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RESEARCH ARTICLE

COMPETENCY MODEL FOR ALLIED HEALTH MANAGER – AN INTERCONNECTED NATURE

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ABSTRACT

OBJECTIVE:

This paper presents management competencies required for Allied Health Managers (AHMs).

METHODS:

An exploratory mixed-method study using a quantitative survey questionnaire followed by a series of qualitative semi-structured interviews was employed for this research. Descriptive statistics were used to analyse the quantitative data, and thematic analysis was used to extract relevant data from the transcripts.

SETTINGS:

The study was undertaken in five acute hospitals within one of the largest metropolitan Local Health Districts in New South Wales, Australia. A total of 29 surveys were completed and sixteen AHMs and deputy AHMs were interviewed.

RESULTS:

Thirty-one competencies were identified as essential for AHMs and they were categorised into core, meta and managerial competencies. There is a layered, hierarchical and interconnected relationship between the three categories. The core and meta competencies form the foundation for the mobilisation and application of those managerial skills and knowledge. This relationship forms the key features of the "Interconnected Nature of Allied Health Manager Competency Model" (The Model).

CONCLUSION:

This paper presents the competencies required for AHMs and their interconnected relationship. This resulted in the creation of the Model. These findings address a knowledge gap in succession and development planning for AHMs. At a practice level, this research finding can be used in mentoring and coaching AHMs in the workplace. At an educational level, this can be used as a tool in teaching at the postgraduate level for AHMs.

KEYWORDS

competency, managers, allied health, health professionals

INTRODUCTION

Allied Health (AH) professionals are university trained and professionally or scientifically qualified in the AH field [1]. Some common AH professionals (AHPs) employed in acute hospitals are dietitians, physiotherapists and social workers. AHPs have been identified as a critical component in strengthening the health care provision in Australia [2]. The AH workforce has grown significantly in the last few decades. In Australia, AH workers showed a 67% growth between 2013 to 2022 and the highest growth in full-time equivalent rate compared to medical, nursing and dental workforces [3]. This growth is contributed to by various factors. First, health workforce shortages have been identified as an ongoing challenge for healthcare organisations internationally [4]. To address this shortage, there is a shift involving multidisciplinary teams (MDT) where various components of the patient care journey are shared between doctors, nurses and AH. For example, social workers focus on the welfare aspect of the care; whereas doctors focus on medical intervention. This is similar to how various AH professions were initially introduced; their roles were created to take over the tasks that were traditionally completed by doctors and nurses to address the workforce shortage [1]. Second, AH is being used to address increasing healthcare costs as there is strong evidence that AH interventions are cost-saving, effective and patient-centred, such as in the area of cancer [5]. Third, there is a shift in focus to chronic disease management, which leads to the increased demand for professionals specialising in lifestyle and behavioural changes, such as dietitians and exercise physiologists [1]. Lastly, due to the advancements in medical technology, new professions are being created, e.g. sonographers [1]. However, despite significant growth in workforce numbers and an increased awareness of the AH role, there is relatively little research on the management of the AH workforce. The purpose of this paper is to present a unique competency model for managers of the AH group within an acute Australian healthcare setting.

Two contexts influence how Allied Health Managers (AHMs) work within a hospital setting. First, AHPs often work within an environment of medical [6] and nursing [7] dominance. This dominance may impact AHMs' ability to exercise power in such an environment to ensure their department is adequately resourced [8]. Second, AHMs carry a hybrid role where they have both professional (clinician) and managerial responsibilities [9]. This hybrid-professional-manager (HPM) role provides several benefits to healthcare organisations as compared with a generic health service manager (HSM). Their ability to navigate between the clinical and managerial world, using their clinical knowledge to facilitate decision-making impacting on both clinical safety, financial performance and obtaining buy-in from clinicians [10]. However, there are challenges to the role where HPMs need to balance prioritising organisational goals with the care of their patients [11]. AHMs share similar ethical dilemmas as doctor managers [12], such as managing the complex relationships between their managerial and clinical patient care decisions. However, due to their perceived lower hierarchical position within the healthcare system, it appears AHMs adapt to the HPM role with a positive, realistic and flexible perspective [9]. This highlights the question of what competencies they possess to manage the challenges of working within medical and nursing dominance, but also to develop a positive sense of being an HPM.

