

## ‘Going the extra mile’: Supervisors’ perspectives on what makes a ‘good’ intern

M de Villiers,<sup>1</sup> MB ChB, MFamMed, FCFP (SA), PhD; B van Heerden,<sup>2</sup> MB ChB, MSc, MMed (Int);  
S van Schalkwyk,<sup>3</sup> BA, BA Hons, MPhil, PhD

<sup>1</sup> Division of Family Medicine and Primary Care, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

<sup>2</sup> MB ChB Unit, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

<sup>3</sup> Centre for Health Professions Education, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

Corresponding author: M de Villiers (mrdv@sun.ac.za)

**Background.** Much has been published on whether newly graduated doctors are ready for practice, seeking to understand how to better prepare graduates for the workplace. Most studies focus on undergraduate education as preparation for internship by investigating knowledge and skills in relation to clinical proficiencies. The conversion from medical student to internship, however, is influenced not only by medical competencies, but also by personal characteristics and organisational skills. Most research focuses largely on the interns’ own perceptions of their preparation. Supervisors who work closely with interns could therefore present alternative perspectives.

**Objectives.** To explore the views of medical intern supervisors on the internship training context, as well as their perspectives on attributes that would help an intern to function optimally in the public health sector in South Africa (SA). This article intends to extend our current understanding of what contributes to a successful internship by including the views of internship supervisors.

**Methods.** Twenty-seven semi-structured interviews were held with medical intern supervisors in 7 of the 9 provinces of SA. The data were thematically analysed and reported using an existing framework, the Work Readiness Scale.

**Results.** The intern supervisors indicated that interns were challenged by the transition from student to doctor, having to adapt to a new environment, work long hours and deal with a large workload. Clinical competencies, as well as attributes related to organisational acumen, social intelligence and personal characteristics, were identified as being important to prepare interns for the workplace. Diligence, reliability, self-discipline and a willingness to work (‘go the extra mile’) emerged as key for a ‘good’ intern. The importance of organisational skills such as triage, prioritisation and participation was foregrounded, as were social skills such as teamwork and adaptability.

**Conclusions.** This article contributes to our understanding of what makes a successful medical internship by exploring the previously uncanvassed views of intern supervisors who are working at the coalface in the public health sector. It is envisaged that this work will stimulate debate among the medical fraternity on how best to prepare interns for the realities of the workplace. Educational institutions, health services and interns themselves need to take ownership of how to instil, develop and support these important attributes.

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Are new doctors prepared for internship? While successful graduation suggests that they have the requisite clinical competence, we could question the extent to which this positions them to be ‘good’ interns. Much has been published in the international literature on whether newly graduated doctors are ready for practice, seeking to understand how to better prepare graduates for the workplace.<sup>[1]</sup> In South Africa (SA), several studies have explored this issue.<sup>[2-7]</sup> Ninety-one percent of interns in a cohort study indicated that they were able to cope with internship, suggesting that they were sufficiently prepared for its demands.<sup>[2]</sup> Generally, medical graduates thought that they had been well prepared for most mainstream clinical activities, but acknowledged that they were less well prepared in some areas, such as pharmacology, medicolegal work and non-clinical roles in internship.<sup>[3]</sup> In terms of procedures, interns again felt confident to perform most of these, but did not feel ready to perform circumcisions, episiotomies, appendectomies and assisted deliveries.<sup>[4,5]</sup> Despite most interns feeling well prepared, critical gaps in paediatrics, orthopaedics and obstetrics have been identified, as well as a need for additional training in ophthalmology, dermatology and otorhinolaryngology.<sup>[6,7]</sup> All these studies have made recommendations regarding a change in curricula and approaches to improve medical graduates’ readiness for practice.

