

# Perceptions of Role Boundaries and Collaborative Practice Among Nursing Technicians and Pharmacy Technicians: A Qualitative Study in Hafr Al-Batin

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## Abstract

Effective collaboration between nursing technicians and pharmacy technicians is crucial for ensuring safe and efficient patient care. However, there is limited research on how these professionals perceive their role boundaries and collaborative practices, particularly in the context of Saudi Arabia. This qualitative study aimed to explore the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia. Semi-structured interviews were conducted with 12 nursing technicians and 12 pharmacy technicians from various healthcare settings. Thematic analysis of the interview data revealed four main themes: (1) the importance of clear role definitions and communication, (2) the benefits and challenges of collaboration, (3) the impact of organizational culture and support, and (4) the need for interprofessional education and training. Participants emphasized the significance of having clear and distinct roles, while also recognizing the value of collaboration in improving patient outcomes and system efficiency. They identified several barriers to effective collaboration, including role ambiguity, power imbalances, and lack of mutual trust and respect. Participants also highlighted the influence of organizational factors, such as management support and resource availability, on their ability to collaborate effectively. Additionally, they expressed the need for more interprofessional education and training opportunities to enhance their collaborative skills and understanding of each other's roles. The findings suggest that clarifying role boundaries, fostering a collaborative organizational culture, and providing interprofessional education and training are essential for promoting effective collaboration between nursing technicians and pharmacy technicians in Hafr Al-Batin.

**Keywords:** nursing technicians, pharmacy technicians, role boundaries, collaboration, interprofessional practice, qualitative research, Saudi Arabia

## 1. Introduction

Collaboration between healthcare professionals is essential for providing safe, high-quality, and patient-centered care (World Health Organization, 2010). Nursing technicians and pharmacy technicians are important members of the healthcare team, who work closely with each other and with other professionals to ensure the effective delivery of medications and patient care (Alkhateeb et al., 2016). However, the roles and responsibilities of these technicians can vary across different healthcare settings and countries, leading to potential confusion and conflict regarding their role boundaries and collaborative practices (Desselle et al., 2020).

In Saudi Arabia, the healthcare system has undergone significant reforms in recent years, with a focus on improving the quality and efficiency of healthcare services (Almalki et al., 2011). These reforms have included the expansion of the roles and responsibilities of nursing technicians and pharmacy technicians, as well as the promotion of interprofessional collaboration and teamwork (Ministry of Health, 2017). However, there is limited research on how these technicians perceive their role boundaries and collaborative practices in the Saudi Arabian context, particularly in the region of Hafr Al-Batin.

This qualitative study aimed to address this gap by exploring the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia. The specific objectives of the study were:

1. To understand how nursing technicians and pharmacy technicians define and differentiate their roles and responsibilities.
2. To identify the factors that facilitate or hinder effective collaboration between nursing technicians and pharmacy technicians.
3. To explore the impact of organizational culture and support on the collaborative practices of nursing technicians and pharmacy technicians.
4. To examine the perceived need and opportunities for interprofessional education and training among nursing technicians and pharmacy technicians.

## **2. Literature Review**

This section provides an overview of the current literature on the roles and collaborative practices of nursing technicians and pharmacy technicians, with a focus on the Saudi Arabian context.

### **2.1 Roles and Responsibilities of Nursing Technicians and Pharmacy Technicians**

Nursing technicians and pharmacy technicians are allied health professionals who work under the supervision of registered nurses and pharmacists, respectively, to provide patient care and medication management services (Alkhateeb et al., 2016). The specific roles and responsibilities of these technicians can vary depending on the healthcare setting, the patient population, and the country's regulations and scope of practice (Desselle et al., 2020). In general, nursing technicians are responsible for assisting nurses with patient care activities, such as taking vital signs, administering medications, performing wound care, and documenting patient information (Alboliteeh et al., 2017). Pharmacy technicians, on the other hand, are responsible for assisting pharmacists with medication dispensing, compounding, inventory management, and patient education (Almaghaslah et al., 2019).