Competency is an outcome-based measure of skills, knowledge and attitudes, and is important for assessing an individual's performance [13]. It continues to be a relevant tool to measure HSMs' performance [14]. Competent HSMs play an important role in ensuring their services run effectively in this rapidly and continually changing health care system [15]. Competency is a viable tool for organisations to identify and develop staff capabilities and measure their performance [16]. Therefore, identifying what constitutes a competent HSM is essential. Common HSM competencies include knowledge of the healthcare system, communication skills and interpersonal/relationship management [17].

Since health care is dynamic and AH continues to evolve as a recognised professional group, a more contemporary investigation of the AHM-specific competency model is warranted to reflect the uniqueness of their role. Current competency models for AHMs are discipline-specific [18] rather than AHMs as a collective group. This impacts on health services' ability to provide consistent training and succession planning for AHMs. This paper aims to fill the gap of what those effective leadership attributes are, especially for those working at the frontline managerial positions, rather than

those at the strategic leadership positions. The purpose of this paper is to address this critical question for managers in AH – what competencies are required for AHMs?

METHOD

This paper reports findings from an exploratory mixed-method study using a quantitative survey questionnaire followed by a series of qualitative semi-structured interviews [19]. The study was conducted in a large local health district (LHD) in New South Wales, Australia. The study LHD has more than one million residents and 48% of the population speaks a language other than English at home and is serviced by approximately 1900 AH staff [20, 21]. The AHMs this research focused on are those who worked in the five acute hospitals in this LHD, led and managed their professional discipline group and operated under the Director of the AH organisational structure [22]. The AH disciplines included in this study were Dietetics, Speech Pathology, Physiotherapy, Occupational Therapy and Social Work. The study population consisted of senior AH clinicians, AH managers and AH directors. The Directors of AH assisted with circulating the information about the study to relevant managers.

QUANTITATIVE COMPONENT

The quantitative component consisted of a survey purposely designed for this research. To create this survey, existing publications on management and leadership competencies models were reviewed and mapped. One hundred and eighty-one individual competency statements were identified [19]. Key knowledge, skills, abilities and personal characteristics were selected based on relevancy to the tasks and roles of AHMs and consensus among the research team. Wordings with situational meanings were chosen for each characteristic to increase readability. A total of 38 competency items have been identified and categorised under three domains: self-awareness and self-management (n=13), social awareness and relationship building (n=18) and technical knowledge and skill (n=7). The participants were asked to rate the importance of the competency to the success of AHMs based on the rating of essential, beneficial, useful and not required. To obtain feedback from both the supervisor and staff of the AHMs, AH Directors and senior AH team leaders were also invited to complete the survey. Twenty-nine surveys were completed and there was representation from all disciplines and hospitals. There is no published data on the number of AH senior clinicians employed in this LHD; hence the total population size and response rate cannot be identified for this exploratory study. Table 1 presents the roles and primary workplace of the participants in the quantitative study. Descriptive statistics were used to analyse the data using IBM SPSS Data Access Pack (version 23). Statistically significant difference was categorised when two-sided p-value was <0.05. The result of the survey questionnaire was used to develop the question guide for the semi-structured interviews.

TABLE 1 ROLES AND PRIMARY WORKPLACE DEMOGRAPHICS OF THE PARTICIPANTS IN THE QUANTITATIVE STUDY.

	Hospital 1	Hospital 2	Hospital 3	Hospital 4	Hospital 5	Total
AH Director	1	0	2	0	4	**7**
AHM/ Deputy AHM	2	2	4	1	1	**10**
AH Team Leader	0	0	1	0	6	**7**
AH Senior Clinician	0	0	2	0	3	**5**
Total	**3**	**2**	**9**	**1**	**14**	**29**

QUALITATIVE COMPONENT

Semi-structured interviews were used to confirm, reject and further explore the competency list created from the quantitative study. To elicit unidentified themes, the interviewees were asked to reflect on their own experiences or observations of an excellent AHM and describe the attributes that made them outstanding. The qualitative study population consisted of 35 AHMs and deputy AHMs employed across five hospitals within the five disciplines. Sixteen (16)

AHMs and deputy AHMs participated in the semi-structured interviews and there were representations from all AH disciplines and hospitals. Table 2 shows the demographic characteristics of the participants in the qualitative study. Concept saturation was reached at interview number 14. Thematic analysis was used to analyse the data from semi-structured interviews using NVivo version 11.4 (QSR International, Melbourne, Vic., Australia, 2016). The transcripts were examined, followed by codes being identified and finally grouped under themes [23].

