الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

Geriatric Medicine Fellowship


بسم الله الرحمن الرحيم

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FORWARD

The growing segment of older adults in Saudi Arabia requires the health care system to develop models of care that accommodate their essential medical needs. The fundamental pillar of the development, delivery, and maintenance of healthy aging is a competent geriatrician. The authors of the document are expert leaders in geriatric medicine in Saudi Arabia. Dr. Hashim Balbaid founded the Saudi Geriatric Society (SGS) and was the first president of the SGS. Dr. Sultan Alamri is the current president of the SGS and is an active voice on many public platforms regarding healthy aging for older adults aging. Dr. Walid Alkeridy is an Assistant Professor in the medicine department and currently the deputy of SGS. This document provides the first version of the curriculum of the geriatric medicine fellowship program in Saudi Arabia. This curriculum puts forward a strong foundation for training competent geriatricians, who are capable of both delivering the best care for older Saudi people and becoming health advocates and international leaders in geriatric medicine. It begins with a general introduction to the history of geriatric medicine field development and covers the basic requirements of the Saudi Commission for Health Specialties' accredited fellowship programs. It adapts the widely accepted Canadian Medical Education Directives for Specialists (CanMEDS) competencies to prepare trainees to become experts in delivering the best care for Saudi people.

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INTRODUCTION

1. Context of Practice

The academic field of geriatric medicine was first introduced by Ignatz Leo Nascher. In 1914, he published the first American textbook of geriatric medicine titled "Geriatrics: The diseases of old age and their treatment." In 1948, the United Kingdom recognized geriatric medicine as a specialty and incorporated it into the National Health system.

The field of geriatric medicine is unique in embracing complexity and comprehensiveness as a core approach to understanding and addressing developing adult's needs. The pillars of geriatric medicine are knowledge of gerontology and competency in care across the different stages of older adult development, including the different stages of disease and different health settings. Gerontology is the scientific knowledge related to the biology of aging, which is the basic knowledge foundation of geriatric medicine in health and disease. Gerontology is not limited to the physical aging process, but encompasses knowledge of the mental, psychological, and social aspects of aging.

Life expectancy is increasing globally. The number of people older than 65 is expected to surpass 1.5 billion in 2050. In Saudi Arabia, the older adult population is expected to comprise 25% of the total population by the end of 2050. Moreover, approximately 1.6 million people are expected to be 80 years or older; this represents 4% of the total population. Due to a decrease in the fertility rate and an increase in life expectancy, the population of adults older than 65 will exceed the population of children younger than 5 years old. Although the change in age demographic is a demographic turning point, it comes with significant challenges to health care systems. Chronic disease that disproportionally affects older adults will pose the greatest burden on the current model of healthcare systems.

Geriatricians are well positioned to take on the challenge of managing care to older adults with complex multimorbidity and of addressing the altered dynamics of global health systems. Competent geriatricians contribute to the care of older adults on many fronts and in diverse health care settings. Expert geriatric medicine sub-specialists provide care to acutely ill older adults from the time of their admission until their safe discharge. Geriatricians provide care to their patients at different levels of care, whether acute or sub-acute. Competent geriatricians work efficiently with multidisciplinary teams to develop and implement customized patient-centered care plans. Moreover, geriatricians are vital members of the ambulatory outpatient workforce, ensuring that older adults are receiving the appropriate preventative screening recommendations, providing longitudinal assessments, and connecting vulnerable older adults with essential community services.

In the face of the rapidly growing senior population and changing global demographics, the geriatric medicine specialty is facing enormous challenges to delivering and maintaining the quality service it hopes to provide in a fair and equitable fashion. In Saudi Arabia, the handful of currently practicing geriatricians cannot meet the national demand for health care for older adults. However, through the heroic efforts of the premier Saudi geriatricians led by Dr. Hashim Balbaid, the Saudi Geriatric Society was founded in 2017. Moreover, Dr. Balabaid put forward the first proposal to launch a geriatric medicine fellowship in Saudi Arabia to train the next generation of Saudi geriatricians.

Launching the Saudi geriatric medicine fellowship program through the Saudi Commission for Health Specialties (SCFHS) will be a huge leap towards fulfilling the current and future needs of older people in Saudi Arabia. The Kingdom's 2030 national vision aims to improve the health, wellness, and longevity of Saudi people. The Saudi geriatric medicine fellowship will embrace this aim as a core value and will strive to achieve this goal through professional training of future medical experts who will care for older adults.

ABBREVIATIONS USED IN THIS DOCUMENT

Try to limit the use of abbreviations to the recognized ones, for examples:

Abbreviation	Description
SCFHS	Saudi Commission for Health Specialties
F(1)	(First) year of Fellowship
OSCE	Objective Structured Clinical Examination
OSPE	Objective Structured Practical Examination
Mini-CEX	Mini-Clinical Experience report
CBD	Case-Based Discussion report
CBE	Competency-Based Education
ITER	In-Training Evaluation Report
RTC	Residency Training Committee
CGA	Comprehensive geriatric assessment
LTC	Long Term Care

PROGRAM ENTRY REQUIREMENTS

- Board Certified in internal medicine or family medicine
- Three years or less since passing the board exam
- Younger than 35 years old
- Full time trainee
- Have completed formal residency training in internal medicine or family medicine and be Board certified by SCFHS or its equivalent.

1. Pass the admission examination and/or an interview.
2. Provide three (3) letters of recommendation from consultants with whom he/she has recently worked with for a minimum of six (6) months.
3. Provide written permission from his/her sponsoring institution allowing him/her to participate on a full time basis for the entire period of the Program.
4. Register annually for the Program with the Saudi Commission for Health Specialties.
5. Sign an agreement that he/she will abide by all rules and regulations of the training program and the affiliated institutions.
   - Be available full-time for the training program.

LEARNING AND COMPETENCIES

Geriatric Medicine CanMEDS Competencies:

1. Medical Expert

A medical expert in geriatric medicine will demonstrate all the CanMEDS roles, through the application of gerontology knowledge and by practicing the acquired geriatric clinical skills in providing personalized care for older adults.

1.Deliver best practices in clinical care for older adults.

1.1- Complete a comprehensive consultation in an optimal way and present the suggestions in a clear manner for other health specialists to follow.

1.2- Customize a patient-centered plan of care reflecting patient's values and wishes.

1.3- Manage and prioritize time efficiently, while delivering care in different health care settings.

1.4- Recognize the common ethical issues facing older adults and provide the best recommendations, incorporating knowledge of the local laws and regulations governing older adults' rights and protections.

2.Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and delivering care in an age-friendly manner. See appendix for required topics.