In Saudi Arabia, the roles and responsibilities of nursing technicians and pharmacy technicians have been expanding in recent years, in response to the growing healthcare needs of the population and the shortage of healthcare professionals (Ministry of Health, 2017). For example, nursing technicians in Saudi Arabia have been given additional responsibilities in areas such as patient assessment, care planning, and medication administration (Alboliteeh et al., 2017). Similarly, pharmacy technicians in Saudi Arabia have been involved in more clinical activities, such as medication reconciliation, patient counseling, and medication therapy management (Almaghaslah et al., 2019).

### **2.2 Collaborative Practices of Nursing Technicians and Pharmacy Technicians**

Collaboration between nursing technicians and pharmacy technicians is essential for ensuring safe and effective medication management and patient care (Alkhateeb et al., 2016). Collaborative practices between these technicians can include activities such as medication order verification, medication reconciliation, patient education, and monitoring of medication side effects and adverse events (Desselle et al., 2020).

Effective collaboration between nursing technicians and pharmacy technicians requires clear communication, mutual trust and respect, shared goals and decision-making, and a common understanding of each other's roles and responsibilities (World Health Organization, 2010). However, several factors can hinder effective collaboration between these technicians, such as role ambiguity, power imbalances, lack of interprofessional education and training, and organizational barriers (Alkhateeb et al., 2016).

In Saudi Arabia, there is a growing recognition of the importance of interprofessional collaboration and teamwork in healthcare (Ministry of Health, 2017). However, there is limited research on the collaborative practices of nursing technicians and pharmacy technicians in the Saudi Arabian context. A few studies have explored the perceptions and experiences of healthcare professionals regarding interprofessional collaboration in Saudi Arabia, but these studies have focused mainly on physicians, nurses, and pharmacists, rather than technicians (Al-Qahtani & Gurney, 2016; Alsulami et al., 2013).

### **2.3 Organizational Culture and Support for Collaboration**

Organizational culture and support can play a significant role in facilitating or hindering collaboration between healthcare professionals, including nursing technicians and pharmacy technicians (World Health Organization, 2010). Organizational factors that can influence collaboration include leadership support, communication channels, resource availability, and policies and procedures (Alkhateeb et al., 2016).

In Saudi Arabia, the Ministry of Health has identified interprofessional collaboration and teamwork as key priorities in its healthcare reform initiatives (Ministry of Health, 2017). However, there is limited research on how organizational culture and support affect the collaborative practices of nursing technicians and pharmacy technicians in Saudi Arabia. A few studies have explored the impact of organizational factors on the job satisfaction and retention of healthcare professionals in Saudi Arabia, but these studies have not specifically focused on technicians or collaboration (Alboliteeh et al., 2017; Alsulami et al., 2013).

## **2.4 Interprofessional Education and Training for Collaboration**

Interprofessional education and training have been identified as important strategies for promoting collaboration between healthcare professionals, including nursing technicians and pharmacy technicians (World Health Organization, 2010). Interprofessional education involves learning with, from, and about other professions to improve collaboration and the quality of care (Centre for the Advancement of Interprofessional Education, 2002).

In Saudi Arabia, there is a growing recognition of the need for interprofessional education and training in healthcare (Ministry of Health, 2017). However, there is limited research on the availability and effectiveness of interprofessional education and training programs for nursing technicians and pharmacy technicians in Saudi Arabia. A few studies have explored the attitudes and readiness of healthcare students and professionals towards interprofessional education in Saudi Arabia, but these studies have not specifically focused on technicians (Fallatah et al., 2018; Farhadi et al., 2019).

## **3. Methods**

This section describes the methods used to conduct this qualitative study, including the study design, participants and sampling, data collection, data analysis, and trustworthiness.

### **3.1 Study Design**

A qualitative descriptive design was used to explore the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia. Qualitative description is an approach that aims to provide a comprehensive summary of an event or experience in the everyday terms of those events and experiences (Sandelowski, 2000).

### **3.2 Participants and Sampling**

Purposive sampling was used to recruit participants who met the following inclusion criteria:

- Nursing technicians or pharmacy technicians who were currently working in a healthcare setting in Hafr Al-Batin, Saudi Arabia.
- Nursing technicians or pharmacy technicians who had at least one year of work experience in their current role.
- Nursing technicians or pharmacy technicians who were willing to participate in an interview and share their perceptions and experiences.

