Aims: Advanced practice providers are a rapidly growing sector of the health-care field. Despite their relatively new place in the medical establishment, these providers are held to high standards of education, practice, and communication skills. However, the communication needs of these practitioners are somewhat different than those of nurses or physicians. These skills are even more necessary in specialized fields where providers frequently are involved in discussions of prognosis, goals of care, and end of life. Design: This was a mixed-methods study. Methods: We completed a needs assessment of communication skills for advanced practice providers at a large cancer center in the northeastern United States from June to July 2017. Results: Participants were confident in their skills across several areas of communication, but also endorsed the need for communication skills training, particularly for challenging interactions with patients and families. Advanced practice providers described many challenges similar to those described by other health-care providers, including general communication skills problems, navigating team dynamics, and goals-of-care planning. However, participants also endorsed communication skills needs specific to their field, including certain patient-centered challenges, perceived/real limitations of their role, serving as the “middleman,” and understanding the advanced practice provider’s role. Conclusion: Given the general and unique communication challenges advanced practice providers in oncology face, we conclude with recommendations for further institutional and educational changes to better address these needs.
Advanced practice providers (APPs) play an increasing role in the United States health-care system, and they are often on the front lines of patient care in ambulatory, impatient, and specialty care settings (Auerbach et al., 2018; Pastores et al., 2019). Advanced practice providers are independent or semi-independent master’s-level (or higher) health-care practitioners, including physician assistants (PAs), nurse practitioners (NPs), certified nurse midwives, and certified registered nurse anesthetists. Individuals in these fields provide direct patient care with the responsibility for holding critical conversations with patients and their families regarding their medical care and prognosis. These providers are instrumental in guiding care planning with patients and families (Briennooge et al., 2018; Virani et al., 2016).

Due to the scope of the APP role, communication skills training is as essential in the training process for APPs as for physicians and other practitioners. Effective communication is a key component of providing high-quality, effective, ethical, person-centered care to patients and their families and has tremendous impact on many aspects of health-care delivery (Epstein & Street, 2007; Institute of Medicine, 2013; Mazor et al., 2013; Stewart, 1995). Effective communication is fundamental to the development and maintenance of trusting therapeutic relationships with patients and families, as well as with other providers and leadership (Institute for Healthcare Communication, 2011; Mazor et al., 2013). Additionally, good patient-provider communication is associated with higher perceived quality and satisfaction with care by patients, reduced anxiety, increased adherence to treatment, better recall and understanding of health information, and improved health outcomes (Stewart, 1995). For health-care organizations, improved intrateam communication is linked with lower rates of medical errors, reduced hospital readmissions, decreased frequency of litigation, and significant health-care savings (Clark, 2003; Wanzer et al., 2004). Further, the necessity of communication skills development for APPs is highlighted in the core competencies listed by the field’s governing bodies (American Academy of Physician Assistants, 2012; National Organization of Nurse Practitioner Faculties, 2017).

Research on communication skills for APPs suggests they face challenges similar to those of providers from other health-care disciplines, including responding to patients’ heightened emotions, discussing prognosis, and dealing with end-of-life goals of care (Banerjee et al., 2016; Bylund et al., 2011; Parker et al., 2010). However, previous studies also identify unique patient-provider and intrateam communication challenges. Advanced practice providers struggle with role clarity, navigating their position as an APP while working within ethical and organization limitations, serving in a unique “middleman” role within health-care teams and hierarchies, and dealing with imposter syndrome (Donald et al., 2010; Paton et al., 2013). Nurse practitioners in particular experience challenges related to transitioning from being providers of care (RNs) to prescribers of care (NPs), as conversations shift from facilitating understanding of information disseminated by the physician to imparting information regarding diagnosis, prognosis, and exploring goals of care (Barnes, 2015; Fleming & Carberry, 2011). Given these challenges, it is vital to understand APPs’ needs in communication, particularly when considering interventions to improve these skills.