3.Integrates knowledge of biology of aging, age-related changes, effect of age on common chronic conditions, and common geriatric syndromes in formulating and delivering a comprehensive care plan.

4.Provide best practice recommendations for preventive interventions for older adults at different stages.

5.Show ability to communicate with caregiver to provide collateral information and assess caregiver stress and burnout.

6.Demonstrate expert opinion to governmental bodies and courts for medico-legal issues related to age-related older adult abuse, as well as cognitive and mental health disorders.

7.Use all specialized geriatric procedural & cognitive skills in assessing and treating older adults in a proficient manner.

8.Demonstrate the ability to self-reflect and critique personal performance periodically and seek professional support when necessary.

Communicator

Expert geriatrician is capable of building a strong rapport with patients and their family members to acquire the necessary information for providing the best care plan. He/She can document this information in a clear and secure way.

1.Develop expert ability to interact, listen, and communicate with older adults from different backgrounds.

2.Maintain a high degree of professionalism in communication, respecting older adults' religious, social, and cultural backgrounds.

3.Prepare the environment for older adults with age-related sensory impairment to communicate and express themselves in the clearest way possible.

4.Demonstrate the ability to use non-pharmacological techniques and communication skills to address older adults with disruptive behavior in a safe and efficient manner.

5.Document the essential historical, physical, functional, and psychosocial information relevant to the patient's presentation.

6.Formulate a clear and comprehensive care plan representing the patient's values and wishes.

7.Apply the closed loop communication method during hand-over of care to another college or health care entity.

8.Record and save medical files in a secure way to protect patients' rights to privacy and personal information security.

9.Share patients' records and medical encounter documentation in written or electronic format, as required.

Collaborator

A competent geriatrician thrives in a multidisciplinary team setting and shows a high level of collaboration with other health care workers to deliver a comprehensive care plan.

1.Work effectively with allied health team members to provide a multifaceted plan.

2.Appreciate the vital role of allied health care (i.e., social worker, occupational health therapist, pharmacist, nurse, and others) and facilitate the implementation of their plan.

3.Demonstrate the highest level of professionalism and respect while communicating with colleagues and allied health care workers.

4.Employ the highest standards of professionalism in the face of conflicts and apply conflict resolution skills to manage appropriately a highly charged situation.

5.Maintain clear documentation to facilitate safe transfer of care within the same team or any other disposition.

Leader

As a leader, a geriatric medicine expert will promote the implementation of healthy aging national policies and advocate for the creation and maintenance of age-friendly health care settings.

1.Work efficiently in a sophisticated health care system.

2.Develop, support, and improve policies and processes focused on the wellness and health of older adults.

3.Illustrate the importance of specialized geriatric units as innovative models to provide optimal care for older adults.

3.1Illustrate the vital role specialized geriatric units play in the sustainability of health care systems.

4.Demonstrate leadership in managing geriatric medicine services in diverse settings (i.e., long-term facilities, acute care, ambulatory care, and patients' homes)

5.Manage and allocate health care resources in efficient manner.

Health Advocate

Globally, there is a dire need for geriatricians to match the health care demands of aging societies. Throughout their professional career, geriatricians play a pivotal role in advocating for older adults' rights and wellness and striving to fight against ageism in any form. As a health advocate, geriatricians support establishing an age-friendly health care system by supporting national health reforms and public health awareness.

1.Show leadership the importance of geriatric medicine practice for improving health outcomes for older adults.

2.Participate in public health awareness campaigns promoting wellness and health of older adults.

3.Advocate for patients in all health care settings to get the appropriate resources and supplies to improve their health, quality of life, and basic functions.

4.Identify barriers preventing older adults from receiving their health care rights. Advocate on their behalf to secure them.

5.Recognize societal priorities of healthy aging and work with leadership to implement them.

Scholar

The dynamic nature of growing evidence in general and geriatric medicine necessitates that a contemporary geriatrician commits to continuous professional development throughout their professional life.

1.Participate in annual continuous improvement program focused on geriatric medicine updates.

2.Demonstrate proficiency in training and teaching junior colleagues and students both basic and advanced topics in geriatric medicine.

3.Engage in quality improvement projects to improve the quality of care for older adults.

4.Participate in developing the field of geriatric medicine through proactive engagement in research.

5.Identify gaps in optimal resources for older adults with special needs and propose practical initiatives to fill them.

Professional

A committed professional geriatrician practices medicine with the highest ethical standards, respecting all people's background, race, or religion. He/She adheres to all the professional regulations that govern their practice.

1.Practice medicine according to the laws and regulations of local and national standards.

2.Demonstrate commitment to society and patients by practicing best care standards in clinical, academic, and research settings.

3.Practice evidence-based medicine and adhere to professional guidelines and recommendations for best practices.

4.Manage patients and colleagues with respect, dignity, and appreciation of their cultural and religious backgrounds.

5.Recognize regulations of public safety and adhere to the laws and regulation of compulsory reporting.

6.Respond to unethical behavior or unprofessional conduct in any clinical, academic, or research setting.

2. Program Durations

The geriatric medicine fellowship program is a full two-year program.

3. Program Rotations

Training Year	Mandatory core rotations		Selective rotations	
	Rotation name	Duration (months)	Rotation name	Duration
F1	•Inpatient Geriatric medicine •Ambulatory Geriatric medicine •Geriatric Psychiatry •Long-Term Care	3 2 3 1	• Stroke /movement disorder/Neurology •Palliative	2 2
F2	•Inpatient Geriatric medicine •Ambulatory Geriatric medicine •Long-Term Care •Home health Care •Rehab	2 2 2 1 1	•Neuroimaging •Stroke /movement disorder/Neurology •Palliative medicine	1 2 2

The table below covers the rotations for the two-year program, including a one-month vacation each year.

1. Mandatory core rotation: Set of rotations that represent program core component and are mandatory.
2. Elective rotation: Set of rotations that are related to the specialty, as determined by the scientific council/committee, and the trainee is required to do some of them.
3. Selective rotation: Set of other rotations that is selected by trainee (directed by mentor/program director) to enhance competency acquisition of the specialty.

4. Mapping of learning objectives and competency roles to program rotations:

This section aims to match the competencies and objectives related to each rotation. Trainees and trainers should work together to achieve these objectives during teaching and formative assessment. Expectations should evolve as the training level progresses (training stage; milestones).

