Annexure A

In South Africa, the CMSA has adopted the CanMEDS physician competency framework for the training of specialists. The CanMEDS system defines the multiple roles of a specialist and consists of seven main roles (Medical Expert, Scholar, Communicator, Collaborator, Leader, Health Advocate and Professional) together with multiple components that formulate the competences of each major role. However, South African anaesthesiology experts are of the opinion that these seven main roles do not adequately encompass all the roles of local anaesthesiologists and have modified them for local applicability. During this survey, you will be supplied with the modified list of main roles and competences underpinning the functions of a specialist.

Since you have recently qualified as a specialist, you are asked to please consider how prepared you are/confident you are in being able to perform each of the listed meta competences (main roles) and accompanying enabling competences.

Please answer using a 4-point Likert scale as follows:

- 1 completely unprepared in being able to perform this competency
- $2-somewhat \, prepared \, in \, being \, able \, to \, perform \, this \, competency$
- 3 prepared in being able to perform this competency
- 4 completely prepared in being able to perform this competency

Medical Expert

Key competency:

1. Practise medicine within their defined scope of practice and expertise.

Enabling competences:

- 1.1 Demonstrate a commitment to high-quality care of your patients.
- 1.2 Integrate the CanMEDS intrinsic roles (Communicator, Collaborator, Professional, Scholar, Health Advocate and Leader) into your practice of medicine.
- 1.3 Apply knowledge of the clinical and biomedical sciences relevant to your discipline.
- 1.4 Perform appropriately timed clinical assessments with recommendations that are presented in an organised manner.
- 1.5 Carry out professional duties in the face of multiple, competing demands.
- 1.6 Recognise and respond to the complexity, uncertainty and ambiguity inherent in medical practice.

Key competency:

2. Perform a patient-centred clinical assessment and establish a management plan.

Enabling competences:

- 2.1 Prioritise issues to be addressed in a patient encounter.
- 2.2 Elicit a history, perform a physical exam, select appropriate investigations and interpret results for the purpose of diagnosis and management, disease prevention and health promotion.
- 2.3 Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function and palliation.

2.4 Establish a patient-centred management plan.

Key competency:

3. Plan and perform procedures and therapies for the purpose of assessment and/or management.

Enabling competences:

- 3.1 Determine the most appropriate procedures or therapies.
- 3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy.
- 3.3 Prioritise a procedure or therapy, taking into account clinical urgency and available resources.
- 3.4 Perform a procedure in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

Key competency:

4. Establish plans for ongoing care and, when appropriate, timely consultation.

Enabling competences:

4.1 Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment and further consultation.

Key competency:

5. Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety.

Enabling competences:

- 5.1 Recognise and respond to harm from health care delivery, including patient safety incidents.
- 5.2 Adopt strategies that promote patient safety and address human and system factors.
- 5.3 Demonstrate the ability to multitask.

Communicator

Key competency:

1. Establish professional therapeutic relationships with patients and their families.

Enabling competences:

- 1.1 Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterised by empathy, respect and compassion.
- 1.2 Optimise the physical environment for patient comfort, dignity, privacy, engagement and safety.
- 1.3 Recognise when the values, biases or perspectives of patients, physicians or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly.
- 1.4 Respond to a patient's non-verbal behaviours to enhance communication.
- 1.5 Manage disagreements and emotionally charged conversations.
- 1.6 Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances.

Key competency:

2. Elicit and synthesise accurate and relevant information, incorporating the perspectives of patients and their families.

- 2.1 Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information.
- 2.2 Provide a clear structure for and manage the flow of an entire patient encounter.
- 2.3 Seek and synthesise relevant information from other sources, including the patient's family, with the patient's consent.

Key competency:

3. Share health care information and plans with patients and their families.

Enabling competences:

- 3.1 Share information and explanations that are clear, accurate and timely, while checking for patient and family understanding.
- 3.2 Disclose harmful patient safety incidents to patients and their families accurately and appropriately.

Key competency:

4. Engage patients and their families in developing plans that reflect the patient's health care needs and goals.

Enabling competences:

- 4.1 Facilitate discussions with patients and their families in a way that is respectful, non-judgmental and culturally safe.
- 4.2 Use communication skills and strategies that help patients and their families make informed decisions regarding their health.

Key competency:

5. Document and share written and electronic information about the medical encounter to optimise clinical decision-making, patient safety, confidentiality and privacy.

Enabling competences:

- 5.1 Document clinical encounters in an accurate, complete, timely and accessible manner, in compliance with regulatory and legal requirements.
- 5.2 Communicate effectively using a written health record, electronic medical record or other digital technology.
- 5.3 Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding.
- 5.4 Able to communicate effectively with patients, caregivers and families despite language differences.

Collaborator

Key competency:

1. Work effectively with physicians and other colleagues in the health care professions.

Enabling competences:

- 1.1 Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care.
- 1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care.
- 1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions.
- 1.4 Ability to respond to need for emergency involvement outside perioperative domain.

Key competency:

2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences and resolve conflicts.

Enabling competences:

- 2.1 Show respect toward collaborators.
- 2.2 Implement strategies to promote understanding, manage differences and resolve conflicts in a manner that supports a collaborative culture.

Key competency:

3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care.

Enabling competences:

- 3.1 Determine when care should be transferred to another physician or health care professional.
- 3.2 Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting or stage of care.
- 3.3 Awareness of the competency required of the receiving practitioner at hand over of patients.