Although communication is integral to health-care delivery, it is not an innate skill; communication skills are learned and can be taught (Banerjee et al., 2017; Ericsson, 2004; Fallowfield et al., 1998; Guest et al., 2001). While evidence-based communication skills training programs have been developed for the training of physicians and nurses (Boissy et al., 2016; Coyle et al., 2015; Ferrell et al., 2015), there is much less known about the unique communication needs of APPs and even less research on training programs to enhance these skills (Chuang et al., 2017; Green et al., 2013; Kurtzman, 2015). Emerging data suggest that communication skills training programs for APPs are beneficial and well received when available (Corey & Gwyn, 2016; Joseph et al., 2018). Our ability to ascertain this data is confounded by limited data availability of communication skills training specifically developed for APPs, as often trainings are developed for other fields (Curtis et al., 2013; Sheldon, 2005). In addition, APPs often are lumped in with nurses or with physicians (Lefkowits et al., 2017; Moore et al., 2018), all of whom have overlapping yet potentially distinct communication skills training needs.
Given the expanding current and future roles of APPs within the health-care system, it is imperative that researchers and providers develop a better understanding of their communication skills needs and challenges; once this is understood, effective and tailored communication skills training programs can be developed.

METHODS

Aims
This study examined general and specific communication challenges among APPs working within an oncologic health-care organization. The aim of the study was to assess the communication challenges and needs in the APP population working in an oncology setting, given their unique position within the health-care system. We hypothesized that APPs would report many of the same challenges noted by those in other health-care professions (Banerjee et al., 2016; Bylund et al., 2011) but also describe difficulties related to the real and perceived limitations of their role within the medical hierarchy.

Design
This study used a cross-sectional survey design.

Sample/Participants
Data were gathered through an online survey sent to all APPs (500 NPs and PAs) employed at a comprehensive cancer center in the northeastern United States from June to July 2017. The response rate was 49% (n = 248).

Data Collection
The study included quantitative measures about confidence in communication and usefulness of communication skills training across multiple domains, as well as qualitative measures to examine participants’ experiences in health-care communication as an APP.

Confidence in Communication. Confidence in communication was assessed using seven items addressing communication across the following domains: palliative needs; death, dying and end-of-life goals of care; sharing serious news; responding to anger; disease prognosis; communicating empathically; and challenging interactions with patients and families. Participants noted their confidence in communication using a five-point Likert scale, ranging from 1 (“Strongly disagree”) to 5 (“Strongly agree”), with prompts such as “I feel confident discussing death, dying, and end-of-life goals of care with patients and families” or “I feel confident responding to challenging interactions with patients and families.”

Need for Communication Skills Training. Participants were also asked to rate the degree to which they would find specific communication skills training helpful in their professional roles across multiple domains: palliative needs; death, dying and end-of-life goals of care; sharing serious news; responding to anger; disease prognosis; communicating empathically; and challenging interactions with patients and families. Responses were on a five-point Likert scale, ranging from 1 (“Not very helpful”) to 5 (“Very helpful”), with prompts such as “Indicate the extent to which you would find the following communication skills program topics helpful for your role as an APP – discussing prognosis.”

Experiences in Health-Care Communication. In addition, participants were provided with the opportunity to provide open-ended responses regarding their experiences in health-care communication as an APP. They were asked to share additional aspects of communication which they find challenging, unique communication challenges for APPs, and examples of scenarios illustrating communication challenges.

Ethical Considerations
A waiver was obtained by the Institutional Review Board, and all participants provided informed consent to participate.

Data Analysis
Descriptive statistics (means, standard deviations, and percentage rating of agree or strongly agree) were used to characterize participant responses about confidence in communication and useful communication training across multiple domains. For qualitative data analysis, we utilized a thematic text analyses approach (Patton & Patton, 2002) that involved a rigorous review and interpretation of the data. A coding team consisting of six of the coauthors analyzed the data and utilized a combination of independent and collaborative analysis.
The first step involved an iterative process of open coding completed independently by all coders. This step was followed by a team meeting, where higher order themes were developed, and consensus was reached about merging the subthemes under higher-order themes (Patton & Patton, 2002).

RESULTS
The study sample consisted of 248 APPs (oncology and specialty service) employed at a comprehensive cancer center located in the Northeastern United States. See Table 1 for descriptive statistics of participants’ work experience. Seventy-two percent of the sample were NPs, while 28% were PAs. A plurality of participants had worked as an APP for 5 to 10 years and had worked with oncology patients for over 11 years. Most participants worked on a surgical service, while others worked in medicine, critical care, pediatrics, and other settings. The majority reported working in outpatient settings compared with inpatient settings. About half of participants had some familiarity with communication skills training: 26% had previously attended communication skills training at their current organization, while 23% attended communication skills training at another organization.