Rotation Setting	Training stage	Training years	Rotation duration (Months/ weeks/ block)	Rotation specific objectives (SMART)* (To describe the purposed outcomes in the form of Knowledge, Skills and Attitude KSA)	Competency roles
In-patient Geriatric medicine	Junior & Senior level	1	3 months	1. Develop expertise in managing older adults in acute/ sub-acute hospital settings	ME, COM, COL, P
		2	2 months	2. Master performing a Comprehensive Geriatric Assessment (CGA)	ME, COM, COL, P, HA, L
				3. Demonstrate the ability to collaborate with multidisciplinary team members	ME, COM, COL, P
				4. Demonstrate proficiency in managing the common geriatric syndromes	ME, COM, COL, P
				5. Demonstrate ability to manage the common acute medical conditions in older adults, such as delirium, falls, hospital-acquired conditions, etc.	ME, COM, COL, P
				6. Show the ability to prioritize medical problems in multi-morbid patients	ME, COM, COL, P
				7. Develop effective communication skills in working within a large multidisciplinary team	ME, COM, COL, P, HA

Ambulatory Geriatric medicine				8. Formulate a customized plan of care that represents patient's values and wishes	ME, COM, COL, P, HA
				9. Assess caregivers for stress and burnout using validated tools	ME, COM, HA, L
				10. Show ability to assess patient function using standardized measurements, such as basic activities of daily living (BADLs) and instrumental activities of daily living (IADLs)	ME, COM, COL, P
				11. Demonstrate expertise in discussing and documenting advanced care plan and goals of care	ME, COM, COL, P, HA
				1. 12. Formulate a customized plan of care that represents patient's values and wishes	ME, COM, HA
	Senior	3	4 months	1. Provide best practice recommendations for preventive interventions for older adults at different stages.	ME, COM, COL, P
		4	4 months	2. Master performing a Comprehensive Geriatric Assessment (CGA) in a timely manner	ME, COM, COL, P, HA, L
				3. Demonstrate ability to refer appropriate specialty and collaborate with interdisciplinary team members in the outpatient settings	ME, COM, COL, P
					ME, COM, COL, P

				4. Demonstrate proficiency in managing the common geriatric syndromes	ME, COM, COL, P
				5. Develop expertise in assessing and managing mobility disorders, such as falls and gait disorders	ME, COM, COL, P, HA COM, COL, P, HA
				6. Develop expertise in assessing and managing mood and cognitive disorders	ME, COM, HA, L
				7. Use available community resources to support patients and caregivers	ME, COM, P
				8. Show skills in completing driving assessment tools and reporting, as per laws and regulations	ME, COM, COL, P, HA
				9. Formulate a customized plan of care that represents patient's values and wishes	ME, COM, HA
				10. Assess caregivers for stress and burnout using validated tools	ME, COM, COL, P, HA, L
				11. Show ability to assess patient function using standardized measures, such as BADLs and IADLs	
				12. Demonstrate expertise in discussing and documenting advanced care plan and goals of care	

Rotation Setting	Training stage	Training years	Rotation duration (Months/ weeks/ block)	Rotation specific objectives (SMART)* (To describe the purposed outcomes in the form of Knowledge, Skills and Attitude KSA)	Competency roles
Geriatric Psychiatry	Senior	F2		1. Show adequate skills in assessing and managing mood disorders in older adults	ME, COM, COL, P
				2. Develop the appropriate skills in in assessing and managing behavioral disorders in patients with dementia	ME, COM, COL, P
				3. Develop skills in using validated tools for screening and monitoring cognitive and mood disorders	ME, COM, COL, P
				4. Demonstrate ability to assess and manage late-life psychotic disorders	ME, COM, COL, P
				5. Show expert abilities in using pharmacological and non-pharmacological measures in older adults with behavioral disorders	ME, COM, COL, P
				6. Demonstrate skills in discussing advanced care planning and goals of care with patients and caregivers	ME, COM, COL, P, HA
				7. Recognize the local laws regarding driving safety and reporting of patients with cognitive disorders	ME, COM, COL, P, HA, L

				8. Manage patients at the end stages of major neurocognitive disorders	ME, COM, COL, P
				9. Assess, screen, and report case of older adults abuse, mistreatment, or neglect	ME, COM, COL, HA, L
				10. Assess older adults' capacity to make personal, medical, financial, or housing decisions	ME, COM, COL, P, HA
Long-Term Care (LTC)	Senior	F2		1. Show effective skills in managing chronic medical conditions, such as bed sores, polypharmacy, and feeding disorders	ME, COM, COL, P
				2. Develop expertise in managing older adults in acute/ sub-acute hospital settings	ME, COM, COL, P
				3. Master performing a Comprehensive Geriatric Assessment (CGA)	ME, COM, COL, P
				4. Demonstrate the ability to collaborate with multidisciplinary team members	COM, COL, P, HA
				5. Demonstrate proficiency in managing the common geriatric syndromes in functional dependent older adults	ME, COM, COL, P

				6. Demonstrate ability to manage common acute medical conditions in older adults (i.e., delirium, falls, hospital-acquired conditions commonly faced in LTC facilities)	ME, COM, COL, P
				7. Show the ability to prioritize medical problems in multi-morbid patients	ME, COM, COL, P
				8. Develop effective communication skills in working within a large multidisciplinary team	ME, COM, COL, P, L
				9. Formulate a customized plan of care that represents patient's values and wishes	ME, COM, COL, P, HA
				10. Assess caregivers for stress and burnout using validated tools	ME, COM, COL, P, HA
				11. Show ability to assess patient function using standardized measurements, such as BADLs and IADLs.	ME, COM, COL, P
				12. Demonstrate expertise in discussing and documenting advanced care plan and goals of care	ME, COM, COL, P

Home Health Care	Junior	F1		1. Demonstrate effective skills in applying diagnostic and therapeutic procedures performed at home for older adults (i.e., feeding tubes, Foley catheter management, etc.) 2. Demonstrate skills in managing wounds and using appropriate dressing material 3. Develop effective skills in assessing sick patients and make the appropriate referrals (i.e., hospital, ER, etc.) 4. Use available resources efficiently 5. Master performing a Comprehensive Geriatric Assessment for home-bound patient 6. Demonstrate skills in performing functional and cognitive assessment for home care patients 7. Perform a comprehensive home safety check 8. Demonstrate the ability to collaborate with multidisciplinary team members to optimize patient care 9. Utilize available community resources to support patients and caregivers at home	ME, COM, COL, P ME, COM, COL, HA ME, COM, COL, P COM, COL, HA, L ME, COM, COL, P ME, COM, COL, P COM, COL, P, HA COM, COL, P, HA ME, COM, COL, HA ME, COM, COL, L