There are two gaps in this research. Firstly, while it is known that the conversion to internship is influenced not only by clinical competencies but also by other aspects, such as personal characteristics and organisational skills,<sup>[8]</sup> studies focusing on undergraduate education as preparation for internship investigate mostly knowledge and skills in relation to clinical proficiencies.<sup>[1,9]</sup> Furthermore, the Health Professions Council of South Africa (HPCSA) approved core competencies for a medical student on the threshold of internship. These include, in addition to the role of healthcare practitioner, roles as a professional, communicator, collaborator, leader and manager, health advocate and scholar.<sup>[10,11]</sup> It is important to determine how new interns perform in terms of this broader set of competencies. Secondly, most studies focus largely on the interns’ own perceptions of their preparation. The views of other stakeholders may provide alternative perspectives.<sup>[1,3]</sup> Intern supervisors, registered medical practitioners with at least 3 years’ experience in a particular clinical domain, work closely with interns and are therefore in a good position to perhaps present such alternative views.<sup>[12]</sup>

The challenges facing medical graduates when entering internship have been well described in the *SAMJ*.<sup>[2,12,13]</sup> These include long hours of work, heavy workload, limited supervision and stress. In 2017, there were 3 796 medical intern posts in public healthcare facilities

accredited by the HPCSA (HPCSA – personal communication, 27 June 2017). Rotations ranging from 1 to 4 months in 8 clinical domains are completed during internship.<sup>[14,15]</sup> Medical internship in SA is thus a fairly extensive enterprise, in which high stakes are involved for many role players. The aim of this study was to explore the views of a subset of these role players, the medical intern supervisors, on the internship training context as well as their perspectives on attributes that would help an intern to function optimally in the public health sector in SA. This article intends to extend our current understanding of what contributes to a successful internship by including the views of internship supervisors.

## Methods

This study was nested within a 5-year longitudinal cohort study that investigated the establishment of the Ukwanda Rural Clinical School (URCS) at Stellenbosch University and its effect on various role players, including graduates, interns, intern supervisors and the community.<sup>[16]</sup> The intern supervisor study set out to explore the nature of the internship training context and what supervisors would perceive as a good intern. The overarching longitudinal study was set in an interpretive paradigm.<sup>[17]</sup> For the intern supervisors, the researchers similarly used an explorative approach. The author team consisted of a family physician, a medical training programme director and an educationalist. None of the authors knew the intern supervisors who participated in the study.

Purposive sampling was done. Sites where there were medical graduates in their first year of internship, who had completed their final year at URCS, were selected based on location to ensure a spread across SA. All of the URCS graduates at these sites were invited to participate. In addition, graduates who had followed the traditional final-year rotation at the tertiary hospital, and who were completing their internship at the same selected sites, were invited to participate. All those who agreed were interviewed. The clinical supervisors for these interns formed the sample for this study. The intern supervisors also supervised interns who qualified from other universities.

Fourteen semi-structured interviews were conducted with intern supervisors in 2014 and 13 in 2015; 10 supervisors were female and 17 were male. On average, they supervised groups of 8 interns (range 1 - 15), who had graduated from a number of different universities. The intern supervisors had an average of 7.5 years' experience of supervising interns (range 1 - 30 years). The supervisors comprised heads of department, consultants, a clinical manager, registrars, medical officers and a community service doctor. These supervisors were based at 15 hospitals in 7 of the 9 provinces of SA, which represented a range of HPCSA-accredited intern training facilities from large central academic hospitals to smaller regional health facilities, some in semi-rural areas. The intern supervisors worked in 6 of the 8 intern rotation domains (Table 1).

**Table 1. Internship rotation supervisors interviewed**

Discipline	Length of rotation, months	Supervisors interviewed, <i>n</i>
Anaesthesiology	2	3
Family medicine	3	4
Internal medicine	4	8
Obstetrics and gynaecology	4	3
Orthopaedics	2	0
Paediatrics	4	3
Psychiatry	1	0
Surgery	4	6
Total		27

In most cases, face-to-face interviews were conducted in English with intern supervisors at hospitals where the interns were working. Telephonic interviews were held when the individual was not available in person during the time that the interviewer visited the particular site. The interviews were conducted by a trained independent interviewer, were of 30 - 60 minutes' duration and were audio recorded and transcribed.