Participants were recruited through invitation letters and referrals from healthcare facilities in Hafr Al-Batin. A total of 24 participants (12 nursing technicians and 12 pharmacy technicians) were recruited from various healthcare settings, including hospitals, primary healthcare centers, and community pharmacies. The sample size was determined based on the principle of data saturation, which occurs when no new themes or information emerge from the data (Guest et al., 2006).

### **3.3 Data Collection**

Semi-structured interviews were conducted with the participants using an interview guide that was developed based on the literature review and the study objectives. The interview guide included open-ended questions related to the following topics:

- Participants' roles and responsibilities as nursing technicians or pharmacy technicians.
- Participants' perceptions of the similarities and differences between their roles and those of other technicians.
- Participants' experiences of collaborating with other technicians and healthcare professionals.
- Factors that facilitate or hinder effective collaboration between nursing technicians and pharmacy technicians.
- The impact of organizational culture and support on the collaborative practices of nursing technicians and pharmacy technicians.
- Participants' perceived need and opportunities for interprofessional education and training.

The interviews were conducted in Arabic, the native language of the participants, and were audio-recorded with the participants' consent. The interviews lasted approximately 30-60 minutes and were conducted in a private and quiet location, either in-person or via telephone, depending on the participant's preference and availability.

### **3.4 Data Analysis**

The audio-recorded interviews were transcribed verbatim and translated into English for analysis. Thematic analysis was used to identify patterns and themes in the data, following the six-phase approach described by Braun and Clarke (2006). The analysis process involved the following steps:

1. Familiarization with the data: The transcripts were read and re-read to gain an overall understanding of the content.

2. Generating initial codes: The data were systematically coded by identifying and labeling meaningful segments of text that were relevant to the research question.
3. Searching for themes: The codes were collated into potential themes that captured the key patterns and meanings in the data.
4. Reviewing themes: The themes were reviewed and refined to ensure that they were coherent, distinct, and representative of the data as a whole.
5. Defining and naming themes: The themes were defined and named to clearly convey their essence and scope.
6. Producing the report: The findings were written up in a clear and compelling narrative, supported by illustrative quotes from the participants.

The analysis was conducted using NVivo 12 software, which facilitated the organization and coding of the data. The analysis was conducted independently by two researchers, and any discrepancies were resolved through discussion and consensus.

### 3.5 Trustworthiness

Several strategies were used to enhance the trustworthiness of the study, based on the criteria of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985):

- **Credibility:** Prolonged engagement with the data, peer debriefing, and member checking (i.e., sharing the findings with a subset of participants for feedback and validation) were used to ensure that the findings accurately represented the participants' perceptions and experiences.
- **Transferability:** Thick descriptions of the study context, participants, and findings were provided to allow readers to assess the applicability of the findings to other settings.
- **Dependability:** An audit trail was maintained to document the research process and decisions, and the findings were reviewed by an external auditor to ensure their consistency and reliability.
- **Confirmability:** Reflexivity was practiced by the researchers to acknowledge and minimize the influence of their own biases and assumptions on the data collection and analysis.

## 4. Results

The thematic analysis of the interview data revealed four main themes related to the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia: (1) the importance of clear role definitions and communication, (2) the benefits and challenges of collaboration, (3) the impact of organizational culture and support, and (4) the need for interprofessional education and training.

### 4.1 Theme 1: The Importance of Clear Role Definitions and Communication

Participants emphasized the importance of having clear and distinct roles and responsibilities as nursing technicians and pharmacy technicians, while also recognizing the need for effective communication and coordination between them. Nursing technicians described their main roles as assisting nurses with patient care activities, such as taking vital signs, administering medications, and documenting patient information. Pharmacy technicians, on the other hand, described their main roles as assisting pharmacists with medication dispensing, inventory management, and patient education.

*"My main role as a nursing technician is to assist the nurses with patient care, like taking vital signs, giving medications, and documenting in the patient's chart. We work under the supervision of the nurses and follow their instructions." (Nursing Technician 3)*

*"As a pharmacy technician, my main responsibilities are to help the pharmacist with dispensing medications, managing inventory, and sometimes educating patients about their medications. We make sure that the right medication is given to the right patient at the right time." (Pharmacy Technician 7)*

Participants also highlighted the importance of effective communication and coordination between nursing technicians and pharmacy technicians, especially when it comes to medication management. They emphasized the need for clear and accurate communication of medication orders, dosages, and administration instructions to ensure patient safety and avoid errors.