TABLE 2 DEMOGRAPHICS OF THE PARTICIPANTS IN THE QUALITATIVE STUDY.

	Sex		Years in management*			Role		
Disciplines	**Male**	**Female**	**< 2 years**	**3-5 years**	**>10 years**	**Manager**	**Deputy**	**Total**
Dietetics		4	2	1	1	3	1	**4**
Occupational Therapy	2	1	2		1	3		**3**
Physiotherapy	3	1	2	2		4		**4**
Speech Pathology		3	2		1	3		**3**
Social Work	1	1	1		1	1	1	**2**
Total	**6**	**10**	**9**	**3**	**4**	**14**	**2**	**16**

* None of the respondents had management experience between 6-10 years

The research was approved by the Human Research and Ethics Committee of the Human Research and Ethics Committee of the South Western Sydney Local Health District (LNR/16/LPOOL/203) and endorsed by Western Sydney University (RH 11762).

RESULTS

QUANTITATIVE RESULTS

Table 3 shows the essential competencies rated by the respondents in the survey questionnaire. Of the 38 competencies, 15 were rated by more than 80% of the participants as essential. The results showed there was a higher percentage of self-awareness and self-management competencies (77%) rated as essential. None of the technical skills and knowledge competencies were rated as essential by more than 80% of the respondents.

TABLE 3 ESSENTIAL COMPETENCIES RATED BY PARTICIPANTS IN QUANTITATIVE SURVEYS

Domain	Competencies	Number	Percentage
Self-awareness and self-management skills (n=13)	Be flexible to overcome obstacles	26	89.7%
	Communicate honestly with all staff	29	100%
	Display integrity despite being criticized	28	96.6%
	Obtain feedback from staff	23	79.3%
	Take responsibility and accountability of own performance	27	93.1%
	Take responsibility and accountability of department performance	25	86.2%
	Contribute to debates without being emotional	22	75.9%
	Aware of own emotions and the impact on others	24	82.8%

	Aware of own limitations	24	82.8%
	Seek assistance for own limitations	24	82.8%
Social awareness and relationship-building skills (n=18)	Create a supportive workplace environment	26	89.7%
	Being visible to the team	24	82.8%
	Communicate clearly at all levels	27	93.1%
	Provide clear expectations and boundaries to staff	26	89.7%
	Manage poor performance	26	89.7%

QUALITATIVE RESULTS

Table 4 presents the 31 competencies and the associated quotes generated from the semi-structured interviews. They are then further categorised as core competency, meta-competency and managerial skills competency.

TABLE 4 COMPETENCIES FOR ALLIED HEALTH MANAGERS

Domains	Competencies	Quote summary points
Core Competency	Practice Ethically	"Working with integrity …… important for interaction" (*Participant* 2)
	Courage	"Courage is probably a word that I would put it in (the competency list)" (*Participant* 12)
	Genuine & Authentic	"Good leadership is being genuine with [everyone]……." (*Participant* 8)
Meta-Competency	Visionary	"You look for opportunities to make a …. bigger community wide change." (*Participant* 15)
	Influential	She creates rapport …… and creates influence." (*Participant* 13)
	Passionate	"Passionate… about what we do" (*Participant* 7)
	Adaptable	"She finds a way that she can work with people." (*Participant* 9)
	Action-focused	"They crosscheck everything ...... before making the decision." (*Participant* 14)
	Self-awareness	"They try to keep [their emotions] in check." (*Participant* 9)
	Reflective	"Self-reflection was really valuable in identifying …. the blind spot you have." (*Participant* 14)
	Self-management (including Resilience)	"If there's something that bothers me ……, I [just] move on" (*Participant* 9)
	Realistic and Objective	"[When faced with too much work], …… I don't resent it that much anymore." (*Participant* 12)