Thematic analysis was conducted following the 6 steps described by Braun and Clarke.<sup>[18]</sup> The authors read the interviews several times to familiarise themselves with the data. Initial manual coding was done, adding codes that would allow key points in the data to be gathered. Notes were then compared and similar codes were grouped into categories and themes by reaching consensus through discussion. During the iterative analysis regarding what comprises a good intern, attempts to organise the data proved complex, as there were overlaps and the categories lent themselves to differing individual interpretations. Therefore, an existing framework, i.e. the Work Readiness Scale (WRS), as developed by Caballero *et al.*<sup>[19]</sup> and applied to the health professions by Walker *et al.*,<sup>[20]</sup> was identified to organise the categories in the results relating to the attributes of a good intern. Illustrative quotes were identified from the data.

Ethical approval was obtained from Stellenbosch University's Health Research Ethics Committee (ref. no. HREC N12/03/014). The intern supervisors signed written informed consent forms.

## Results

The results are reported according to two overarching foci, i.e. (i) the context of internship training; and (ii) what comprises a good intern within this context.

### The context of internship training

The intern supervisors believed that some of the first-year interns experienced the transition from student to doctor as challenging. The interns had to apply theory to practice, take personal responsibility for patient care and adapt to a new environment. They also had to work long hours and deal with a heavy workload. The supervisors alluded to factors that helped to enhance preparedness to deal with these challenges.

### Transition from student to doctor

The intern supervisors (interviewees) described the transition from student to doctor as the most significant challenge for first-year interns, as they had to apply their theoretical knowledge in clinical practice. One of them described it as follows: 'I think the transition for them is actually going from actually being a student and looking at the books and learning the knowledge that they've got, to actually going to a patient and actually taking responsibility for assessing and managing a patient' (IS\_WR02\_2015).

In addition, assuming personal responsibility for patient care for the first time proved to be demanding, a realisation reflected on as follows: 'The most difficult thing is now you are on your own. You know you are an intern and you are supposed to work under supervision, but there are some decisions you need to make. As a student, I don't want to use that word, who cares? The responsibility is not on you. If you don't do well, the patient is going to die. It's scary somehow' (IS\_WR04\_2015).

The supervisors indicated that more hands-on clinical experience and responsibility for patients as part of a team during undergraduate training helped interns to overcome this transition: 'I think ones where their undergraduate programme puts more focus on them actually running their own patients and being more part of the unit as opposed to just attending tutorials and that sort of thing, and

where they are really made to be part of the unit and they have to take responsibility' (IS\_TGB01\_2014).

**Dealing with the heavy workload and long hours**

The interviewees identified the heavy workload and long working hours as difficult for the new interns. They felt, however, that these were the realities of the health services that the interns had to learn to cope with: 'They have got to master the art of working for long hours, sustaining their attention for very long hours' (IS\_LIM01\_2015).

The supervisors were of the opinion that working on call during undergraduate training assisted with internship preparation: 'Probably calls, because I know some universities do expect quite a lot of after-hour work, but in general students don't have to do the same amount of like hours of lack of sleep. So I think in general the transition from being a student to being an intern, it's really the hours of work' (IS\_TGB04\_2015).

**Adjusting to a new environment**

Adjusting to a different health service from where they had been trained, relocating to a new community and making new friends were also difficult for interns, according to the interviewees. Language and cultural differences and getting to know the healthcare team in the new working environment took time to adjust to: 'I think the hardest part is that they have to be used to be doing clinical medicine rather, and to most of them it's a foreign hospital, because we're not always here for their clinical teaching. So the problem is getting used to that' (IS\_WR05\_2015).

The supervisors thought that being exposed to role models and building resilience were factors that were helpful in preparing interns for the world of work: 'So if you have a role model that makes you do that as a young doctor, you are at another level altogether' (IS\_TGB03\_2015). 'So in other words resilience ... maybe actually giving interns quite regular support. In the sense of coaching or groups that are physically there for the interns, where they can be briefed and they can actually feedback on their problems' (IS\_WR02\_2015).