*"Communication is key between nursing technicians and pharmacy technicians. We need to make sure that we are on the same page when it comes to the patient's medications, like the dosage, route, and frequency. Any miscommunication can lead to serious errors and harm to the patient." (Nursing Technician 9)*

*"We have to work closely with the nursing technicians to ensure that the medications are administered correctly and on time. If there are any changes or discrepancies in the medication orders, we need to clarify them with the nursing staff before dispensing the medications." (Pharmacy Technician 11)*

#### 4.2 Theme 2: The Benefits and Challenges of Collaboration

Participants identified several benefits of collaboration between nursing technicians and pharmacy technicians, including improved patient safety, increased efficiency, and better patient outcomes. They described how collaboration can help prevent medication errors, reduce duplication of efforts, and ensure continuity of care.

*"When nursing technicians and pharmacy technicians work together, it helps prevent mistakes and errors in medication administration. We double-check each other's work and make sure that the right medication is given to the right patient at the right time." (Nursing Technician 6)*

*"Collaboration between nursing technicians and pharmacy technicians can help speed up the medication process and reduce delays in patient care. If we communicate and coordinate effectively, we can get the medications to the patients faster and more efficiently." (Pharmacy Technician 2)*

However, participants also identified several challenges and barriers to effective collaboration between nursing technicians and pharmacy technicians, including role ambiguity, power imbalances, lack of trust and respect, and communication breakdowns. They described how these factors can lead to conflicts, errors, and suboptimal patient care.

*"Sometimes there is confusion about who is responsible for what when it comes to medication management. If the roles and responsibilities are not clearly defined, it can lead to duplication of efforts or things falling through the cracks." (Nursing Technician 12)*

*"There can be a power imbalance between nursing technicians and pharmacy technicians, especially if one group feels like they are more important or have more authority than the other. This can create tension and hinder collaboration." (Pharmacy Technician 8)*

*"Trust and respect are important for collaboration. If nursing technicians and pharmacy technicians don't trust each other or respect each other's expertise, it can lead to conflicts and communication breakdowns." (Nursing Technician 5)*

#### 4.3 Theme 3: The Impact of Organizational Culture and Support

Participants highlighted the influence of organizational culture and support on their ability to collaborate effectively as nursing technicians and pharmacy technicians. They described how factors such as management support, resource availability, and communication channels can facilitate or hinder collaboration.

*"The support and encouragement of our managers and supervisors is important for collaboration. If they promote teamwork and provide us with the resources and tools we need, it makes it easier for us to work together effectively." (Nursing Technician 1)*

*"Having good communication channels and systems in place, like electronic health records and medication administration records, can facilitate collaboration between nursing technicians and pharmacy technicians. It helps ensure that everyone has access to the same information and can communicate more easily." (Pharmacy Technician 10)*

Participants also described how a lack of organizational support and resources can create barriers to collaboration and negatively impact patient care.

*"If we don't have enough staff or resources, it can make it difficult to collaborate effectively. We may be too busy or overwhelmed to communicate and coordinate with each other, which can lead to errors and delays in patient care." (Nursing Technician 8)*

*"If the organization doesn't prioritize or value collaboration, it can create a culture where everyone works in silos and doesn't see the importance of working together. This can lead to fragmented and suboptimal patient care." (Pharmacy Technician 4)*

#### 4.4 Theme 4: The Need for Interprofessional Education and Training

Participants expressed a need and desire for more interprofessional education and training opportunities to enhance their collaborative skills and understanding of each other's roles. They described how education and training can help bridge the gaps between nursing technicians and pharmacy technicians and promote more effective teamwork.

*"We need more education and training on how to work together effectively as a team. It would be helpful to learn more about each other's roles and responsibilities, and how we can communicate and collaborate better." (Nursing Technician 10)*

*"Joint training sessions or workshops for nursing technicians and pharmacy technicians could be beneficial. It would give us a chance to learn from each other and practice our collaboration skills in a safe and supportive environment." (Pharmacy Technician 6)*

Participants also suggested that interprofessional education and training should start early in their careers, such as during their vocational training programs, to lay the foundation for collaboration.