	Persona	Various individual characteristics were described by the respondents, including • "To remain calm and you can look at a [big] picture." (*Participant* 2) • "You need to have an above average smile and, an above average handshake." (*Participant* 16) • "Empathy and compassion are essential qualities for a leader." (*Participant* 4)
	Assertive	"You should listen to everyone with respect and advocate for your staff and for your service." (*Participant 14)*
	Confident	"Different scenarios, …… helps to build your confidence and be able to deal with [different situations]." (*Participant* 9)
Managerial Skill Competency	Leadership	"You need to be clear as to where you want to go. …… Lead the way." (*Participant* 4)
	Change management	"Change is actually handed down and [our role is to] make the implementation work for my department." (*Participant* 8)
	Communication	"The ability to modify our communication according to the medical priority ……" (*Participant* 2)
	Buffering	"Middle managers who survive the pressure, …… they become a buffer between the organisational pressures and their department service." (*Participant* 14)
	Consultative	"It's part of our training to work collaboratively." (*Participant* 2)
	Collaboration and negotiation	"You're facing the prospect or the need to negotiate, discuss and explain some of the different decisions." (*Participant* 1)
	Coaching	"A manager taking ownership and wanting to develop, train and mentor your staff is really important." (*Participant* 1)
	Delegation	"Obviously we need to delegate work and jobs" (*Participant* 6)
	Talent management	"It's important for leaders to identify talent and to nurture those talents for future leadership capacity." (*Participant* 4)

	Lead positive workplace culture	"A culture where everyone treats everybody with respect, ……it's created by and filtered through the manager." (*Participant 6*)
	Operational, including financial management	"If you can't manage your budget, you can't use it to argue for your [service]……. This is important in allied health." (*Participant 9*)
	Complaint/Conflict management	"Confident with saying what people didn't want to hear (managing conflict), and … without being offended that would probably be important" (*Participant 3*)
	Analytical	"Part of the skill set is to be analytical." (*Participant 15*)
	Prioritisations	"You have to prioritise …… keeps changing depending on what the urgency is." (*Participant 1*)
	Organisation	"As a manager …… it's very important to stay organised." (*Participant 16*)
	Knowledgeable	"You are coming with that broader knowledge of the organisation …… how the broader system works." (*Participant 15*)

These 31 competencies were categorised into three groups based on their relationship with each other. Core competency (Core) refers to those innate characteristics that are essential but may not be learnt. Meta-competency (Meta) refers to those characteristics that are ambiguous and difficult to measure and observe. Managerial skills competency (Managerial) refers to those observable skills and behaviours. The Core and Meta are categorised as those person-centric characteristics that are not related to a measurable skillset or knowledge. However, they form the foundation for the mobilisation and application of skills and knowledge (Managerial). Table 5 presents examples of quotes that reflect the relationship between individual competencies.

TABLE 5 RELATIONSHIP BETWEEN COMPETENCIES

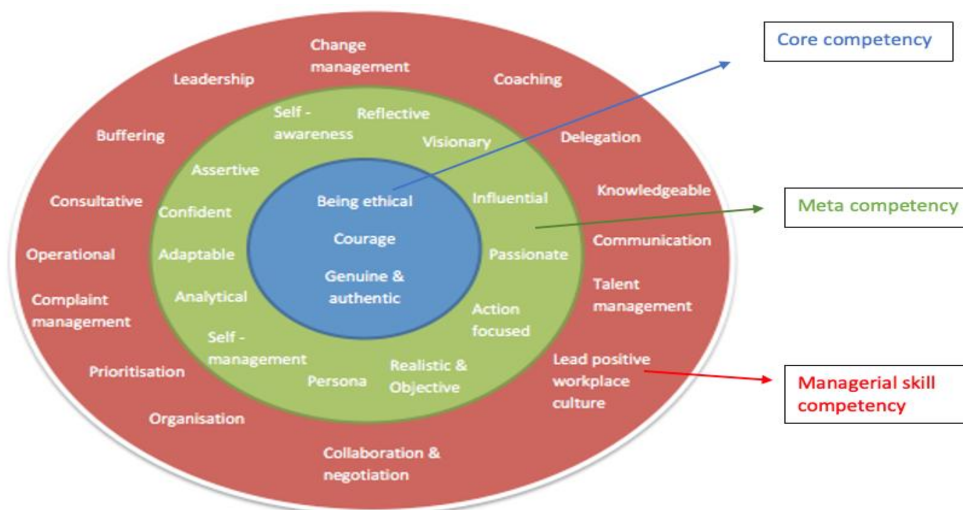
Quotes	Competencies relationship
Being able to talk in language to the next level up (*Participant 7*)	Meta: Adaptable Managerial: Communication Managers need to be adaptable in their communication approach with all levels in the organisation
Comes down to empathy …… and trying to understand the other, …… being simple but straight forward (*Participant 4*)	Meta: Empathy Managerial: Communication Managers need to be empathetic to understand others' situation when communicating and interacting with them