**What comprises a good intern?**

During the interviews, the concept of a good intern was explored. A good intern was seen as someone who could work well within the described internship training context and contribute to safe patient care. The categories generated during the initial coding process were

mapped against the WRS.<sup>[19,20]</sup> The results are reported here using the WRS components, i.e. work competence, organisational acumen, social intelligence and personal characteristics.<sup>[20]</sup>

**Work competence**

Work competence is described as the technical knowledge and skills needed to perform the job at hand, such as technical focus, problem-solving skills, clinical skills, motivation, confidence, responsibility and knowing one's limitations.<sup>[19,20]</sup> Table 2 lists the categories related to work competence mentioned by the intern supervisors, including short illustrative quotes and the interview sources.

**Organisational acumen**

Organisational acumen is described as comprising aspects such as work ethic, knowledge of the working environment (ward, hospital), maturity, organisational awareness and professional development.<sup>[19,20]</sup>

The intern supervisors foregrounded the importance of organisational acumen for a successful intern: 'A good intern has to have very good organisational and people management skills. They have to be able to get the job done, under pressure, and they have to be able to approach their job list in a rational manner. They have to be able to prioritise what needs to be done urgently and what can wait, and they have to have good organisational skills' (IS\_WR01\_2015). Table 3 lists these categories from the data, including illustrative quotes and interview sources.

**Social intelligence**

The social intelligence domain is described as including teamwork, the ability to communicate with a range of coworkers and clients, interpersonal adaptability and conflict management, and asking for help.<sup>[19,20]</sup> Table 4 lists these categories, including relevant quotes from the data and interview sources.

**Personal characteristics**

The personal characteristics domain is deemed to include personal skills, self-knowledge, flexibility, resilience and adaptability.<sup>[19,20]</sup> The intern supervisors indicated that each individual intern came with their own set of characteristics: 'Obviously some people, personalities play a role' (IS\_TGB04\_2015).

For the intern supervisors, the most important attribute of an intern was to be conscientious. A supervisor described this as follows:

**Table 2. Work competence**

Category	Quote	Interview source
Apply knowledge	'You can have certain knowledge but if you can't apply it clinically you can't be confident about it.'	IS_LIM02_2014
Confidence	'They might need a couple of extra weeks of hand holding before they become a little bit more secure.'	IS_TGB04_2015
Assess and manage patients	'They need to be able to approach a patient, take an adequate history, make a differential diagnosis, and then sort of start the appropriate investigations and start emergency treatment.'	IS_WR01_2015
Practical skills	'They tend to have actually done the drips, done the bloods, done the lumbar punctures on actual patients. So when they come here it is not a daunting task for them.'	IS_LIM03_2014
Safe doctor	'Make sure that they are safe doctors that follow protocols.'	IS_TGB03_2015
Empathy	'You've got to have what you call good bedside manners, be empathetic to patients and their relatives.'	IS_LIM01_2014
Caring, kindness and compassion	'She is also quite compassionate, so she knows her patients and she cares about her patients.'	IS_LIM04_2014
Independent decision-making	'That's what you want, you want someone who is independent enough, who can make decisions.'	IS_TGB03_2014

**Table 3. Organisational acumen**

Category	Quote	Interview source
Organisational skills	'An intern with a well sorted out clipboard is a good intern. An intern with a haphazard sort of approach to work is a bad intern.'	IS_WR01_2015
Triage, prioritisation and judgement	'They can sort of triage. They know when a situation is serious, when they should ask for help, and when they should act quickly. It's judgement that is important as well.'	IS_LIM02_2014
Maturity	'I don't know if it's related to where she studied, she is mature as well.'	IS_LIM05_2014
Willingness to work and learn	'Actually just a willingness to work ... the willingness to go home at night, read up on some of the topics ... and the next day they can give you feedback.'	IS_TGB06_2015
Enthusiasm, participation	'The good intern is the intern that shows initiative, that is at work on time, wanting to learn, always there and showing enthusiasm.'	IS_WR03_2014