*"Collaboration should be emphasized and taught from the beginning of our training as nursing technicians and pharmacy technicians. If we learn how to work together and communicate effectively from the start, it will become a natural part of our practice."* (Nursing Technician 2)

*"Our vocational training programs should include more opportunities for interprofessional learning and interaction. It would help us build relationships and trust with each other before we start working in the real world."* (Pharmacy Technician 12)

**Table 1. Demographic characteristics of participants (N=24)**

Characteristic	Nursing Technicians (n=12)	Pharmacy Technicians (n=12)
Gender		
- Male	8 (66.7%)	7 (58.3%)
- Female	4 (33.3%)	5 (41.7%)
Age (years)		
- 20-29	3 (25.0%)	4 (33.3%)
- 30-39	6 (50.0%)	5 (41.7%)
- 40-49	2 (16.7%)	2 (16.7%)
- 50-59	1 (8.3%)	1 (8.3%)
Work experience (years)		
- 1-5	4 (33.3%)	5 (41.7%)
- 6-10	5 (41.7%)	4 (33.3%)
- 11-15	2 (16.7%)	2 (16.7%)
- 16-20	1 (8.3%)	1 (8.3%)
Work setting		
- Hospital	8 (66.7%)	6 (50.0%)
- Primary healthcare center	3 (25.0%)	2 (16.7%)
- Community pharmacy	1 (8.3%)	4 (33.3%)

**Table 2. Main themes and sub-themes**

Main Themes	Sub-themes
1. The importance of clear role definitions and communication	- Distinct roles and responsibilities of nursing and pharmacy technicians - Need for effective communication and coordination
2. The benefits and challenges of collaboration	- Improved patient safety, efficiency, and outcomes - Role ambiguity, power imbalances, lack of trust and respect
3. The impact of organizational culture and support	- Management support, resource availability, communication channels - Lack of organizational support and resources as barriers to collaboration
4. The need for interprofessional education and training	- Desire for more interprofessional education and training opportunities - Importance of starting interprofessional education early in career

## 5. Discussion

This qualitative study explored the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia. The findings highlight the importance of clear role definitions and communication, the benefits and challenges of collaboration, the impact of organizational culture and support, and the need for interprofessional education and training.

The importance of clear role definitions and communication, as emphasized by the participants in this study, is consistent with previous research on interprofessional collaboration in healthcare (Reeves et al., 2010). Studies have shown that clarifying roles and responsibilities and promoting effective communication are essential for successful collaboration between healthcare professionals (Suter et al., 2009). In the context of nursing technicians and

pharmacy technicians, clear role definitions and communication can help ensure that medication management and patient care are coordinated and efficient (Desselle et al., 2020).

The benefits and challenges of collaboration identified by the participants in this study are also supported by the literature on interprofessional collaboration in healthcare (Zwarenstein et al., 2009). Studies have shown that collaboration between healthcare professionals can improve patient safety, increase efficiency, and enhance patient outcomes (World Health Organization, 2010). However, studies have also identified several barriers to effective collaboration, such as role ambiguity, power imbalances, lack of trust and respect, and communication breakdowns (Reeves et al., 2010). These barriers can hinder the ability of nursing technicians and pharmacy technicians to work together effectively and provide optimal patient care (Desselle et al., 2020).

The impact of organizational culture and support on collaboration, as highlighted by the participants in this study, is also consistent with previous research on interprofessional collaboration in healthcare (San Martín-Rodríguez et al., 2005). Studies have shown that organizational factors, such as management support, resource availability, and communication channels, can facilitate or hinder collaboration between healthcare professionals (Suter et al., 2009). In the context of nursing technicians and pharmacy technicians, a supportive organizational culture and adequate resources can create an environment that promotes and sustains collaboration (Alkhateeb et al., 2016).

The need for interprofessional education and training, as expressed by the participants in this study, is also supported by the literature on interprofessional collaboration in healthcare (Reeves et al., 2016). Studies have shown that interprofessional education and training can enhance the collaborative skills and attitudes of healthcare professionals and improve patient outcomes (World Health Organization, 2010). In the context of nursing technicians and pharmacy technicians, interprofessional education and training can help bridge the gaps in understanding and communication between these two groups and promote more effective teamwork (Desselle et al., 2020).

