# مصفوفة البرنامج القديم وNARS 2017

NARS 2017 Competency-based	Faculty of Medicine Minia University MBBCh Program (6+1) Learning outcome-based
Attributes	Program aims
1. Work to maintain health and promote human wellbeing.	<ul><li>1.1. a. Keep normal health, provide primary health care</li><li>1.1.b. Manage common health problems in the society.</li></ul>
2. Behave professionally and adhere to medical ethics	<ul><li>1.2 Know the importance of a good doctor/ patient relationships, and how to deal with his colleague, seniors and patients ethically.</li><li>1.3 Observe rules of medical ethics.</li></ul>
3. Provide -quality and safe patient-centered care, focusing on primary health care and dealing with common health problems in his/her community.	<ul><li>1.1b Manage common health problems in the society.</li><li>1.4 Develop appropriate communication, clinical and practical skills</li></ul>
4. Value the importance of a good doctor/ patient relationship, and work to establish and maintain it.	1.2 Know the importance of a good doctor/ patient relationships, and how to deal with his colleague, seniors and patients ethically.
5. Work effectively with other health care professionals respecting their roles and their contribution to the team.	1.5 Deal by good respectable attitudes and professionalism.

6. Recognize his/her role as a part of health care system, respecting its	
hierarchy and rules and using his managerial and leadership skills to add value	
to the system.	
7. Contribute to the development and empowerment of his/ her community.	
8. Work as a lifelong learner- on his/her own continuous professional	1.6. Guide to life-long learning and how to earn Knowledge.
development, including being equipped to engage in post- graduate and	1.7. Adapt in post- graduate field.
research studies.	1.8. Make research studies and develop basic administrative capabilities.

# NARS 2017 Competency areas

#### Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.	C.2.1. Take and record a structured, patient centered history.
1.2. Adopt an empathic and holistic approach to the patients and their problems.	<ul><li>C.3.1. Adopt an empathic and holistic approach to the patients and their problems.</li><li>C.3.3. Understand and comply with the different cultural believes and values in the community they serve.</li></ul>
1.3. Assess the mental state of the patient.	<ul><li>A.1.4. Identify basics of normal and abnormal behaviors.</li><li>A.2.2. Identify and Retrieve principles of genetics and integrate their role in health and disease, as well as basics of gene therapy and genetic counseling.</li><li>C.2.3. Examine mental state of the patient.</li></ul>

1.4. Perform appropriately timed full physical examination 1of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.	<ul> <li>A.1. Normal human body:</li> <li>A.1.1. Describe Normal structure and function of human body (as an intact organ) and of each of its major systems at molecular, cellular, biochemical &amp; organ levels.</li> <li>A.1.2. Outline Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.</li> <li>A.1.3. Recognize normal growth and development of human body including main developmental changes and the effect of growth, development and aging on the individual &amp; his/her family.</li> <li>B.1. Integrate basic anatomical, pathological, biochemical, and physiological facts with clinical data.</li> <li>C.2.2. Make full physical examination appropriate to the age, gender, acute and chronic clinical conditions, and culturally sensitive.</li> </ul>
1.5. Prioritize issues to be addressed in a patient encounter.	<ul> <li>B.2. Reason deductively in solving clinical problems:</li> <li>Reason deductively in solving clinical problems:</li> <li>B.2.1. Diagnose, evaluate, and prioritize problems.</li> <li>B.2.2. Interpret, order, and analyze information objectively, recognize its limitations.</li> <li>C.3.6. Council patient suffering from complicated terminal illness.</li> <li>D.6. Effectively manages time and resources and set priorities</li> </ul>
1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	<ul> <li>A.4.5. list and report common diagnostic investigations e.g., laboratory, radiological and pathological (stressing on their role in management plans).</li> <li>B.3. Reconstruct the results of history, physical, pathological and laboratory test findings into a meaningful diagnostic formulation. (Solving the clinical problem and formulating differential diagnosis).</li> </ul>