**Table 4. Social intelligence**

Category	Quote	Interview source
Interpersonal and communication skills	'A good intern is that doctor that is okay, who has good presentability, who has good manners and a good relationship with their colleagues. It's an easy person to communicate with.'	IS_LIM05_2014
Knowing limitations/asking for help	'They're not expected to know everything and do everything. They are here to learn, but they must be able to communicate with their seniors to say okay, no I don't know anymore, please come and help me.'	IS_TGB05_2015
Patient orientated	'So that good [patient] relationship should be very, very okay. You should take you patients first.'	IS_WR04_2015
Teamwork	'We work as a team. Meaning that if the one gets sick, then one of you can say okay I cover their calls.'	IS_LIM05_2014

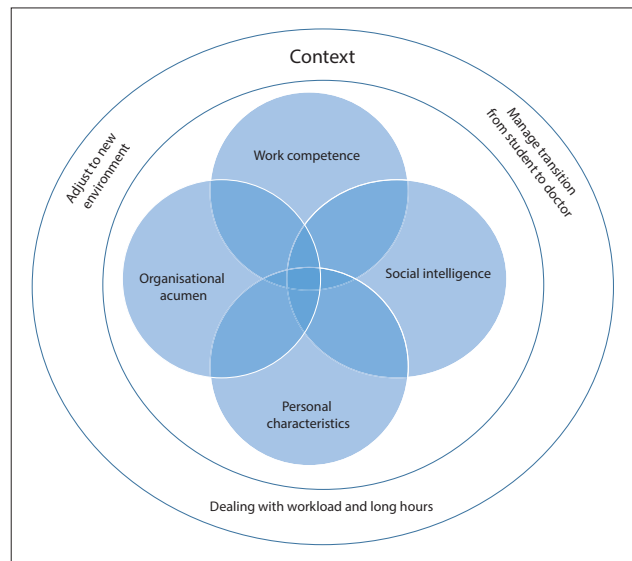
'For me, a good intern, it's not a student that has got straight As from medicine. A good intern is an average guy in medical school, but it is an intern that is conscientious about patient care. For me that is a good intern ... And of course the good intern is the one that shows up for work on time, and leaves whenever it's appropriate to do so' (IS\_TGB03\_2015). Table 5 lists these categories, including quotes from the data and the interview sources.

Fig. 1 demonstrates the interconnectedness between the contextual factors in internship and the attributes needed for an intern to be able to function within this environment.

**Discussion**

This study provides insight into the context awaiting interns on entering the workplace, i.e. long hours of work, heavy workload and taking on responsibilities. These factors have been described before.<sup>[2]</sup> Work environment stressors such as the fast pace of work, poor supervision, work-life balance challenges and constant rotations have also been reported as facing new graduate doctors in Kenya,<sup>[21]</sup> Australia<sup>[22]</sup> and elsewhere.<sup>[1]</sup> In the current study, the ability to adapt to these realities is foregrounded as a crucial attribute for junior doctors. Support for interns helped them to build resilience and to cope with the demands of their first year of internship. Being able to ask for help and knowing how to access support in difficult circumstances are important factors in developing resilience in healthcare workers.<sup>[20]</sup>

The ability to function as a competent healthcare practitioner, described under work competence in our results, is still key to being a good intern. In addition to the medical technical focus, important attributes include critical thinking and problem-solving.<sup>[19]</sup> This study further underlines the importance of the other three work-readiness domains of organisational acumen, social intelligence and personal characteristics in preparing interns for the workplace.



*Fig. 1. Attributes of a 'good' intern.*

Willingness to work or 'going the extra mile' emerged as a key attribute of a good intern, as expressed in the following quote from supervisor WR03\_2014: 'He was really good. He was very enthusiastic. He is quiet and reserved, but he was very diligent and always went the extra mile and we were all very happy with him.' Personal characteristics such as diligence, reliability, dependability, self-discipline and thoroughness were mentioned. In the literature, these have been grouped together under the term 'conscientiousness', which is one of the so-called 'Big Five' primary factors that underlie personality.<sup>[23]</sup> Research further points out that conscientiousness is positively associated with performance in the workplace,<sup>[24]</sup> as well as