				10. Demonstrate expertise in discussing and documenting advanced care plan and goals of care for patients receiving home care services	ME, COM, COL, L
Palliative care	Senior or junior	F1/F2		1. Demonstrate effective skills in palliative care evaluation and assessment, such as pain and psychological symptoms management 2. Assess and manage patients with signs and symptoms of impending death 3. Use pharmacological and non-pharmacological interventions to manage pain and suffering at end of life 4. Provide counseling for grieving families 5. Demonstrate the ability to collaborate with multidisciplinary team members to optimize patient care 6. Demonstrate expertise in discussing goals of care for patients at end of life stage	ME, COM, COL, P ME, COM, COL, P ME, COM, COL, P, HA COM, COL, P, HA ME, COM, COL, P, L ME, COM, COL, P, HA

Rehab rotation	junior	F1		1. Show ability to perform a comprehensive rehabi-li-tation assessment of the patient	ME, COM, P
				2. Recognize the principles of assistive devices, fit-ting canes, and walkers	ME, COM, COL, P
				3. Develop optimal skills in utilizing inpatient or out-pa-tient rehabilitation pro-gram to maximize older adults' function and inde-pendence	ME, COM, COL, P
				4. Demonstrate skills in performing comprehen-sive neurological and musculo-skeletal exam for possible rehabilitation candidates	ME, COM, P ME, COM, COL, P
				5. Show ability to determine rehabilitation candidacy for older adults in all set-tings (i.e., post-acute, home care, post stroke, etc.)	ME, COM, COL, P
				6. Demonstrate ability to collab-orate with multidis-ciplinary team members to create rehabilitation care plan for patient care	ME, COM, COL, P ME, COM, COL, P
				7. Assess medical limitation for moderate or high in-tensity exercise pro-grams	ME, COM, COL, P,HA
				8. Demonstrate advanced skills in assessing mobili-ty, gait, and balance for older adults	ME, COM, COL, P ME, COM, COL, P

Stroke / movement disorder/ Neurology	junior	F1		1. Demonstrate the ability to assess and manage patients in the hyper acute/ acute phase of stroke 2. Ability to obtain comprehensive neurological and cardiovascular history from patients or caregivers 3. Show ability to identify possible pathophysiological mechanism and anatomical side of stroke, based on historical and physical exam findings 4. Show proficient skills in assessing and managing secondary prevention strategies for stroke and transient ischemic attack (TIA) 5. Develop appropriate skills in determining possible rehabilitation needs for patients recovering from stroke 6. Demonstrate skills in assessing and managing neuropsychiatric complications of stroke (i.e., depression, emotional liability, etc.)	ME, COM, COL, HA, L, P ME, COM, COL, P ME, COM, COL, P ME, COM, COL, P ME, COM, COL, P, L ME, COM, COL, P

				7. Show skills in managing patients with movement disorders common in older adults (e.g., Parkinson's disease)	ME, COM, COL, P
				8. Demonstrate ability to discuss goals of care for patients with severe stroke or end stage Parkinson's disease	ME, COM, COL, P, L, HA COM, COL, P, HA
				9. Demonstrate the ability to collaborate with multidisciplinary team members to implement the post-acute stroke care plan	COM, COL, P, HA, L

5. CONTINUUM OF LEARNING

This includes learning that should take place in each key stage of progression within the specialty. Trainees are reminded of the importance of life-long continuous professional development (CPD). Trainees should keep in mind that CPD is needed for every healthcare provider to meet the demands of their vital profession. The following table states how the role is progressively expected to develop throughout junior, senior, and consultant levels of practice.

Specialty General Practice	F1 (Junior Level)	F2 (Senior Level)	Consultant Sub-specialist
Sub- specialty Non-practicing	Dependent/supervised practice	Dependent/supervised practice	Independent practice/provide supervision
Obtain basic health science and foundational level to core discipline knowledge	Obtain fundamental knowledge of gerontology and geriatric syndrome	Apply knowledge of gerontology to provide appropriate clinical care related to common disease in older adults	Acquire advanced and up-to-date knowledge related to geriatric medicine
Internship to the practice of discipline	Apply clinical skills (i.e., physical examination, mobility, and gait assessment), mental status exam, and cognitive assessment to complete a comprehensive geriatric assessment	Analyze and interpret the findings from clinical skills to develop appropriate differential diagnoses and management plan for the patient	Create a customized care plan prioritizing issues according to patient's values and wishes

6. TEACHING METHODS

The teaching process in the postgraduate fellowship training programs is based on the principles of adult learning theory. The trainees feel the importance of learning, playing an active role in learning content, and the process of their own learning. The training programs implement the adult learning concept on each feature of the activities where the residents are responsible for their own learning requirements. Formal training time will include the following three formal teaching activities:

- Program Specific Learning Activities
- Universal topics
- General Learning Opportunities

1.1. Program-Specific learning activities:

The program-specific activities are educational activities that are specifically designed and intended for trainee teaching during their training period. Trainees are required to attend these activities. Non-compliance can result in disciplinary action. It is advisable to link attendance and participation in these activities to the continuous assessment tools (see the formative assessment section below). Program administration should support these activities by providing a protected time for trainees to attend these activities and allow them to participate.

A) Program Academic half-day: Appendix F

Every week, at least 2–4 hours of formal training time (commonly referred to as Academic Half Day or AHD) should be reserved. Formal teaching time is a pre-planned activity, with an assigned tutor, time slot, and venue. Formal teaching time excludes bedside teaching, clinic postings, and similar methods. The academic half day covers the core specialty topics that are determined and approved by the specialty's scientific council, aligned with the specialty-defined competencies and teaching methods. The core specialty topics will ensure that important clinical problems of the specialty are well taught. It is recommended that lectures be conducted in an interactive, case-based discussion format. The learning objectives of each core topic need to be clearly defined. It is preferable to use pre-learning material. Whenever applicable, core specialty topics should include workshops, team-based learning (TBL), and simulation to develop skills in core procedures.

Regional supervisory committees, in coordination with academic and training affairs, program directors, and chief residents, should work together to ensure the planning and implementation of academic activities as indicated in the curriculum. There should be active trainee involvement in the development and delivery of the topics under faculty supervision; the involvement might be in the form of delivery, content development, research, etc. The

supervisor should make sure that the discussion each topic is stratified into the three categories of the learning domain: knowledge, skill, and attitude (see Appendix D for the table of knowledge topic-list). The recommended number of half-days conducted annually is 40 sessions per training academic year, with reserved time for other forms of teaching methods, such as Journal club, clinical, and practical teaching. Through the residency training committee, program directors, and chief residents, in coordination with academic and training affairs and regional supervisory committees, should work together to ensure the planning and implementation of academic activities as indicated in the curriculum. These efforts should aim for the efficient use of available resources and the exchange of expertise

B) Clinical/practical teaching:

This includes courses and workshops (e.g., simulations, standardized patients, and bedside teaching). This will allow each program to describe the required courses or workshops. This includes the objectives of the course or the workshop, the teaching methods, the expected completion time, and the assessment method applied for each activity. It is highly advisable to integrate these activities with formative and relevant assessment tools (e.g., DOPS, mini-CES, Logbook, etc.).