1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	<ul><li>B.9. Discriminate and cope with uncertainty by:</li><li>B.9.1. Accept that uncertainty is unavoidable in the practice of medicine.</li><li>B.9.2. Select appropriate cognitive strategies to deal with uncertainty when it arises.</li></ul>
1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	<ul> <li>B.8. Interpret, analyze, and synthesize relevant and current data from literature, using information technologies and library resources, to help solve a clinical problem based on evidence (Evidence-Based Medicine).</li> <li>B.10. Demonstrate insight into research and scientific method through:</li> <li>B.10.1. Formulate research questions that are pertinent to medicine.</li> <li>B.10.2. Recognize of the importance of precision in collecting, analyzing and interpreting medical data.</li> <li>D.7. Work and cooperate effectively within a team.</li> </ul>
	D.9. Support Evidence Based Medicine in management decisions.
1.9. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).	<ul><li>A.14. Mention basic computer knowledge (needed to support literature retrieval and learning).</li><li>B.8. Interpret, analyze, and synthesize relevant and current data from literature, using information technologies and library resources, to help</li></ul>
	solve a clinical problem based on evidence (Evidence-Based Medicine).
	D.3. Assist, manage, and manipulate information, including electronically.
1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.	A.3. Recognize, describe and discuss common and life-threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum, relating their incidence, etiology, risk factors, natural history, pathogenesis, clinical features, differential diagnosis, and complications.

	<ul> <li>B.1. Integrate basic anatomical, pathological, biochemical, and physiological facts with clinical data.</li> <li>B.3. Reconstruct the results of history, physical, pathological and laboratory test findings into a meaningful diagnostic formulation. (Solving the clinical problem and formulating differential diagnosis).</li> </ul>
1.11Perform diagnostic and intervention procedures2 in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.	<ul> <li>A.4. Identify and describe principles of management strategies of common and life-threatening diseases including:</li> <li>A.4.5. list and report common diagnostic investigations e.g., laboratory, radiological and pathological (stressing on their role in management plans).</li> <li>A.4.2. Non-invasive and invasive available interventions.</li> <li>A.4.3. Basic pre- and post-operative care.</li> <li>B.5. (Plan) Construct appropriate management strategies (both diagnostic and therapeutic) for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.</li> <li>C.2.7. Perform required laboratory work as an integral part of their practical training in some pre-clinical departments</li> <li>C.2.8. show, careful use and handle instruments, devices, microscopes, etc.</li> <li>C.2.15. Perform basic bedside laboratory tests.</li> <li>C.2.16. make and interpret ECG.</li> <li>D.12. Follow a changing work environment</li> </ul>
1.12. Adopt strategies and apply measures that promote patient safety.	C.2.6. Adopt strategies and apply measures to safe prescribe safe lines of treatment.
1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management	<ul><li>C.2.4. Formulate a management plan for common diseases.</li><li>D.9. Apply Evidence Based Medicine in management decisions.</li></ul>

1.14. Respect patients' rights and involve them and /or their families/carers in management decisions.	C.3.2. Respect patients' rights and involve them and /or their caretakers in management decisions
1.15. Provide the appropriate care in cases of emergency, including cardio- pulmonary resuscitation,	B.6. Design an initial course of management for stabilization of patients with serious illnesses
	C.2.13. Demonstrate competency in cardiopulmonary resuscitation and basic life-support.
1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.	A.4.2. Non-invasive and invasive available interventions. A.4.4. Pain relief and palliative care
1.17. Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification.	A.5.5. Population-based approaches to health care services and their role in improving medical practice

## Competency area II: The graduate as a health promoter.

2.1 Identify the basic determinants of health and principles of health	A.1.3. Recognize normal growth and development of human body
improvement.	including main developmental changes and the effect of growth,
	development and aging on the individual & his family.
	A.5. Identify principles of Population Health and Health Systems,
	including:
	A.5.1. The determinants of health, principles of disease prevention and
	early detection of common community health problems.
	A.5.2. Epidemiological principles of demography and biological
	variability
	A.5.5. Population-based approaches to health care services and their role
	in improving medical practice
2.2 Recognize the economic, psychological, social, and cultural factors that	C.2.2. Make full physical examination appropriate to the age, gender,
interfere with wellbeing	acute and chronic clinical conditions, and culturally sensitive.