Confidence in Communication
Participants reported varied levels of confidence across areas of communication assessed (see Table 2). Self-reported confidence was highest in communicating empathically, with over 90% of participants reporting that they agreed or strongly agreed with this item. Participants reported moderate confidence in addressing palliative needs, sharing serious news, responding to patients’ and families’ anger, and responding to challenging interactions with patients and families. Self-reported confidence was lowest in discussing death, dying, and end-of-life goals of care and talking about prognosis, with nearly 50% of participants reporting that they felt neutral or not confident with these communication skills.

Need for Communication Skills Training
Participants reported that they would find communication skills training helpful across all domains assessed (see Table 2): addressing palliative needs; discussing death, dying, and end-of-life goals of care; sharing serious news; responding to patients’ and families’ anger; discussing prognosis; communicating empathically; and responding to challenging interactions with patients and families. Desire for communication skills training was highest in the areas of responding to challenging interactions with patients and families and lowest in addressing palliative needs and communicating empathically.

Experiences in Health-Care Communication
General Challenges in Communication. Three major topic areas emerged from APPs’ responses to qualitative questions identifying issues related to communicating effectively: 1) general communication skills challenges, 2) navigating team
dynamics, and 3) goals-of-care planning. Within these, there were several emergent themes found across multiple responses. Table 3 highlights each topic area and emergent theme along with illustrative quotations for each.

General communication skills challenges include responding to heightened emotions or concerns expressed by a patient or their family, such as shutting down emotionally, blaming staff for a patient’s death, or expressing high levels of anger or verbal escalation. Participants also noted challenges with a lack of ethics or regulatory information, particularly in challenging situations such as disagreeing with a plan of care or following a patient’s unexpected death. A final communication challenge endorsed by APPs was demographically discordant interactions, such as working with a patient who speaks a different language or whose gender identity or sexual orientation is different from the provider’s.

Advanced practice providers described some difficulties communicating with others, including other medical professionals, the patient, and their loved ones. Study participants noted communication challenges around dealing with conflict between team members, reconciling disagreements on goals of care, or identifying roles and limitations when working between interprofessional teams (e.g., when providing consultation to a patient’s primary treatment team). In addition, APPs discussed concrete communication challenges, such as difficulty contacting other team members with questions or surgical team members being unavailable for long periods of time while in surgery.

Difficulties with goals of care planning relate to emotional, medical, and practical challenges that arise as a patient’s medical status declines. Advanced practice providers reported challenges related to death, dying, and end-of-life goals of care discussions, such as having these discussions without knowing the patient well or in the absence of the patient’s primary physician. In addition, participants described difficulty with managing patient expectations, generally referring to situations in which a patient or family member is overly hopeful about health status or the efficacy of treatment. In these situations, providers noted the challenge of helping families make effective

Table 2. Descriptive Statistics for Self-Reported Confidence and Challenges for APPs

| Confidence in:                                      | M (SD)     | Percentage who agreed or strongly agreed |
|----------------------------------------------------|------------|----------------------------------------|
| Addressing palliative needs                        | 3.84 (1.08)| 66.5                                   |
| Discussing death, dying, and end-of-life goals of care | 3.56 (1.16)| 53.7                                   |
| Sharing serious news                               | 3.70 (1.15)| 61.3                                   |
| Responding to patients’ and families’ anger        | 3.80 (0.97)| 71.8                                   |
| Discussing prognosis                               | 3.53 (1.13)| 54.9                                   |
| Communicating empathically                          | 4.45 (0.77)| 91.1                                   |
| Responding to challenging interactions with patients and families | 4.01 (0.94)| 79.1                                   |

| Need for communication training in:                 | M (SD)     | Percentage who agreed or strongly agreed |
|----------------------------------------------------|------------|----------------------------------------|
| Addressing palliative needs                        | 3.99 (0.89)| 75.8                                   |
| Discussing death, dying, and end-of-life goals of care | 4.06 (0.93)| 76.7                                   |
| Sharing serious news                               | 4.16 (0.87)| 79.0                                   |
| Responding to patients’ and families’ anger        | 4.16 (0.77)| 80.3                                   |
| Discussing prognosis                               | 4.09 (0.89)| 78.3                                   |
| Communicating empathically                          | 4.00 (0.88)| 73.8                                   |
| Responding to challenging interactions with patients and families | 4.19 (0.77)| 81.5                                   |
Table 3. Qualitative Codes: Challenges in Communication for APPs

