam maneuvers. Five minutes was built into the timing of the OSCE for completion of this worksheet prior to entering the room with the patient. This forced the students to take that time to identify the differential diagnosis prior to speaking with the patient and relying on their basic history-taking questions.

The students were able to get some inpatient and outpatient experience during this rotation. They were specifically placed with preceptors that have a specific interest in teaching or on the academic services at both hospitals. They were encouraged to perform histories and physicals and given specific feedback. They were also given opportunities to present these patients and given immediate feedback to assist with this new skill.

During their repeat OSCEs, the students were assisted with differential diagnosis and history-taking by using the case planning worksheet and working in pairs. The multiple OSCEs assisted them with repetition of skills and gave them an opportunity for focused practice and feedback. As the week progressed, they seemed more comfortable with communication skills, focused history-taking and physical examinations. Their notes improved and they were able to give a broader differential diagnosis. Their management plans were obviously not as specific or appropriate as

someone with a higher level of training, but they were challenged to think about these.

Limitations:

Several students that were recommended to take this course refused to take it. This may have been due to multiple factors. Some may have had other electives or vacation time already planned. In discussion with the clinical skills instructors, several of the students that were recommended to take the course did not feel that their clinical skills were behind their peers. Therefore, they did not see the need or the benefit in taking the elective.

Unfortunately, soon after this elective, one of the students ultimately was dismissed. Other students have continued to struggle from ongoing academic challenges and communication issues. One or more of them may also ultimately be dismissed from medical school.

Another limitation of this project is difficulty obtaining statistics to prove benefit. We did create algorithms to score the OSCEs, which give some objective scoring to part of the activities in the course. The students also took surveys before and after the course that can be compared. Unfortunately, these are all very subjective and may not prove beneficial to this course.

Conclusion:

Students who struggle with clinical skills can be identified early in their medical school career. This course in advanced clinical skills was a pilot program to identify ways in which to assist these students. A week-long course that enabled them to focus on skills such as history taking, physical examination, clinical reasoning, note writing, and patient presentations was well-received. Plans to provide this course as an option for other similar students were in place prior to the pandemic. Unfortunately, because of lack of clinical space, the course will not be offered again at this time. In the future, some of the pieces of this course (case planning worksheet, multiple OSCEs) will most likely be used as part of the transitions to the M3 year for the entire class.

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TITLE:

Creating the "Section of Education:" Community and Support for Faculty Educators

Introduction/Background:

The focused development of faculty with an interest in surgical education is critical to ensure their preparedness for future leadership roles, such as program or clerkship director, and to enhance the science of education through research and innovation. Resources for faculty development in education are scarce. Therefore, we sought to develop and implement the concept of a "Section of Education" in one academic department of surgery to support the career development of faculty educators.

Methods:

The Section of Education—a community of practice for faculty development in surgical education—was developed in partnership with key stakeholders. The core values of the Section include community, support, and outcomes. All department of surgery faculty with an interest in career development in surgical education were invited to participate in an onboarding process. Monthly "Education Works in Progress" meetings were established to grow the sense of community amongst members of the Section.

Results:

Three faculty members from three different surgical divisions have completed the onboarding process to join the Section. Three additional faculty members have expressed a commitment to join. Attendance at the monthly Education Works in Progress meeting has increased over the past year.

Faculty members and their division chiefs have expressed satisfaction with the process of joining and subsequent support provided by the Section.

Discussion:

The concept of a Section of Education to support the career development of faculty interested in surgical education is feasible, and has been well-received by both faculty educators and their division chiefs. Long-term outcomes for faculty who have joined the Section should be studied to evaluate the success of the program.

Limitations:

The outcomes of a career development program are difficult to ascertain in the short term and will need to be evaluated over the next five years.

Conclusion:

A Section of Education can provide a community of practice for career educators, and financial and human resources support for career development. This model must also hold faculty accountable for the good stewardship of resources through attention to outcomes relevant to the career goals of each faculty member.

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TITLE:

Future Surgical Leaders (FSL)

Introduction/Background:

Surgical residency curriculum consists largely of patient care and surgical skills. However, we identified residents that continue to have difficulties with interpersonal communication and professionalism. Our goal is to create a leadership curriculum for residents and fellows that will provide tools to collaborate across disciplines, navigate difficult situations with conflict management and communication skills, enhance teaching skills, expand cultural competency, and promote inclusion.

Methods:

Stakeholders across disciplines were established. A validated and published list of leadership domains and competencies from the Medical University of South Carolina master of health administration program was used to create a needs assessment survey asking the importance of each competency for residency training and the appropriate PGY level for its delivery. The survey was delivered to 240 people with a 360-degree perspective.

Results:

The respondents were grouped into three weighted supergroups: Attendings and Recent Graduates (44 of 74, 59 percent response), Residents and Fellows (42 of 72, 59 percent response), and Multi-Disciplinary (44 of 95, 46 percent response) including advanced practice providers, students, administrative staff, and nurses. The importance of each competency was compared among groups and overall importance was defined as >75 percent "important"

and "very important" responses. With competencies selected, a heat map for PGY delivery was created.

A curriculum for each PGY was created with competencies and subtopics. Resident stakeholders for each PGY and program assisted with educational design. The program was introduced by grand rounds with feedback solicited. Speakers were identified by stakeholders and others. Speaker education with experiential learning was conducted. Pre-program assessments including the Maslach Burnout inventory survey were delivered. The first FSL sessions are scheduled for next week.

Discussion:

Respondents agreed that leadership domains are important to teach residents and fellows with some variance in competencies and appropriate PGY delivery between groups.

Limitations:

Single institution, low number of survey respondents

Conclusion:

From the needs assessment survey and involvement of key stakeholders, a leadership curriculum was created. Implementation and evaluation are in process.

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