### **5.1 Implications for Practice and Policy**

The findings of this study have several implications for practice and policy related to the role boundaries and collaborative practices of nursing technicians and pharmacy technicians in Saudi Arabia. First, the findings suggest that healthcare organizations should strive to clarify the roles and responsibilities of nursing technicians and pharmacy technicians and promote effective communication and coordination between them. This can be achieved through job descriptions, standard operating procedures, and communication protocols that clearly delineate the scope of practice and expectations for each group (Alkhateeb et al., 2016).

Second, the findings highlight the need for healthcare organizations to create a supportive culture and provide adequate resources for collaboration between nursing technicians and pharmacy technicians. This can include providing opportunities for joint meetings, case conferences, and quality improvement initiatives, as well as investing in technology and systems that facilitate communication and information sharing (Desselle et al., 2020).

Third, the findings underscore the importance of interprofessional education and training for nursing technicians and pharmacy technicians, both during their vocational training programs and throughout their careers. Healthcare organizations and educational institutions should work together to develop and implement curricula and training programs that promote interprofessional learning and collaboration (Reeves et al., 2016). This can include joint classroom sessions, simulation exercises, and clinical rotations that allow nursing technicians and pharmacy technicians to learn with and from each other (World Health Organization, 2010).

Finally, the findings suggest that policymakers and regulators in Saudi Arabia should consider ways to support and promote collaboration between nursing technicians and pharmacy technicians. This can include developing national guidelines and standards for interprofessional collaboration in healthcare, as well as providing funding and incentives for healthcare organizations to implement collaborative practices (Alkhateeb et al., 2016). Policymakers can also work with educational institutions and professional associations to ensure that interprofessional education and training are integrated into the curricula and continuing education requirements for nursing technicians and pharmacy technicians (Desselle et al., 2020).

### **5.2 Limitations and Future Research**

This study has several limitations that should be acknowledged. First, the study was conducted in a specific geographic location (Hafr Al-Batin) and with a relatively small sample size (24 participants), which may limit the transferability of the findings to other settings and populations. Future research should include larger and more diverse samples of nursing technicians and pharmacy technicians from different regions of Saudi Arabia and other countries.

Second, the study relied on self-reported data from interviews, which may be subject to social desirability bias and recall bias. Future research could use other data collection methods, such as observation, document analysis, or surveys, to triangulate the findings and provide a more comprehensive understanding of the phenomenon.

Third, the study focused on the perceptions and experiences of nursing technicians and pharmacy technicians, but did not include the perspectives of other healthcare professionals, such as nurses, pharmacists, or physicians. Future

research could explore the perceptions and experiences of other healthcare professionals regarding the role boundaries and collaborative practices of nursing technicians and pharmacy technicians, as well as the impact of these practices on patient care and outcomes.

Finally, the study was exploratory and descriptive in nature and did not examine the effectiveness or outcomes of different collaborative practices or interventions. Future research could use experimental or quasi-experimental designs to evaluate the impact of different strategies and interventions for promoting collaboration between nursing technicians and pharmacy technicians, such as interprofessional education and training programs, communication protocols, or technology-assisted collaboration tools.

## 6. Conclusion

This qualitative study provides valuable insights into the perceptions of nursing technicians and pharmacy technicians regarding their role boundaries and collaborative practices in Hafr Al-Batin, Saudi Arabia. The findings highlight the importance of clear role definitions and communication, the benefits and challenges of collaboration, the impact of organizational culture and support, and the need for interprofessional education and training.

The study underscores the need for healthcare organizations and policymakers in Saudi Arabia to support and promote collaboration between nursing technicians and pharmacy technicians, through clear job descriptions, standard operating procedures, communication protocols, and interprofessional education and training programs. By doing so, they can create a culture of collaboration that enhances patient safety, increases efficiency, and improves patient outcomes.

As healthcare becomes increasingly complex and specialized, it is essential for different healthcare professionals to work together effectively and efficiently to provide high-quality, patient-centered care. Nursing technicians and pharmacy technicians are important members of the healthcare team, and their collaboration is crucial for ensuring the safe and effective management of medications and the continuity of patient care. By understanding and addressing the factors that influence their role boundaries and collaborative practices, healthcare organizations and policymakers can create a more collaborative and integrated healthcare system that benefits patients, providers, and society as a whole.

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