| Theme (No.) | Illustrative quotations |
|-------------|-------------------------|
| **General communication skills problems (17)** | “Patients sometimes ‘shut down’ during a difficult conversation. Finding the right way to help people understand can sometimes be difficult.” |
| | “I often deal with patients who get angry over little issues because they are really upset over the changes in treatment plan (i.e., unresectable cancer).” |
| **Responding to patient/family’s heightened emotions/concerns (12)** | “I have sometimes disagreed with an attending MD’s treatment planning/decision making, and it is difficult to stand by this with the patient or to let them know that they have other options when an MD is adamant that operating is the best decision.” |
| | “When the primary oncologist has provided the patient with an unrealistic view of their life expectancy and/or with the chance that the chemo may provide benefit.” |
| **Lack of ethics/regulatory information (3)** | “Language barrier—having to communicate via Vocera or translator.” |
| **Demographic discordance (2)** | “I would like to see minority sexual health included...including how to address LGBTQ patients, how to communicate to ensure this population feels safe, provide confidence to practitioners when facing a difficult LGBT situation.” |
| **Navigating team dynamics (23)** | “Reconciling differing goals of care among team members so that a coherent message is given to patients and families.” |
| | “Communication between attending [physician], APP, and patient sometimes can be very difficult.” |
| | “Managing conflict between team members—how do you speak to the oncologist when you feel they need to share serious news with patient/family or when they are offering tumor-directed therapy that likely will not be beneficial?” |
| **Goals of care planning (30)** | “Patient adamantly wishing to be allowed a natural death, and family having difficulty coping with his decision.” |
| **Death, dying, and end-of-life goals of care discussions (13)** | “I find it challenging as an APP to have end-of-life conversations with patients particularly because, in the outpatient setting, I am not their primary oncologist, and they usually want to have these types of treatment-impacting/decision-making conversations with their doctor.” |
| | “Discussing changing goals of care from curative to comfort.” |
| **Managing patient expectations (8)** | “I think that our patients are hospitalized with poor prognosis, and they are not ready to hear that they have a poor prognosis because the oncologist has said something different or the initial plan from their oncologist is now changed because of the hospitalization.” |
| | “Navigating scenarios where patient and family have differing/conflicting goals—managing unrealistic expectations.” |
| **Discussing prognosis (5)** | “Often get the question ‘This is what the doctor said. Do you think that is true? Are they really telling me my kid will not make it? Should I even hope things will go well?’” |
| **Sharing serious news (4)** | “What are the chances of...this coming back, my child dying, my child having this or that side effect?” |
| | “Patient had relapsed and wanted more information on prognosis and treatment options. Without being able to specify the treatment plan, it was difficult to speak with the family and make them feel heard since I couldn’t give them something only their attending could discuss.” |
| | “It is always difficult to discuss ‘serious news’ with a patient or family whether it is the initial diagnosis of cancer, discussing treatment plan/prognosis/end of life. No matter how long one has worked in cancer care, I think attending communication training is always helpful and provides ‘tools.’” |