C) Practice-based learning:

Training exposure during bedside, lab, surgery, and other work-related activities represent excellent targets for learning. Trainees are expected to build their capacity for self-directed learning. Furthermore, practice-based learning allows the educator to supervise trainees to become competent in the required practical skills, which ensures fulfilling knowledge, psychomotor, and/or attitude learning domains. Each trainee needs to maintain a logbook documenting the procedures observed, performed under supervision, and performed independently. It would be prudent to determine the minimum number of procedures to be performed before training completion and the minimum number needed to maintain competency after certification.

1.2. Universal Topics

Universal topics are educational activities that are developed by SCFHS and are intended for all specialties. Priority is given to topics that are:

- High value
- Interdisciplinary
- Demonstrative of expertise that might be beyond the availability of the local clinical training sites

Universal topics have been developed by SCFHS and are available via e-learning, with personalized online access for each trainee. Each universal topic will have a self-assessment at the end of the module. As indicated in the "executive policies of continuous assessment and annual promotion," universal topics are a mandatory component of the criteria for the annual promotion of trainees from their current level of training to the subsequent level. Universal topics will be distributed over the entire training period. Please refer to Table 5 5 for the universal topics modules assigned to every training year/program stage.

1.3 General Learning Opportunities:

Formal training time should be supplemented by other practice-based learning (PBL), such as:

- Journal Club

Grand rounds

Fellows in the geriatric medicine are expected to organize and present monthly regional presentations on relevant geriatric medicine topics or updates on recent guideline/ national policy

Quality improvement project

Fellows in the geriatric medicine are expected to complete a quality improvement project by the end of their fellowship. The topic should be relevant to improving the care of older adults in any setting.

Continuous professional activities (CPD) relevant to specialty

Fellows in geriatric medicine are expected to attend one international conference relevant to geriatric medicine OR two local geriatric medicine conference

7. ASSESSMENTS AND EVALUATIONS

1. Purpose of Assessment

Assessment plays a vital role in the success of postgraduate training. Assessment guides trainees and trainers to achieve defined standards, learning outcomes, and competencies. In addition, the assessment will provide feedback to learners and faculty regarding curriculum development, teaching methods, and the learning environment. A reliable and valid assessment is an excellent tool to evaluate the curriculum alignments between the objectives, learning methods, and assessment methods. Finally, assessments assure patients and the public that health professionals are safe and competent to practice.

Assessments can serve the following purposes:

- **Assessment for learning:** Trainers will use information from trainees' performance to inform their learning for improvement. It enables educators to use information about trainees' knowledge, understanding, and skills to provide feedback about learning and steps for improvement.
- **Assessment as learning** involves trainees in the learning process, which enables them to monitor their own progress. Trainees use self-assessment and the educators' feedback to reflect on their progression as it develops and supports trainees' metacognitive skills. Assessment as learning is crucial in helping residents/fellows become life-long learners.
- **Assessment of learning:** Demonstrates achievement of learning. This is a graded assessment and usually counts towards the trainee's end-of -training degree.
- **Feedback and evaluation:** Assessment outcomes represent a quality metric that can improve the learning experience.

Miller's Pyramid of Assessment provides a framework for assessing the trainees' clinical competences, which acts as a road map for the trainers to select the assessment methods to target different clinical competencies including "knows," "knows how," "shows how," and "does."
For the sake of organization, assessment will be further classified into two main categories:
Formative and Summative.

2. Formative Assessment

2.1 General Principles

Trainees, as adult learners, should strive for feedback throughout their journey of competency from "novice" to "mastery." Formative assessment, also referred to as continuous assessment, is the component of assessment that is distributed throughout the academic year aiming primarily to provide trainees with effective feedback. Every two weeks at least one hour should be assigned for trainees to meet with their mentors, in order to review performance reports (e.g., ITER, e-portfolio, mini-CEX, etc.). Input from the overall formative assessment tools will be utilized at the end of the year to make the decision to promote each individual trainee from the current-to-subsequent training level.

- Formative assessment will be defined based on the scientific (council/committee) recommendations (usually updated and announced for each individual program at the start of the academic year). According to the executive policy on continuous assessment (available online: www.scfhs.org), formative assessment will have the following features that will be used based on Miller's pyramid Multisource: a minimum of four tools.
- a. Comprehensive: covering all learning domains (knowledge, skills, and attitude).
- b. Relevant: focusing on workplace-based observations.
- c. Competency-milestone oriented: reflecting trainee's expected competencies that matches the trainee's developmental level.
- Trainees should play an active role in seeking feedback during training. On the other hand, trainers are expected to provide timely and formative assessments. SCFHS will provide an e-portfolio system to enhance communication and analysis of data arising from formative assessment. Trainers and trainees are directed to follow the recommendations of the scientific council regarding the updated forms, frequency, distribution, and deadlines related to the implementation of evaluation forms.

2.2 Formative Assessment Tools

Learning Domain	Formative Assessment Tools	Important details (e.g., frequency, specifications related to the tool)
Knowledge	• Structured Oral Exam (SOE) • Case Based Discussion (CBD)	Complete two CBDs each year. The evaluation should be done by two consultants who are board certified in geriatric medicine, and at least one who is external to the fellow's home base hospital.
Skills	• DOPS: Direct Observation for Procedural Skills • Mini-CEX: mini-Clinical Evaluation Exercise • Research Activities	DOPS: Fellows are expected to run two family meetings independently every year Fellows must complete 4 Mini-CEX per year Fellows are expected to complete one research project during the two years of the fellowship
Attitude	ITER: In-Training Evaluation Report	For every rotation

To achieve unconditional promotion, the candidate must score a minimum "borderline pass" in all five components. The evaluation of each component will be based on the following equation:

percentage	< 50%	50-59.4%	60-69.4%	>70%
Description	Clear fail	Borderline fail	Borderline pass	Clear pass

In some situations, the program director can still recommend the promotion of candidates if the above is not met. For example:

- If the candidate scored "borderline failure" in one or two components (at maximum), and these scores do not belong to the same area of assessment (for example, both borderline failures do not belong to "skills")
- The candidate must have passed all other components and scored a minimum of a clear pass in at least two components.