**Table 5. Personal characteristics**

Category	Quote	Interview source
Adaptability	'Trying to adapt to that new responsibility.'	IS_LIM01_2014
Self-efficiency	'Arranging their lives and arranging their to-do lists and getting things done efficiently.'	IS_LIM04_2014
Motivation	'Motivation to be a doctor, to sacrifice your time and your life for the patient.'	IS_LIM04_2015
Resourcefulness	'Just think a little bit for themselves.'	IS_TGB03_2014
Manage stress	'Learning to look after themselves as well as managing a stressful job.'	IS_TGB01_2014
Resilience	'Can actually recognise when you are burnt out, and to know what you should do then.'	IS_WR02_2015
Discipline	'The discipline, law-abiding, disciplined guys.'	IS_LIM04_2015
Involvement	'Who doesn't wait for you to invite them to become involved with a patient.'	IS_LIM01_2014
Commitment	'Someone with low absenteeism, who comes in punctual, who does what he is supposed to do.'	IS_LIM01_2015
Dedication	'This dedication, I am going to work, I am not telling lies, I am not running away.'	IS_WR04_2015
Diligence	'I don't expect them to know ... but I expect them to be diligent, punctual.'	IS_TGB01_2014

being positively correlated with preparedness for internship.<sup>[25]</sup> These characteristics can be developed during undergraduate training of medical students through exposure to discipline, diligence and positive role modelling. Moreover, so-called character virtues such as duty, commitment, maturity and resilience are important elements of professionalism that can be regarded as being closely aligned with the dimensions of conscientiousness described above.<sup>[26]</sup>

Of note is that the word 'commitment' is central to the phrasing of all three key competencies under 'Professional role' in the HPCSA framework.<sup>[10]</sup> Enabling competencies include 'appropriate professional behaviour, including honesty, integrity, commitment, compassion, respect for life, accessibility and altruism'. It could be argued that the term commitment perhaps aims to encompass the conscientiousness and duty principles as foregrounded by the results of this study. It is, however, recommended that the specific conscientiousness characteristics be explicitly listed in the competency framework to guide preparation for internship.

A second area of importance emerging from this study, which appears to be lacking from the HPCSA key competency framework, is that of organisational abilities, such as being able to triage, prioritise, take initiative and make sound decisions. Our study and other studies found these so-called non-technical skills to be important for interns entering practice.<sup>[27]</sup> Sein and Tumbo<sup>[28]</sup> indicated that attitude, personality and interpersonal skills were essential to overcome internship challenges.<sup>[28]</sup> More research on these 'peripheral' factors is needed to understand how best to create opportunities for medical students to enhance these skills during undergraduate training, as well as in the support and development of new interns in the workplace.

### Study limitations

The transferability of the findings of this study may be limited, as it was restricted to intern supervisors in the SA public healthcare sector. Although the sample was small, it represented 7 of the 9 provinces in the country and therefore drew on potentially quite different settings. The sampling strategy (following interns who had graduated from one university) could also be a limitation; however, all the supervisors were supervising interns from a number of different universities at the time. The findings could have benefited from a validation of the data back to the supervisors, but that proved logistically challenging.

### Conclusion

This article contributes to the literature by exploring the previously uncanvassed views of intern supervisors, who are working at the coalface in the public health sector, on what makes a good intern – being fully committed to good patient care. In addition to clinical

work competencies, attributes related to organisational acumen, social intelligence and personal characteristics that helped medical interns to function within the internship training context were identified. It is hoped that this can stimulate debate in the medical fraternity on how best to prepare interns for the realities of the workplace and perhaps be more explicitly included in the competency frameworks of training institutions and the HPCSA. Educational institutions, health services and interns need to take ownership of how to instil, develop and support these key attributes.

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**Author contributions.** SvS: principal investigator of the overarching 5-year longitudinal study; BvH and MdV: analysed the intern supervisor interviews (BvH the 2014 dataset and MdV the 2015 dataset); SvS: assisted with the thematic analysis of the data; MdV: wrote the manuscript; and SvS and BvH: contributed to the manuscript through several iterations and approved the final version.

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