Leader

Key competency:

1. Contribute to the improvement of health care delivery in teams, organisations and systems.

Enabling competences:

- 1.1 Apply the science of quality improvement to contribute to improving systems of patient care.
- 1.2 Contribute to a culture that promotes patient safety.
- 1.3 Analyse patient safety incidents to enhance systems of care.
- 1.4 Use health informatics to improve the quality of patient care and optimise patient safety.

Key competency:

2. Engage in the stewardship of health care resources.

Enabling competences:

- 2.1 Allocate health care resources for optimal patient care.
- 2.2 Apply evidence and management processes to achieve costappropriate care.

Key competency:

3. Demonstrate leadership in professional practice.

Enabling competences:

- 3.1 Demonstrate leadership skills to enhance health care.
- 3.2 Facilitate change in health care to enhance services and outcomes.

Key competency:

4. Manage career planning, finances and health human resources in a practice.

- 4.1 Set priorities and manage time to integrate practice and personal life.
- 4.2 Manage a career and a practice.
- 4.3 Implement processes to ensure personal practice improve-



Health advocate

Key competency:

1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment.

Enabling competences:

1.1 Incorporate disease prevention, health promotion and health surveillance into interactions with individual patients.

Key competency:

2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner.

Enabling competences:

- 2.1 Possess an in-depth knowledge of global health issues.
- 2.2 Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion and health surveillance activities.
- 2.3 Contribute to a process to improve health in the community or population they serve.
- 2.4 Ensure that all staff (including oneself) in the clinical environment are safe and not at risk with respect to physical or psychological injuries.

Scholar

Key competency:

1. Engage in the continuous enhancement of their professional activities through ongoing learning.

Enabling competences:

- 1.1 Develop, implement, monitor and revise a personal learning plan to enhance professional practice.
- 1.2 Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources.
- 1.3 Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

Key competency:

2. Teach students, residents (trainees), the public and other health care professionals.

Enabling competences:

- 2.1 Recognise the influence of role-modelling and the impact of the formal, informal and hidden curriculum on learners.
- 2.2 Promote a safe learning environment.
- 2.3 Ensure patient safety is maintained when learners are involved.
- 2.4 Plan and deliver a learning activity.
- 2.5 Provide feedback to enhance learning and performance.
- 2.6 Assess and evaluate learners, teachers and programmes in an educationally appropriate manner.

Key competency:

3. Integrate best available evidence into practice.

Enabling competences:

- 3.1 Recognise practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.
- 3.2 Identify, select and navigate pre-appraised resources.
- 3.3 Critically evaluate the integrity, reliability and applicability of health-related research and literature.
- 3.4 Integrate evidence into decision-making in their practice.

Key competency:

4. Contribute to the creation and dissemination of knowledge and practices applicable to health.

Enabling competences:

- 4.1 Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care.
- 4.2 Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations.
- 4.3 Summarise and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry.

Professional

Key competency:

1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards.

Enabling competences:

- 1.1 Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity and maintenance of confidentiality.
- 1.2 Demonstrate a commitment to excellence in all aspects of practice.
- 1.3 Recognise and respond to ethical issues encountered in practice.
- 1.4 Recognise and manage conflicts of interest.
- 1.5 Exhibit professional behaviours in the use of technologyenabled communication.

Key competency:

2. Demonstrate a commitment to society by recognising and responding to societal expectations in health care.

Enabling competences:

- 2.1 Demonstrate accountability to patients, society and the profession by responding to societal expectations of physicians.
- 2.2 Demonstrate a commitment to patient safety and quality improvement.

Key competency:

3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation.

Enabling competences:

- 3.1 Fulfil and adhere to the professional and ethical codes, standards of practice and laws governing practice.
- 3.2 Recognise and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions.

Key competency:

4. Demonstrate a commitment to physician health and well-being to foster optimal patient care.

- 4.1 Exhibit self-awareness and manage influences on personal well-being and professional performance.
- 4.2 Manage personal and professional demands for a sustainable practice throughout the physician life cycle.



- 4.3 Promote a culture that recognises, supports and responds effectively to colleagues in need.
- 4.4 Able to practise efficiently at all times.
- 4.5 Ability to advocate on behalf of the profession to the public to assist in public awareness.
- 4.6 Able to function punctually at all times.

Context awareness

Key competency:

1. Demonstrate the ability to adapt clinical and non-clinical practice to specific scenarios and environments to ensure good outcomes.

Enabling competences:

- 1.1 Ability to perceive, to comprehend the meaning of and to predict the impact of variables in the work environment (situational awareness).
- 1.2 Capacity to be adaptable and creative in solving problems.
- 1.3 Ability to assess capacity and obtain appropriate consent in any given circumstance.
- 1.4 Ability to remain humane in difficult circumstances.

Humaneness

Key competency:

1. Demonstrate the ability to engage with and respond appropriately to patients, colleagues, societies and communities in need with qualities that personify good naturedness, and with sound moral standards.

- 1.1 Awareness of and respect for the impact and sensitivities of race, culture and ethnicity on decision-making and patient management.
- 1.2 Tolerance and the ability to respect diversities in patients, families and colleagues and to function in a non-judgmental manner.
- 1.3 Ability to practise with sound moral standards (honesty, altruism, integrity, humility, commitment, kindness).
- 1.4 Ability to remain calm under pressure.
- 1.5 Ability to manage patients and their families with a caring and empathetic nature.
- 1.6 Ability to promote human welfare and humanitarianism in society and at work.