



## NIHS Residency TRAINING PROGRAM

### Program: Internal Medicine Specialty

### Comprehensive Clinical Examination (CCE)

#### I. Definition of Comprehensive Clinical Examination (CCE)

CCE is a form of performance-based testing of higher levels of cognition to ensure that the candidate has clinical competence to practice independently as a specialist or consultant. During a CCE, candidates are observed and evaluated through a series of stations in which the stations reflect real-life situations and allow the candidate to explain the rationale behind their thinking. Each station tests one or more clinical competency domains.

#### II. Comprehensive Clinical Examination (CCE) Exam Format

1. Number of Stations =8
2. Duration per station = 12 minutes
3. Duration of the break between the two consecutive stations = 3 minutes
4. Examiners per Station =2
5. Patient encounters will be with actual patients or surrogates. Candidates will interact with the patient/surrogate and answer the examiners' questions.
6. Information presented may include patient photographs, radiographs, electrocardiograms, and recordings of heart or lung sounds to illustrate relevant patient findings.

#### III. Clinical/Practical Skill Domains

No	Proposed Domains for NIHS	DEFINITIONS
1	Data gathering / History taking	Asks key relevant questions. Sensitively gathers appropriate information. Explores main problems/concerns of patient/parent/career in structured manner.





No	Proposed Domains for NIHS	DEFINITIONS
2	Physical Examination and practical skills	Demonstrate correct, thorough, systematic, appropriate, fluent, and professional technique of physical examination. Demonstrate proficiency in performing practical and procedural skills at the level of a specialist.
3	Data interpretation	Correctly interpret the history findings, physical examination and investigation results.
4	Clinical reasoning and analytical skills (Differential Diagnosis & Provisional Diagnosis)	Formulate & propose likely appropriate differential diagnosis and diagnosis Understand the implications of findings. Able to suggest appropriate steps if the physical examination was inconclusive.
5	Decision-making & Management	Select or negotiate a sensible and appropriate management plan for a patient, relative or clinical situation. Select appropriate investigations or treatments for a patient. Apply clinical knowledge, including knowledge of law and ethics, to the case.
6	Communication & Professionalism	Appropriate level of confidence; greeting and introduction; appropriate body language Develop appropriate rapport with patient/relative/carer or colleague. Appropriate tone & pace of speech Able to show appropriate skills for breaking bad news or talking about sensitive issues or complex diagnosis or complications or errors Behave towards the patient or relative respectfully and sensitively and in a manner that ensures their comfort (eg; avoid causing pain), safety (eg; washing hands) and dignity (eg; covering patient). Seek, detect, acknowledge and address patients' or relatives' concerns. Demonstrate empathy.

#### IV. Blueprint Outline

- This will be published on the NIHS website for the candidates.
- This will act as a guideline for the Examination Sub-committee for exam design.
- This will be fixed for the next four academic years.

- Cardiology
- Endocrinology
- Gastroenterology





- Hematology
- Infectious Diseases
- Nephrology
- Neurology
- Oncology
- Pulmonary Diseases
- Rheumatology

The examination's content reflects the Internal Medicine Competencies. At each station, different and combined domains will be assessed. The scenarios may cover a range of situations, from ambulatory to emergency and critical needs, and the range of body systems covered by internal medicine. A sample of distribution is provided here as an example.

Station	Content area/System	Domains Assessed
1	History	1, 3, 5, 6
2	Communication and Counselling (e.g. Communicating serious illness, Disclosing errors, Diagnosis and treatment counselling)	1, 3, 5, 6
3	Cardiology	1, 2, 3, 4, 5, 6
4	Pulmonology	1, 2, 3, 4, 5, 6
5	Neurology	1, 2, 3, 4, 5, 6
6	Abdomen- Gastroenterology/Nephrology/Hematology	1, 2, 3, 4, 5, 6
7	Endocrinology / Rheumatology	1, 2, 3, 4, 5, 6
8	Miscellaneous (any remaining systemic question or Oncology, ID, Toxicology)	1, 2, 3, 4, 5, 6

## V. Passing Score

- Each station shall be assigned a minimum performance level (MPL) based on the expected performance of a minimally competent candidate using a sound scientific standard-setting method such as regression analysis.
- To pass the examination, a candidate must attain a score equal to or more than the MPL in at least 70% of the stations.

## VI. Time Management

- The examiner is aware of how much material needs to be covered per station, and it is their responsibility to manage the time accordingly.
- The examiner will want to give you every opportunity within the allowed time to address all the questions within the station.
- They may indicate that "in the interests of time, you will need to move to the next question." This type





of comment has no bearing on the candidate's performance. It is simply an effort to ensure that they complete the station.

- If the candidate is unclear about something during the station, they can ask the examiner to clarify.
- Some stations may finish early – if this occurs, the examiner will end the encounter.

## VII. Examiner Professionalism

- The examiners have been instructed to interact with you professionally – don't be put off if they are not as warm and friendly towards you as usual.
- We recognize this is a stressful situation, and the examiner is aware that you are nervous. If you need a moment to collect your thoughts before responding, indicate this to the examiner.
- The nomination of examiners is based on the principle that candidates are assessed by qualified examiners selected and appointed by NIHS. The examiner is not obligated to share personal information or professional details with the candidate.

## VIII. Conflict of Interest

- The examiners come from across the country. You will likely recognize and may have worked with some of them in your center's clinical/academic capacity. This is entirely acceptable to the NIHS and is not a conflict unless the examiner contributed substantially to your training or evaluation or if you have another personal relationship with the examiner.
- Identify the conflict at the time of introduction; examiners have been instructed to do the same. Examiners will alert the NIHS staff – every attempt will be made to find a suitable replacement for the station.

## IX. Confidentiality

- Electronic devices are NOT permitted.
- Communication with other candidates during the evaluation is prohibited and will result in immediate dismissal from the examination immediately.

## X. Link to FAQs on the NIHS Website

## XI. Textbooks

Davidson's self-assessment questions  
Harrison's Textbook of medicine  
Harrison's self-assessment questions  
Medical Knowledge Self-Assessment and Practice (MKSAP)  
Current Textbook of medicine  
Oxford Handbook of Clinical Medicine  
Oxford Handbook of Geriatrics Medicine  
Med Studies Reviews  
Massachusetts Internal Medicine Practice





UpToDate

Professionalism and Ethics, Handbook for Residents, Practical guide, Prof. James Ware

Clinical Medicine for MRCP PACES: Volume 2: History taking, communication and ethics G Mehta; D Bowman

Oxford handbook of Medical ethics and law, Anna Smajdor, Jonathan Herring, Robert Wheeler

## **XII. Journals**

Rational Clinical Examination series, JAMA

## **XIII. Others**