3. Summative Assessment

3.1 General Principles

Summative assessment is the component that aims to make informed decisions on trainees' competency. In comparison to the formative assessment, the summative assessment does not aim to provide constructive feedback. For further details on this section, please refer to general bylaws and executive policy of assessment (available online: www.scfhs.org). To be eligible for the final exams, a trainee should be granted "Certification of Training-Completion"

3.2 Certification of Training-Completion

To be eligible for final specialty examinations, each trainee is required to obtain a "Certification of Training-Completion." Based on the training bylaws and executive policy (please refer to www.scfhs.org) trainees will be granted "Certification of Training-Completion" once the following criteria are fulfilled:

- Successful completion of all training rotations.
- Completion of training requirements (e.g., logbook, research, others) as outlined in Final In Training Evaluation Report (FITER), which is approved by the scientific committee of the Saudi Geriatric Society.
- Clearance from SCFHS training affairs, which ensures compliance with tuition payment and completion of universal topics.
- Passing first part examination (whenever is applicable)

"Certification of Training-Completion" will be issued and approved by the supervisory committee or its equivalent according to SCFHS policies.

3.3 Final Specialty Examinations for geriatric medicine

- Final written exam: Eligibility must be achieved by acquiring "Certification of Training-Completion."
- The final written exam will be a combination of short essay questions (SEQs) and multiple-choice question (MCQs).
- The final written exam will constitute a maximum of 40% of the total weight of the final assessment.
- The rest of the cumulative weight of assessment will be distributed as per the following:
- 15% on the average of Mini- CEX
- 20% for the total grade of long case-based discussion (5% for each long CBD)
- 25% on the FITER

The final specialty examination is the summative assessment component that grants trainees the specialty's certification. It has two elements:
A) Final clinical/practical exam: Trainees will be required to pass the final written exam to be eligible to sit for the final clinical/practical exam.

Blueprint: Blueprint of the final written and clinical/practical exams:
The content of the following table is for demonstration only; please refer to the most updated version published on the SCFHS website.

Domain	Topic	Percent
Gerontology	Biology of aging	10%
	Physiology of aging	
	Age-related changes	
Functional Assessment and Rehabilitation	Functional assessment for older adults	2.5%
	Cognitive assessment	
	Rehabilitation assessment of older adults	
Research, quality improvement and models in health care	Research designs and research methodologies	2.5%
	Health care models for older adults	
	Quality improvement projects	
Diseases in the Elderly	Cognitive impairment	35%
	Delirium	
	Incontinence	
	Falls	
	Malnutrition	
	Gait disorders	
	Pressure ulcers	
	Sleep disorders	
	Fatigue and dizziness.	
	Frailty	
	Sensory deficits	
	Abuse and mistreatment of older adults	

Diseases in the Elderly	Cardiovascular diseases in older adults	50%
	Respiratory diseases in older adults	
	Neurological diseases in older adults	
	Endocrinological diseases in older adults	
	Gastroenterology diseases in older adults	
	Musculoskeletal diseases in older adults	
	Hematological diseases in older adults	
	Dermatological conditions in older adults	
	Rheumatological diseases in older adults	
	Nephrology diseases in older adults	
	Psychiatric diseases in older adults	
	Ear, nose, and throat diseases in older adults	
	Ophthalmological diseases in older adults	
	Infectious diseases in older adults	
	Palliative and end of life care	

APPENDIX

Appendix A

Junior-level Competency-Metrix: to map Competency, learning domain and Milestones

Training Year level	Competency-Roles (with annotation of learning domains involved: K: knowledge, S: Skills, A: Attitude)	Professional Activities Related to geriatric medicine fellowship					
		Master performing a Comprehensive Geriatric Assessment (CGA)	Complete a cognitive and functional assessment	Preform a comprehensive advanced neurological assessment	Assess patients for gait and balance disorders	Screen for elder abuse and neglect	Recognize common geriatric syndromes
F1	Professional Expert	Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and deliver care in an age-friendly manner KSA	Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and deliver care in an age-friendly manner KSA	Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and deliver care in an age-friendly manner KSA	Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and deliver care in an age-friendly manner KSA	Demonstrate expert opinion to governmental bodies and courts for medico-legal issues related to age-related older adult abuse, cognitive and mental health disorders KSA	Acquire a profound knowledge in gerontology, geriatric medicine clinical skills, and deliver care in an age-friendly manner KSA
	Communicator	Develop expert ability to interact, listen, and communicate with older adults from different backgrounds SA				Develop expert ability to interact, listen, and communicate with older adults from different backgrounds SA	Develop expert ability to interact, listen, and communicate with older adults from different backgrounds SA

	Collaborator	Work effectively with allied health team members to provide a multifaceted plan SA					Work effectively with allied health team members to provide a multifaceted plan SA
	Advocate	Identify barriers preventing older adults from receiving their health care rights; advocate on their behalf to secure them SA				Advocate for patients in all health settings to get the appropriate resources and supplies to improve their health, quality of life, and life functions KSA	Advocate for patients in all health settings to get the appropriate resources and supplies to improve their health, quality of life, and life functions KSA
	Leader	Manage and allocate health care resources in an efficient manner KSA				Manage and allocate health care resources in an efficient manner KSA	Manage and allocate health care resources in an efficient manner KSA

	Scholar					Identify gaps in optimal resources for older adults with special needs and propose practical initiatives to fill them KSA	Identify gaps in optimal resources for older adults with special needs and propose practical initiatives to fill them KSA
	Professional	Manage patients and colleagues with respect, dignity, and appreciation for their cultural and religious backgrounds SA	Manage patients and colleagues with respect, dignity, and appreciation for their cultural and religious backgrounds SA				Manage patients and colleagues with respect, dignity, and appreciation for their cultural and religious backgrounds SA

Appendix B

	Competency-Roles (with annotation of learning domains involved: K: knowledge, S: Skills, A: Attitude)	Professional Activities Related to Specialty					
		Complete a comprehensive geriatric assessment in a timely manner	Run a multi-disciplinary team meeting	Manage geriatric syndromes	Manage acutely confused older adults at different settings	Lead an in-patient team in acute care for the elderly	Conduct a family meeting for seriously ill patient
F2	Professional Expert	Deliver best practices in clinical care for older adults KSA		Use all specialized geriatric procedural & cognitive skills in assessing and treating older adults in proficient manner KSA	Deliver best practices in clinical care for older adults. KSA	Use all specialized geriatric procedural & cognitive skills in assessing and treating older adults in proficient manner KSA	Show ability to communicate with caregiver to provide collateral information and assess the for-caregiver stress and burnout KSA
	Communicator	Demonstrate the highest level of professionalism and respect while communicating with colleagues and allied health care workers KSA	Demonstrate the highest level of professionalism and respect while communicating with colleagues and allied health care workers KSA			Demonstrate the highest level of professionalism and respect while communicating with colleagues and allied health care workers KSA	Develop expert ability to interact, listen, and communicate with older adults from different backgrounds SA