*Table continued on the following page*
| Theme (No.)                      | Illustrative quotations                                                                                                                                                                                                 |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Patient-centered challenges (17) | “Some patients and family members seem to feel that having the APP discuss serious issues is not good enough and would hold more merit if it were coming from the physician.” |
| Provider preferences (13)       | “Speaking to a metastatic breast cancer patient about her progression of disease and treatment options, but she is just insistent on speaking with a doctor and not just some nurse.” |
| Establishing rapport/trust (2)  | “Working in the PICU, there are times when I have to address end-of-life with families I am meeting for the first time.”                                                                                                    |
| Reconfirming medical information (2) | “Often, I am the person who is clarifying for the patient or their family the medical diagnosis and plan that was addressed by the MD.”                                                                                   |
| Perceived/real limitations (19) |                                                                                                                                                                                                                         |
| Role clarity (7)                | “When it is unclear whether we can ‘go all the way’ with goals of care conversations, or if we should defer to an attending.”                                                                                              |
|                                 | “Lots of times, things come up that I don’t usually discuss with patient (e.g., pathology, not a surgical candidate, etc.). It’s not that I feel incapable of discussing such things; it’s just that usually I feel it is something that should come from the horse’s mouth so to speak.” |
| APP lack of confidence (5)      | “Sometimes as an APP, I feel the patient or family wants to hear from an MD and not ‘just the assistant.’ It is hard to come across as a ‘serious’ member of a team of providers.”                                             |
|                                 | “If I see patients independently as NP visit, I think they often wonder if the answer would be different if an MD saw them. I think sharing bad news is harder because they wonder if the MD would have a better idea than I do.” |
| Insufficient information (4)    | “When asked with cancer-specific questions, I often page the primary team to address patient/family concerns. I feel patients think I know all scenarios of their treatment and ask many questions I am unable to answer in my position.” |
|                                 | “It is difficult to communicate with the patients and families when the APPs are not involved in discussion in disease management and planning.”                                                                        |
| Limitations of APP’s role (3)   | “DNR discussion oftentimes comes up in the absence of the attending physician who need to be pulled into the conversation as orders cannot be initiated by the NP.”                                                        |
|                                 | “Certain attendings prefer APPs to not discuss the pathology and the treatment management to patients. It will be helpful to provide attendings with education on the value APPs can bring with our participation.” |
| Serving as middleman (17)       |                                                                                                                                                                                                                         |
| Serving as middleman (10)       | “Often patients express their true wishes to us, but not to the attending. Often, I feel like we are left carrying the burden because of this and wrangle with how to advocate for our patients.”                      |
|                                 | “Knowing results before a family, and the primary physician has not yet shared—not wanting to disclose sensitive results but not wanting to give false hope.”                                                               |
| Understanding APP’s role (7)    | “Patient is unable to fully discuss with physician their personal and social concerns—but able to communicate their concerns to APN [advanced practice nurse].”                                                                     |
|                                 | “Patient/family members not familiar with APP being part of the medical care team may not readily trust or be willing to be seen or heed medical advice or recommendations from non-MD.”                                                             |
|                                 | “Confusion of what a nurse practitioner is and how I can relay imaging results or treatment options.”                                                                                                                   |
treatment decisions if their outlook is unrealistic. An additional challenge within this topic area was discussing prognosis—talking with the patient and family about subjects such as disease progression, life expectancy, and prospective decline or impairment. Finally, APPs reported communication challenges around sharing serious news, such as disease relapse, metastasis, or that treatment has not worked.

Communication Challenges Unique to APPs. Notably, more than half of participants (56%) reported they experience unique communication challenges as an APP. Participants’ responses resulted in three topic areas of communication challenges specific to the role of APPs: 1) patient-centered challenges, 2) perceived/real limitations of their role, 3) serving as the middleman, and 4) understanding the APP role. See Table 3 for a list of topic areas, emergent themes, and illustrative quotations.

Patient-centered challenges specific to APPs included variations in patient’s preference of provider from whom they were receptive to receiving information, establishing rapport or a trusting relationship for communication of health information and medical decision-making, and serving to reconfirm for patients and/or their family members medical information provided by a physician provider.

Certain limitations impacting the APP’s role in patient communications included lack of role clarity, lack of confidence, insufficient information, and limitations of the role. One aspect of lack of role clarity was a lack of understanding on the part of the APP as to which aspects of patient care and medical decision-making they are permitted to communicate with patients and families either due to real or perceived restrictions by their physician colleagues. An additional aspect was a lack of clarity about who should have the responsibility to discuss certain aspects of patient care (e.g., primary management team, specific physician, or APP). Some APPs expressed a lack of confidence in how they were perceived as providers or whether the information they provided was being received by patients and families. Insufficient information was described as not being privy to treatment information provided to patients and families in prior discussions by other providers on their care team (i.e., poor team communication) or feeling the need to respond to questions that fall outside the APP’s scope of practice or their role, such as a cardiology consultant being asked about an oncologic treatment plan. Limitations in the role of the APP were related to either real or perceived legal limitations of their role and those set by physician colleagues.