Having the courage and the resilience, being confident and having the strategies and experience to do some of these (managing complaint of poor staff performance). So, it is not just one element. (*Participant 1*)	Core: Courage + Practice Ethically Meta: Confident + Analytical Managerial: Complaint/Conflict Management When managing conflict, managers need to have courage and resilience to confront the situation; and at the same time, they need to have analytical skills to identify the best strategy to address the conflict, find a solution that is ethically best for patients and department and have the confidence to execute.
Sometimes people are not going to like you and you're going to be the bearer of bad news …… you have to have a certain amount of courage. (*Participant 12*)	Core: Courage Managerial: Collaboration/ Negotiation A Manager needs to have courage to share the bad news, listen to others' opinions openly and work through a mutually agreed solution
Leadership … you look for opportunity to make changes …… something you can do with you own organisation. (*Participant 15*)	Meta: Visionary + Action-focused Managerial: Leadership To lead, managers need to have vision to see opportunity and the ability to implement any changes.
Part of the skill set (for performance management) is …… analytical and be able to really look at …. what is the issue and how you are going to attack (the issue). (*Participant 15*)	Meta: Analytical Managerial: Talent Management To support staff growth and manage poor performance, managers need to have good analytical skill to identify strengths and weaknesses of a staff. So they can support their staff in the productive way.

DISCUSSION

This paper identifies competencies required for AHMs. Thirty-one individual competencies were identified and are presented in the Interconnect Nature of Allied Health Manager Competency Model below (Figure 1). Some of the competencies identified align with existing competency models for HSMs, such as leadership, communication and change management [24, 25]. However, the model presents the unique hierarchical relationship between the competencies as shown in Table 5. Instead of viewing competencies as isolated characteristics, this paper highlights the complex layered relationship between competencies.

FIGURE 1. INTERCONNECTED NATURE OF ALLIED HEALTH MANAGER COMPETENCY MODEL



A key part of the Model is illustrated by three layers of competency: core competency, meta-competency and managerial skill competency. The understanding of core competency is of particular importance. Attributes, including 'practice ethically', being 'courageous' and 'genuine and authentic', are essential in ensuring an ethical service is being delivered. These three qualities form the basis of the development of the rest of the competencies. In health, resource allocation is often where ethical dilemmas occur. For example, when facing financial constraints, HSMs are required to make difficult decisions to cut services. A recent study conducted in Australia explored doctors' values and ethical commitments in macro-allocation. Their participants identified that personal ethics, including taking responsibility, persistence, patience and loyalty to a cause, were the foundation of their decision-making in resource allocation [26].

Building on this concept is a hierarchy of importance of meta-competency and managerial skills competency, as these individual competencies are interrelated. Extending Mintzberg's theory [27] core competency does not just influence approaches to work. They form the foundation on how someone utilises their skills and knowledge and ultimately performs tasks. Courage, part of core competency, is the linkage path from thought to action, which can be broken down into five stages [28]. Harris suggested that courage is required to transition through the different stages/steps of the decision-making model, i.e. values, commitment, interpretation, intention and action. Having the courage to act is particularly important when facing role conflicts and ethical dilemmas. For example, when AHMs face a budget-deciding dilemma impacting patient care, especially in situations where the organisational goal (for example, containing cost by reducing staffing) does not align with their professional values (for example, providing patient care based on evidence-based guidelines). AHMs require courage to apply their values (i.e. ensuring the highest quality of patient care being provided and adequate staffing) with the responsibility and commitment to the organisation (i.e., hospital priority of reducing overall length of stay and containing budget) in managing the situation. Courage is also needed to analyse the situation (for example, the impact of cutting or not cutting services) based on all the available information. Courage enables AHMs to rationalise their decision for the intended solution. Finally, the AHM draws on their courage to execute the solution/action despite possible push-back from executives, staff or community. Therefore, courage is an important competency for AHMs throughout the decision-making and task execution process when facing ethical dilemmas and challenges, especially under new situations and contexts.