	Collaborator	Work effectively with allied health team members to provide a multifaceted plan SA	Work effectively with allied health team members to provide a multifaceted plan SA			Work effectively with allied health team members to provide a multifaceted plan SA	
	Advocate	Identify barriers preventing older adults from receiving their health care rights and advocate on their behalf to get them SA	Identify barriers preventing older adults from receiving their health care rights and advocate on their behalf to get them SA				Identify barriers preventing older adults from receiving their health care rights and advocate on their behalf to get them SA
	Leader	Manage and allocate health care resources in an efficient manner KSA	Work efficiently in a sophisticated health care system SA			Demonstrate leadership in managing geriatric medicine services in diverse settings (i.e., long-term facilities, acute care, ambulatory care, and patients' home) KSA	Manage and allocate health care resources in an efficient manner KSA

	Scholar	Participate in annual continuous improvement program focused on geriatric medicine updates KA		Participate in annual continuous improvement program focused on geriatric medicine updates KA			
	Professional	Practice evidence-based medicine and adhere to professional guideline recommendations for best practices KSA		Practice evidence-based medicine and adhere to professional guideline recommendations for best practices KSA	Practice evidence-based medicine and adhere to professional guideline recommendations for best practices KSA	Practice evidence-based medicine and adhere to professional guideline recommendations for best practices KSA	

Appendix C

Universal Topics

Each trainee should complete a total of 20 subjects from the universal topic during residency and fellowship training. Please visit the SCFHS for the complete list of universal topics. Here are some of the suggested universal topics for geriatric fellows.

Intent:

These are high value, interdisciplinary topics of the utmost importance to the trainee. The reason for delivering the topics centrally is to ensure that every trainee receives high quality teaching and develops essential core knowledge. These topics are common to all specialties. The topics included here meet one or more of the following criteria:

- Impactful: these are topics that are common or life-threatening
- Interdisciplinary: hence topics that are difficult to teach through a single discipline
- Orphan: topics that are poorly represented in the undergraduate curriculum
- Practical: topics that trainees will encounter in hospital practice

Development and Delivery:

Core topics for the fellowship program curriculum will be developed and delivered centrally by the Commission through an e-learning platform. A set of preliminary learning outcomes for each topic will be developed. Content experts, in collaboration with the central team, may modify the learning outcomes.

These topics will be didactic in nature, with a focus on practical aspects of care. These topics will be more content-heavy than workshops and other planned face-to-face interactive sessions.

The suggested duration of each topic is 1.30 hours.

Assessment:

The topics will be delivered in a modular fashion. At the end of each learning unit, there will be an online formative assessment. After completion of all topics, there will be a combined summative assessment in the form of context-rich MCQ. All trainees must attain minimum competency in the summative assessment. Alternatively, these topics can be assessed in a summative manner along with a specialty examination. Some ideas may include case studies, high-quality images, examples of prescribing drugs in disease states, and internet resources

Module	Subject	Objectives
Module -1 Introduction	• Safe drug prescribing • Hospital-acquired infections • Sepsis; SIRS; DIVC • Antibiotic stewardship • Blood transfusion	Safe drug prescribing: At the end of the Learning Unit, you should be able to • Recognize importance of safe drug prescribing in the healthcare system • Describe the various Adverse Drug Reactions with examples of commonly prescribed drugs that can cause such reactions • Apply principles of drug-drug interactions, drug-disease interactions, and drug-food interactions to common situations • Apply principles of prescribing drugs in special situations, such as renal failure and liver failure • Apply principles of prescribing drugs to the elderly, pediatric patients, and during pregnancy and lactation • Promote evidence-based cost-effective prescribing • Discuss ethical and legal frameworks governing safe-drug prescribing in Saudi Arabia **Hospital Acquired Infections (HAI):** At the end of the Learning Unit, you should be able to: • Discuss the epidemiology of HAI with special reference to Saudi Arabia • Recognize HAI as one of the major emerging threats to healthcare • Identify the common sources and set-ups of HAI • Describe the risk factors of common HAIs, such as ventilator-associated pneumonia, Methicillin-resistant Staphylococcus aureus (MRSA), central line-associated bloodstream infection (CLABSI), Vancomycin Resistant Enterococcus (VRE)

		• Identify the role of healthcare workers in the prevention of HAI • Determine appropriate pharmacological (e.g., selected antibiotic) and non-pharmacological (e.g., removal of indwelling catheter) measures in the treatment of HAI • Propose a plan to prevent HAI in the workplace • • Sepsis, SIRS, DIVC: At the end of the Learning Unit, you should be able to: • Explain the pathogenesis of sepsis, SIRS, and DIVC • Identify patient-related and non-patient related predisposing factors of sepsis, SIRS, and DIVC • Recognize a patient at risk of developing sepsis, SIRS, and DIVC • Describe the complications of sepsis, SIRS, and DIVC • Apply the principles of management of patients with sepsis, SIRS, and DIVC • Describe the prognosis of sepsis, SIRS, and DIVC **Antibiotic Stewardship:** At the end of the Learning Unit, you should be able to: • Recognize antibiotic resistance as one of the most pressing global public health threats • Describe the mechanisms of antibiotic resistance • Determine the appropriate and inappropriate use of antibiotics • Develop a plan for safe and proper antibiotic usage, including right indications, duration, types of antibiotic, and discontinuation. • Appraise the local guidelines in the prevention of antibiotic resistance

		Blood Transfusion: At the end of the Learning Unit, you should be able to: • Review the different components of blood products available for transfusion • Recognize the indications and contra-indications of blood product transfusion • Discuss the benefits, risks, and alternatives to transfusion • Undertake consent for specific blood product transfusions • Perform steps necessary for safe transfusion • Develop understanding of special precautions and procedures necessary during massive transfusions • Recognize transfusion-associated reactions and provide immediate management
Module -2 Cancer	• Oncologic emergencies • Surveillance Follow-up of cancer patients	**Oncologic Emergencies:** At the end of the Learning Unit, you should be able to: • Enumerate important oncologic emergencies encountered both in hospital and ambulatory settings • Discuss the pathogenesis of important oncologic emergencies • Recognize the oncologic emergencies • Institute immediate measures when treating a patient with oncologic emergencies • Counsel the patients in anticipatory manner to recognize and prevent oncologic emergencies