The perception of the APP as a middleman is a unique challenge for communication. This was illustrated in responses discussing a more robust relationship between the APP and the patient or family, compared to between the physician and patient, due to the amount of time spent together. Participants reported that they would receive more sharing of “true” patient preferences or personal and social concerns, which creates a conflict or burden regarding how to best advocate for the patient’s best interests. A secondary characterization of this unique challenge is being aware of diagnostic results in advance of patient disclosure. This is particularly challenging with sensitive results as the APP does not want to convey false assurances or hope, as well as a general sense of unease about how to proceed with communication.

Lack of public knowledge or familiarity with the APP role is a common theme and often impacts communication. The APPs in the study expressed the perception that patients and families at times mistrust the information or medical advice that is being imparted by them. They noted several explanations for this, including unfamiliarity with the role of the APP in general, the APP’s role within the medical care team, and the APP’s expertise.

DISCUSSION
Advanced practice providers play a vital and ever-expanding role in our health-care system settings (Auerbach et al., 2018; Bruinooge et al., 2018; Viran et al., 2016). With increasing utilization of APPs in hospitals in the United States, it is imperative to understand their unique needs. Advanced practice providers in oncology have been found to spend the majority of their time in direct patient care with patient counseling and treatment management as top patient care activities (Bruinooge et al., 2018). As such, communication skills are essential to their function within the health-care team and to the provision of quality patient-centered care.
Overall, participants in this study reported high confidence in their ability to communicate effectively, particularly in the domains of empathic communication, dealing with patient/family anger, and responding to challenging interactions with patients and families. The most challenging communication domain was discussing death, dying, and end-of-life goals of care, although over 50% of participants still reported that they were somewhat or highly confident in their communication in this area. Despite high confidence in communication across multiple domains, APPs still reported a need for communication skills training, particularly in the domains of responding to challenging interactions and discussing death, dying, and end-of-life goals of care planning. These findings are aligned with other studies demonstrating health-care providers’ appreciation for communication skills workshops and their significant uptake in skills following participation (Banerjee et al., 2017; Boissy et al., 2016; Coyle et al., 2015; Moore et al., 2018; Joseph et al., 2018).

General communication challenges (e.g., heightened emotions by a patient or their family, blaming staff for a patient’s death, or a patient expressing high levels of anger) have been reported across many disciplines in health care, including physicians, medical trainees, and nurses across type and length of medical training (Banerjee et al., 2016; Bylund et al., 2011). Conversations surrounding prognosis, sharing serious news, death and dying, and goals of care planning—particularly at end of life—are among the most difficult that a health-care provider may have. Such conversations naturally carry a heightened level of emotion while all involved are forced to confront issues of mortality with myriad emotional and behavioral responses (e.g., acceptance, straightforward planning, avoidance, anger).

While APPs are well-trained to handle such difficult conversations, they may not be explicitly trained in issues surrounding the mental health care of patients or negative emotional responses to illness (Sheldon, 2013). Dovetailing with literature on communication challenges among other health-care providers (Banerjee et al., 2016; Bylund et al., 2011), APPs in this study endorsed similar challenges, reporting difficulty responding to heightened patient/family emotions, communicating about goals-of-care planning, and—unique to the APP role—the challenge of navigating team dynamics combined with lack of role clarity adding to the complexity of these communications. Ideally, as newer APPs transition into practice and evolve as providers, so does the nature of their communication with patients and their families. This change likely reflects more in-depth clinical knowledge, development of self-efficacy within their roles as APPs, confidence in their clinical and communication skills, and their ability to understand the institutional hierarchy, establish role clarity, and navigate team dynamics (Parker et al., 2010).

Several additional communication difficulties unique to the APP role emerged in this study, including patient-centered challenges such as patients preferring to work with physicians, establishing rapport and trust, and reconfirming medical information provided by others. Participants also reported they frequently felt pulled to be the “middleman” because they had closer relationships with patients due to their unique position within the medical hierarchy or because of patients’ difficulty understanding the APP role. In addition, APPs identified perceived and real limitations of their role, such as lack of understanding of their responsibilities, decreased confidence, insufficient information from others, and concrete limitations of the role.