	C.3.3. Understand and comply with the different cultural believes and values in the community they serve.
2.3 Discuss the role of nutrition and physical activity in health.	
2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.	<ul> <li>A.3. Recognize, describe and discuss common and life-threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum, relating their incidence, etiology, risk factors, natural history, pathogenesis, clinical features, differential diagnosis, and complications.</li> <li>A.9. Categorize and discuss principles of prevention and select proper management of locally endemic diseases (stressing on infective hepatitis, schistosomiasis, and tuberculosis).</li> <li>B.7. Categorize factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.</li> </ul>
2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.	A.5.1. The determinants of health, principles of disease prevention and early detection of common community health problems.
2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.	<ul> <li>A.5.2. Epidemiological principles of demography and biological variability</li> <li>A.5.3. Principles of disease surveillance and screening</li> <li>A.5.4. Control of communicable diseases and health promotion.</li> <li>A.5.5. Population-based approaches to health care services and their role in improving medical practice</li> <li>A.5.6. Indications, Advantages &amp; disadvantages of various management strategies</li> </ul>
2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	

2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.	
2.9 Adopt suitable measures for infection control.	A.5.1. The determinants of health, principles of disease prevention and early detection of common community health problems.
	B.5. (Plan) Construct appropriate management strategies (both diagnostic and therapeutic) for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.
	C.2.22 Adopt suitable measures for infection control.
	D.13. Support safety and infection control measures during practice.

## Competency Area III: The graduate as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects	A.6. Recognize and define basics of ethics, medico-legal aspects,
of practice, demonstrating honesty, integrity, commitment, compassion, and	malpractice, and common medical errors
respect.	A.11. Categorize principles and select proper management of traumatic
	conditions (stressing on severely and poly-traumatized cases).
	B.5. (Plan) Construct appropriate management strategies (both diagnostic
	and therapeutic) for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.
	B.6. Design an initial appropriate course of management for stabilization
	of patients with serious illnesses.
	or patients with serious ninesses.
	C.3.4. Recognize the important role played by the other health care
	professions inpatients management.
	C.3.5. Be aware and understand the national code of ethics.
	C.3.7. Ensure confidentiality and privacy for patient information.
	C.3.9. Demonstrate, respect and work cooperatively with other health care

	<ul> <li>professional for effective patient management.</li> <li>C.3.10. Be willing to share in all types of inter-professional activities including collaborative and shared learning.</li> <li>C.4.1. Deal clearly, sensitively and effectively with patient and their relatives, and colleagues from a variety of health, social care and professions.</li> <li>C.4.5. Be honor and respect patients and their relatives, Superiors, colleagues and any other members of health profession.</li> <li>D.1. Maintain the principles of lifelong learning and how to earn knowledge.</li> </ul>
3.2. Adhere to the professional standards and laws governing the practice and abide by the national code of ethics issued by the Egyptian Medical Syndicate.	<ul><li>A.6. Recognize and define basics of ethics, medico-legal aspects, malpractice, and common medical errors</li><li>C.3.5. Be aware and understand the national code of ethics.</li></ul>
3.3. Respect the different cultural beliefs and values in the community they serve.	C.3.3. Understand and comply with the different cultural believes and values in the community they serve.
3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.	<ul><li>C.3.8. Treat all patients equally, avoid stigmatizing any category regardless to believes, culture and behaviors.</li><li>C.4.2. Deal effectively with individuals regardless of their social, cultural or ethnic backgrounds, or their disabilities</li></ul>
3.5. Ensure confidentiality and privacy of patients' information.	C.3.7. Ensure confidentiality and privacy for patient information.
3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.	A.6. Recognize basics of ethics, medico-legal aspects, malpractice, and common medical errors
3.7. Recognize and manage conflicts of interest.	
3.8. Refer patients to appropriate health facility at the appropriate stage.	

ight jeopardize patients' safety.	D.11. Solve problems related to patients, work management, and among colleagues
	D.14. Evaluate their work and that of others using constructive feedback.

#### Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.	<i>Graduates should demonstrate knowledge and understanding of:</i> A.1.1. Describe normal structure and function of human body (as an intact organ) and of each of its major systems at molecular, cellular, biochemical & organ levels.	
4.2. Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis	A.1.2. Graduate should be able to outline Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.	
4.3 Recognize and describe main developmental changes in humans and the effect of growth, development, and aging on the individual and his family	A.1.3. Recognize normal growth and development of human body including main developmental changes and the effect of growth, development, and aging on the individual & his family.	
4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	A.1.4. Identify basics of normal and abnormal behaviors.	
4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).	<ul> <li>A.2.2. Retrieve principles of genetics and integrate their role in health and disease, as well as basics of gene therapy and genetic counseling.</li> <li>A.3. Recognize common and life-threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum, relate their incidence, etiology, risk factors, natural history pathogenesis, clinical features, differential diagnosis, and complications.</li> </ul>	

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.	A.2.1. Outline and interprete altered growth, development, structure and function of the body and its major systems that are seen in various diseases and conditions.
4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.	<ul><li>A.4. Identify and describe principles of management strategies of common and life-threatening diseases including:</li><li>A.4.1. Pharmacological basis of drugs including drug effects, pharmacokinetics, dosage, drug-drug interactions, and adverse reactions.</li></ul>
4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.	<ul> <li>A.1.2. Outline Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.C.2.7. Perform required laboratory work as an integral part of their practical training in some pre-clinical departments</li> <li>A.4.5. list and report common diagnostic investigations e.g., laboratory, radiological and pathological (stressing on their role in management plans).</li> </ul>
	<ul><li>B.3. Reconstruct the results of history, physical, pathological and laboratory test findings into a meaningful diagnostic formulation. (Solving the clinical problem and formulating differential diagnosis).</li></ul>
	<ul><li>C.2.9. Perform venipuncture and collect blood samples.</li><li>C.2.15. Perform basic bedside laboratory tests.</li><li>C.2.16. make and interpret ECG.</li><li>C.2.17. Supply basic oxygen therapy.</li></ul>

#### Competency Area V: The graduate as a member of the health team and a part of the health care system:

5.1 Recognize the important role played by other health care professions in	C.3.9. Demonstrate, respect and work cooperatively with other health care
patients' management.	professional for effective patient management.
	C.3.10. Be willing to share in all types of inter-professional activities
	including collaborative and shared learning.

	<ul><li>D.7. Work effectively within a team.</li><li>D.10. Work effectively within the health care team.</li></ul>
5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.	<ul> <li>C.3.9. Demonstrate, respect and work cooperatively with other health care professional for effective patient management.</li> <li>C.3.10. Be willing to share in all types of inter-professional activities including collaborative and shared learning.</li> <li>C.4.1. Deal clearly, sensitively and effectively with patient and their relatives, and colleagues from a variety of health, social care and professions.</li> <li>C.4.5. Be honor and respect patients and their relatives, Superiors, colleagues and any other members of health profession.</li> <li>D.10. Work effectively within the health care team.</li> <li>D.11. Solve problems related to patients, work management, and among colleagues.</li> <li>D.12. Cope with a changing work environment</li> </ul>
5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.	<ul> <li>D.5. Communicate ideas and arguments effectively.</li> <li>D.7. Work and cooperate effectively within a team.</li> <li>D.8. Analyze and use numerical data</li> <li>D.10. Cooperate with the health care team.</li> <li>D.11. Seek to solve problems related to patients, work management, and among colleagues.</li> <li>D.14. Justify work and that using constructive feedback.</li> <li>.</li> </ul>
5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.	D.8. Adjust and produce an effective leader of health team at primary care level, in planning, supervising & monitoring the services of health professionals in health team
5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.	D.3. Assist, manage, and manipulate information, including electronically.