		Surveillance and Follow-Up of Cancer Patients: At the end of the Learning Unit, you should be able to: • Describe the principles of surveillance and follow-up of patients with cancers • Enumerate the surveillance and follow-up plan for common forms of cancer • Describe the role of primary care physicians, family physicians, and others in the surveillance and follow-up of cancer patients • Liaise with oncologists to provide surveillance and follow-up for patients with cancer **Recognition and Management of Diabetic Emergencies:** At the end of the Learning Unit, you should be able to: • Describe pathogenesis of common diabetic emergencies including their complications • Identify risk factors and groups of patients vulnerable to such emergencies • Recognize a patient presenting with diabetic emergencies • Institute immediate management • Refer the patient to appropriate next level of care • Counsel patient and families to prevent such emergencies **Management of Diabetic Complications:** At the end of the Learning Unit, you should be able to: • Describe the pathogenesis of important complications of Type 2 diabetes mellitus • Screen patients for such complications • Provide preventive measures for such complications

		• Treat such complications • Counsel patients and families with special emphasis on prevention **Comorbidities of Obesity:** At the end of the Learning Unit, you should be able to: • Screen patients for presence of common and important comorbidities of obesity • Manage obesity related comorbidities • Provide dietary and life-style advice for prevention and management of obesity **Abnormal ECG:** At the end of the Learning Unit, you should be able to: • Recognize common and important ECG abnormalities • Institute immediate management, if necessary
Module- 4 Medical and Surgical Emergencies	• Management of acute breathlessness • Management of altered sensorium • Management of hypotension and hypertension • Management of upper GI bleeding • Management of lower GI bleeding	For all the above, the following learning outcomes apply. At the end of the Learning Unit, you should be able to: • Triage and categorize patients • Identify patients who need prompt medical and surgical attention • Generate preliminary diagnoses based on history and physical examination • Order and interpret urgent investigations • Provide appropriate immediate management to patients • Refer the patients to next level of care, if needed

Module- 5 Acute Care	Pre-operative assessment	**Pre-Operative Assessment: At the end of the Learning Unit, you should be able to:** • Describe the basic principles of pre-operative assessment • Preform pre-operative assessment in uncomplicated patient with special emphasis on 1. General health assessment 2. Cardiorespiratory assessment 3. Medications and medical device assessment 4. iv. Drug allergy 5. v. Pain relief needs • Categorize patients according to risk
Module-6 Frail Elderly	• Mini-mental state examination • Prescribing drugs in the elderly	Mini-Mental State Examination: At the end of the Learning Unit, you should be able to: • Review the appropriate usages, advantages, and potential pitfalls of Mini-MSE • Identify patients suitable for mini-MSE • Screen patients for cognitive impairment through mini-MSE **Prescribing Drugs in the Elderly: At the end of the Learning Unit, you should be able to:** • Discuss the principles of prescribing drugs to the elderly • Recognize poly-pharmacy, prescribing cascade, inappropriate dosages, inappropriate drugs, and deliberate drug exclusion as major causes of morbidity in the elderly • Describe the physiological and functional declines in the elderly that contribute to increased drug related adverse events

		• Discuss drug-drug interactions and drug-disease interactions among the elderly • Familiar with Beers criteria • Develop rational prescribing habit for the elderly • Counsel elderly patient and family on the safe medication usage
Module-7 Ethics and Health-care	Ethical issues: treatment refusal; patient autonomy	**treatment refusal; patient autonomy: At the end of the Learning Unit, you should be able to:** • Predict situations where a patient or family is likely to decline prescribed treatment • Describe the 'rational adult' concept in the context of patient autonomy and treatment refusal • Analyze key ethical, moral, and regulatory dilemmas in treatment refusal • Recognize the importance of patient autonomy in the decision making process • Counsel patients and families about declining medical treatment in accordance with the best interest of the patients

Appendix D

Top Conditions and procedures in geriatric medicine

Top Ten Causes of Out-Patient Consultations Related to geriatric medicine in Saudi Arabia			
	Disease; Conditions	Relative	Cumulative
		Frequency	Frequency
1.	Dementia	10%	10%
2.	Falls	10%	20%
3.	Diabetes	10%	30%
4.	Hypertension	15%	45%
5.	Heart failure	7%	52%
6.	Dysphagia	10%	62%
7.	Weight loss	10%	72%
8.	Functional decline	10%	82%
9.	Depression	5%	87%
10.	Delirium	13%	100%

Examples of Core Specialty Topics: Case Discussions; Interactive Lectures	
Topics	Comments
Depression in elderly	
Dysphagia in older adults	
Elder abuse, neglect, or mistreatment	Comments
Community resources for older adults	
Assessment of bed sores and principles of wound care management	
Presentation of Disease in Old Age	
Perioperative management of older adult	
Critical appraisal of the literature	
Heart failure with preserved ejection fraction	

Atrial fibrillation in older adults	
Osteoporosis and bone health	
Delirium	
Principles of rehabilitation in older adults	
Frailty	
Sarcopenia	
Diabetes in elderly	
Hypertension	
Home safety and functional assessment at home	
Alzheimer's disease	
Behavioral and Psychological Symptoms in Dementia	
Stroke and TIA	
Pain management in older adults	
Cultural aspects of death and dying	
End of life management	
Parkinsonism and Other Movement Disorders	
Drug prescribing in the elderly	
Deprescribing principles	
Orthogeriatric multidisciplinary management	
Cancer management in older adults	
Role of novel immunotherapy for older adults	
Osteoarthritis management	
Rheumatoid arthritis in the elderly	
Constipation & bowel obstruction	
Incontinence	
General Prevention interventions for older adults	

Appendix E

Half-day Academic Activities

The following is a table with example topics that illustrate the half-day activities as it spans over the course of one year (or cycle of teaching if required more than one year to cover all the topics). Each program should decide on the date, time, and presenter of each section at the beginning of the academic year.

Academic week	Section
1	Introduction to geriatric medicine
2	Biology of aging and Healthy aging
3	Comprehensive geriatric assessment
4	Cognitive assessment and Mental status exam
5	Mobility and gait assessment
6	Hearing assessment (Lab)
7	Dysphagia in older adults
8	Depression in elderly
9	Elder abuse, neglect, or mistreatment
10	Community resources for older adults
11	Assessment of bed sores & principle of wound care management
12	Introduction to quality improvement Part 1/2
13	Introduction to quality improvement Part 1/2
14	Presentation of Disease in Old Age
15	Perioperative management of older adult
16	Critical appraisal of the literature
17	Heart failure with preserved ejection fraction
18	Atrial fibrillation in older adults
19	Osteoporosis and bone health
20	Delirium

21	Principles of rehabilitation in older adults
22	Frailty
23	Sarcopenia
24	Diabetes in the elderly
25	Hypertension
23	Home safety and functional assessment at home
24	Alzheimer's disease
25	Behavioral and Psychological Symptoms in Dementia
26	Stroke and TIA
27	Pain management in older adults
28	Cultural aspects of death and dying
29	End of life management
30	Parkinsonism and Other Movement Disorders

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