Reasons for these findings are likely multifactorial. Advanced practice providers are a relatively new addition to the medical system, and as such, these professions are still clarifying their positions to other providers, to patients, and even to other APPs. Role clarity is integral to team effectiveness, interprofessional collaboration, and patient communication and care (Brault et al., 2014). Lack of role clarity can lead to role confusion and interprofessional power struggles, which negatively impact team functioning and patient communication, as well as care delivery and patient satisfaction. Although APPs traditionally function in the middle of the medical hierarchy (between physicians and nurses), participants most frequently described being limited by physicians or by the team dynamics from providing certain information to patients. Given these vague professional
boundaries, it is no wonder that APPs can struggle to know where the personal and real limitations of their practice exist.

In a similar vein, the role and scope of practice of the APP varies widely from state to state, institution to institution, and between different areas of practice (Kartha et al., 2014; Perloff et al., 2019). Other roles (physician, registered nurse, social worker, etc.) are more clearly defined and easily internalized. The codified nature of those positions provides clearer distinction as to their purpose in the health-care team, as well as the public's understanding of their roles. With the more nebulous scope of practice, coupled with wide variation across states and institutions, the APP role may be harder to internalize than that of their colleagues in other fields.

Beyond the legal and ethical limitations, APPs face unique internal challenges due to the nature of their roles. These difficulties are exacerbated by APPs being middlemen (lying hierarchically between physicians and nurses). The concept of the APP being “the middleman” has been linked to previously described challenges, including role ambiguity, nebulous team roles and responsibilities, problems in communication between team members as well as with patients, either real or perceived knowledge and skill deficits, and organizational challenges such as poor documentation or discontinuities in patient care (Chuang et al., 2017). Furthermore, APP communication can be hampered by restrictions placed by physicians as to what message should be conveyed, by their own close/empathic relationship to patients/families causing difficulty communicating sensitive information, and by perceived mistrust of the APP role. This lack of clarity and barrier to role internalization can lead to uncertainty and insecurity in new practitioners (Fleming & Carberry, 2011). Such uncertainty may give rise to the phenomenon of imposter syndrome: APPs feeling they have only a veneer of legitimacy, knowledge, and professionalism, believing they may be deficient in their practice, and feeling that they are frauds (Prata & Gietzen, 2007). This insecurity, internal conflict, and self-doubt negatively impacts a provider’s ability to communicate; it becomes difficult to convey a clear, consistent, and coherent message when one lacks fundamental confidence in one’s own ability. With this understanding, it is unsurprising that respondents in this study reported difficulties in establishing trusting relationships with patients and families for communication of health information and shared decision-making. These issues arise from a combination of real and perceived limitations of their role due to organizational, internal, or team factors, and create challenges in complex communications with patients and families while feeling like a “middleman” with lack of clarity on how to best advocate for their patients.

Limitations
The current study has some limitations that are important to note. This study was completed at one site utilizing self-reported measures, which can limit the generalizability of these results. Scope of practice can vary widely across and within APP disciplines, making it difficult to draw overarching conclusions about the necessity of some communication skills, such as discussing prognosis. Many participants noted the interplay of personal, institutional, and profession-wide factors that create a system of communication challenges that are general to the health-care field, as well as specific to the APP role. Tackling these issues will require comprehensive, evidence-based change at each level.

CONCLUSION
Communication skills are vital for health-care providers at all levels of practice, but as this study demonstrates, the skills needed for successful practice vary significantly by profession. Numerous communication skills training programs have been shown to successfully improve care by physicians, medical trainees, and nurses (Banerjee et al., 2017; Boissy et al., 2016; Bylund et al., 2011; Coyle et al., 2015; Ferrell et al., 2015). Training programs provide the means to facilitate and enhance vital communication skills, including building empathy, discussing prognosis, dealing with patient and family anger, and communicating about end-of-life goals of care. Established communication skills training programs provide a starting point for a curriculum tailored for APPs, one which accounts for the general and specific needs of these professions. In particular, APPs report that they
would benefit from communication skills training programs targeting sharing serious news, discussing prognosis, dealing with end-of-life goals of care, team communication, and dealing with patient/families’ heightened emotions, as well as a training program that incorporates understanding of the APP's perceived and real role limitations. Of note, APPs’ unique position within medical teams may necessitate both intra- and interprofessional team communication skills training for maximum benefit. With the development of communication skills training programs (which have demonstrated strong efficacy in other professions), APPs will be able to further cement their own professional identity and that of their fields at large.

**Disclosure**
The authors have no conflicts of interest to disclose.

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