	D.4. Organize and present information clearly in written, electronic, and oral forms.
5.6 Evaluate his/her work and that of others using constructive feedback.	D.14. Justify work and that using constructive feedback.
5.7 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.	
5.8 Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.	
5.9 Use health informatics to improve the quality of patient care.	D.3. Retrieve, manages, and manipulate information, including electronically.
5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	
5.11 Improve the health service provision by applying a process of continuous quality improvement.	D.1. Employ the principles of lifelong learning.
5.12 Demonstrate accountability to patients, society, and the profession.	<ul> <li>C.3.1. Adopt an empathic and holistic approach to the patients and their problems.</li> <li>C.3.2. Respect patients' rights and involve them and /or their caretakers in management decisions.</li> <li>C.3.3. Understand and comply with the different cultural believes and values in the community they serve.</li> </ul>

## Competency Area VI: The graduate as a lifelong learner and researcher

6.1 Regularly reflect on and assess his/her performance using various	D.1. Maintain the principles of lifelong learning and how to earn
performance indicators and information sources.	knowledge.
	D.15. Justify work and that using constructive feedback.

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	D.8. Adjust and produce an effective leader of health team at primary care level, in planning, supervising & monitoring the services of health professionals in health team.
6.3 Identify opportunities and use various resources for learning.	A.14. Network, google, and relate to basic computer knowledge (needed to support literature retrieval and learning).
	B.8. Interpret, analyze, and synthesize relevant and current data from literature, using information technologies and library resources, to help solve a clinical problem based on evidence (Evidence-Based Medicine).
	D.1. Employ the principles of lifelong learning.
6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.	<ul><li>C.3.9. Demonstrate, respect and work cooperatively with other health care professional for effective patient management.</li><li>C.3.10. Be willing to share in all types of inter-professional activities including collaborative and shared learning.</li></ul>
6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.	<ul><li>B.9. Recognize and cope with uncertainty by:</li><li>B.9.1. Accept that uncertainty is unavoidable in the practice of medicine.</li><li>B.9.2. Select appropriate cognitive strategies to deal with uncertainty when it arises.</li></ul>
6.6 Effectively manage learning time and resources and set priorities.	D.6. Effectively manages time and resources and set priorities.
6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.	<ul> <li>A.13. List principles of research methodology and critical evaluation of evidence.</li> <li>A.14. Mention basic computer knowledge (needed to support literature retrieval and learning).</li> <li>A.15. Demonstrate proficiently in English language (needed for learning and communication).</li> </ul>
	B.10. Demonstrate insight into research and scientific method through:

	<ul><li>B.10.1. Formulate research questions that are pertinent to medicine.</li><li>B.10.2. Recognize of the importance of precision in collecting, analyzing, and interpreting medical data.</li></ul>
6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.	<ul><li>D.1. Maintain the principles of lifelong learning and how to earn knowledge.</li><li>D.2. Use computers efficiently.</li><li>D.3. Assist, manage, and manipulate information, including electronically.</li></ul>
6.9 Analyze and use numerical data including the use of basic statistical methods.	D.8. Analyze and use numerical data (Use simple statistical methods).
6.10 Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.	<ul><li>D.4. Organize and present information clearly in written, electronic, and oral forms.</li><li>D.5. Communicate ideas and arguments effectively.</li></ul>

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1.W ork to maintain health and promote human wellbeing.	1.1.a. K eep normal health,p rovide primary health care 1.1.b.M anage common health problems in the society.
2. Behave professionally and adhere to medical ethics	1.2 Know the importance of a good doctor/ patient relationships, and how to deal with his colleague, s eniors and patients ethically.
	1.3 Observe rules of medical ethics.
3.P rovide -quality and safe patient-centered care, f ocusing on primary health care and dealing with common health problems in his/her community.	<ul><li>1.1b Manage common health problems in the society.</li><li>1.4 Develop appropriate communication, c linical and practical skills</li></ul>
	1.4 Develop appropriate communication, comment and practical symp
I. V alue the importance of a good doctor/ patient relationship, and work to establish and maintain it.	1.2 Know the importance of a good doctor/ patient relationships, and how to deal with his colleague, seniors and patients ethically.
5.W ork effectively with other health care professionals respecting their roles	1.5 Deal by good respectable attitudes and professionalism.
nd their contribution to the team.	