Boyatzis proposed that unconscious disposition influences an individual's values and subsequently impacts the application of their soft and hard skills [29]. This paper suggests that core competency is similar to unconscious disposition. Meta-competency and managerial skills competency are similar to soft and hard skills. This research expands and explains the complex relationship between individual competencies. Although it is important to understand individual competency, the Model shows the interconnected relationship between individual competencies. Therefore, it is critical for AHMs to have the skill to know when and how to apply these competencies under different situations.

The critical point for AHMs is applying those skills in an environment where they have limited power or control. Due to their perceived low hierarchical status in the health care system, certain competencies, such as persona and action-focused, are particularly important. First, ‘persona’ is a competency worth mentioning. It has been described as “a social role played by the user when interacting in a specific context”, which “may be a set of expectations that the society places on the user” [30]. The ability to “act” in this social role is essential in building allies, especially with doctors or nurses. Hence, it may be helpful for AHMs to have the ability to draw on a ‘persona’ that is appropriate for the context and people they interact with, especially when lobbying for resources or negotiating with dominant counterparts. Second, ‘action-focused’ is categorised as a meta-competency related to one’s approach to work. AHPs and their managers constantly compete for resources and need to act on opportunities when they occur [1]. Therefore, being able to respond quickly, act fast and seize opportunities is essential. In addition, AHMs need to be ‘action-focused’ as they are the “go-between”, i.e. playing a bridging role linking staff and senior management, daily operations and organisational strategic directions [10]. Therefore, the ability to act promptly in following up with feedback and requests from both the executives and staff is critical for their knowledge broker role.

The Model provides a framework for understanding the role of AHMs and the competencies required. The Model highlights core competencies, such as courage, being an essential competency for AHMs. Courage is required from the time presented with a challenge to the moment of executing an action. It is important for AHMs to be aware of the critical nature of this competency, and effort should be invested in building that courage. This model also demonstrates the intricate relationship between individual competencies. It is imperative for AHMs to understand that possessing the skill, knowledge and attributes does not necessarily lead them to master the role. The critical component is to be able to combine those competencies based on the context of the situation. By highlighting this complexity, this encourages AHMs to reflect deeply on each encounter and view competency as a dynamic concept rather than a fixed behaviour. This ultimately helps them to gain insight into the best way in developing those competencies. The Model is also built on the context where AHMs perceive their role as being in a lower hierarchical position within the healthcare system. This provides a unique enquiry into the impact of medical and nursing dominance on the competency of other health professions. This leads to the identification of a rather unique competency, that is persona. Being in a less powerful position, AHMs require support from the doctors and nurses to build their influence. This is an exceptionally important finding as AHMs, especially newly appointed managers, may not be aware of the importance of acting in a certain “persona” to gain buy-in from the doctors and nurses they work with. This buy-in may support them in lobbying for their department resources.

CONCLUSION

This paper presents a competency model for AHMs as a collective group in acute hospital settings, named Interconnected Nature of Allied Health Manager Competency Model (the Model). It advocates that competencies are not just isolated characteristics; they have an interconnected relationship with hierarchical importance. The strength of this paper is the visual presentation of the interconnected relationship between each competency required for AHMs. This model provides AHMs and their managers with insight into what such competencies are and the complexity of their development. This leads to the proposition that implementing competency training and assessment for AHMs is a complex process.

This model addresses an important gap in research specific to AH management competencies. A strength of this paper is the comprehensive presentation of the competencies required for AHMs to manage challenges within the healthcare system. Additionally, by providing an understanding of competencies for this collective group, the Model provides a resource for succession and development planning for a growing AH workforce. It provides insight into understanding competencies for AHMs and their interconnected relationship. This will assist in assessing and developing AHMs.

Future research efforts should focus on how to further develop these competencies, including identifying their behavioural descriptors; this will assist in operationalising the competency model. At a practice level, this research finding can be used

in mentoring and coaching for AHMs in the workplace. At an educational level, it can be used in teaching AHMs at a postgraduate level. In addition, this paper highlights how hierarchical status within an organisation impacts the competencies required for AHMs. This relationship, therefore, could be applied to other HSMs in similar positions, where dominance and hierarchical relationships exist between professional groups.

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