الهيئة السعودية للتخصصات الصحية
Saudi Commission For Health Specialties

PHYSICAL MEDICINE
&
REHABILITATION

SAUDI BOARD PROGRAM

SAUDI BOARD FINAL CLINICAL EXAMINATION FOR
PHYSICAL MEDICINE & REHABILITATION
(2017)

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I Objectives

a. Determine the ability of the candidate to practice as a specialist and provide consultation in the general domain of his/her specialty for other health care professionals or other bodies that may seek assistance and advice.
b. Ensure that the candidate has the necessary clinical competencies relevant to his/her specialty including but not limited to history taking, physical examination, documentation, procedural skills, communication skills, bioethics, diagnosis, management, investigation and data interpretation.
c. All competencies contained within the specialty core curriculum are subject to be included in the examination.

II EliGibility

a. Passing Saudi Board Part II (final) written examination.
b. Candidates are allowed a maximum of three attempts to pass final specialty clinical examination within a period of 5 years provided that evidence of continuing clinical practice is presented and approved by the specialty scientific council.
c. If the candidate did not pass the three attempts, an exceptional attempt may be granted upon the approval of the scientific and executive councils, provided evidence of continuing clinical practice is presented.
d. A candidate who failed to pass the clinical examination including the exceptional attempt has to pass Part II written examination again, after which he/she is allowed to sit the final specialty clinical examination only once provided that evidence of continuing clinical practice is presented and approved by the scientific council.
e. After exhausting above attempts candidate is not permitted to sit the Saudi board final specialty clinical examination.

III General Rules

a. Saudi board final specialty clinical examination will be held once each year within 4-8 weeks after Part II written examination.
b. If the percentage of failure in the clinical examination are 50% or more the examination shall be repeated after 6 months.
c. Specialty clinical examinations shall be held on the same day and time in all centers, however if consecutive sessions are used, suitable quarantine arrangements must be in place.
d. If examination is conducted on different days, more than one exam version must be used.

IV Exam Format

a. The Physical Medicine & Rehabilitation final clinical examination shall consist of 12 graded stations each with 10 minute encounters.
b. The 12 stations consist of 9 Objective Structured Clinical Exam (OSCE) stations and 3 Structured Oral Exam (SOE) stations with 2 examiners each.
c. All stations shall be designed to assess integrated clinical encounters.
d. SOE stations are designed with preset questions and ideal answers.
e. Each OSCE station is assessed with a predetermined performance checklist. A scoring rubric for post-encounter questions is also set in advance.

V Final Clinical Exam Blueprint*

		DIMENSIONS OF CARE				
		Health Promotion & Illness Prevention 1±1 Station(s)	**Acute** 2±1 Station(s)	**Chronic** 5±1 Station(s)	**Psychosocial Aspects** 1±1 Station(s)	**# Stations**
DOMAINS FOR INTEGRATED CLINICAL ENCOUNTER	**Patient Care** 8±1 Station(s)	1	**2**	5		**8**
	Patient Safety & Procedural Skills 1±1 Station(s)			**1**		**1**
	Communication & Interpersonal Skills 2±1 Station(s)			**1**	**1**	**2**
	Professional Behaviors 1±1 Station(s)			**1**		**1**
	Total Stations	**1**	**2**	**8**	**1**	**12**

VI Definitions

Dimensions of Care	Focus of care for the patient, family, community, and/or population
Health Promotion & Illness Prevention	The process of enabling people to increase control over their health & its determinants, & thereby improve their health. Illness prevention covers measures not only to prevent the occurrence of illness such as risk factor reduction but also arrest its progress & reduce its consequences once established. This includes but is not limited to screening, periodic health exam, health maintenance, patient education & advocacy, & community & population health.
Acute	Brief episode of illness, within the time span defined by initial presentation through to transition of care. This dimension includes but is not limited to urgent, emergent, & life-threatening conditions, new conditions, & exacerbation of underlying conditions.
Chronic	Illness of long duration that includes but is not limited to illnesses with slow progression.
Psychosocial Aspects	Presentations rooted in the social & psychological determinants of health that include but are not limited to life challenges, income, culture, & the impact of the patient`s social & physical environment.

Domains	Reflects the scope of practice & behaviors of a practicing clinician
Patient Care	Exploration of illness & disease through gathering, interpreting & synthesizing relevant information that includes but is not limited to history taking, physical examination & investigation. Management is a process that includes but is not limited to generating, planning, organizing care in collaboration with patients, families, communities, populations, & health care professionals (e.g. finding common ground, agreeing on problems & goals of care, time & resource management, roles to arrive at mutual decisions for treatment)
Patient Safety & Procedural Skills	Patient safety emphasizes the reporting, analysis, and prevention of medical error that often leads to adverse healthcare events. Procedural skills encompass the areas of clinical care that require physical and practical skills of the clinician integrated with other clinical competencies in order to accomplish a specific and well characterized technical task or procedure.
Communication & Interpersonal Skills	Interactions with patients, families, caregivers, other professionals, communities, & populations. Elements include but are not limited to active listening, relationship development, education, verbal, non-verbal & written communication (e.g. patient centered interview, disclosure of error, informed consent).
Professional Behaviors	Attitudes, knowledge, and skills based on clinical &/or medical administrative competence, ethics, societal, & legal duties resulting in the wise application of behaviors that demonstrate a commitment to excellence, respect, integrity, accountability & altruism (e.g. self-awareness, reflection, life-long learning, scholarly habits, & physician health for sustainable practice).

VII Passing Score

a. The pass/fail cut off for each OSCE/SOE station is determined by the exam committee prior to conducting the exam using a Minimum Performance Level (MPL) Scoring System.
b. Each station shall be assigned a MPL based on the expected performance of a minimally competent candidate. The specialty exam committee shall approve station MPLs.
c. At least one examiner marks each OSCE station and two examiners independently mark each part of the SOE.
d. To pass the examination, a candidate must attain a score > MPL in at least 70% of the number of stations and 60% in each component (OSCE and SOE).

VIII Score Report

a. All score reports shall be issued by the SCFHS after approval of the Specialty Examination Committee.

IX Exemptions

a. SCFHS at present has no reciprocal arrangement with respect to this examination or qualification by any other college or board, in any specialty.

X OSCE Station Sample**

Station 1

Instructions to candidate: A 30 year-old volley ball player came to clinic with right anterolateral shoulder pain. It is aggravated by over head activities and sleeping on the right side. He has a past history for anterior shoulder dislocation three months ago during one of the games. The shoulder has been relocated in the emergency department. Since then he has dislocated his shoulder twice.

In the next 15 minutes, you need to conduct **full shoulder examination**?

In the last two minutes, the examiner will ask you two questions

Please note that you will be marked after verbalization/explaining what you are doing.

Introduce self/ explain the procedure/ and take permission			**3**
Inspection		**Palpation**	
Exposure	**1**	Sternoclavicular joint	**1**
Head neck alignment (frontal/sagittal) Shoulder posture (protraction/retraction) Forward head posture	**3**	Clavicle	**1**
Recognize importance of symmetry and arm dominance effect on posture	**2**	Acromioclavicular joint	**1**
edema, discoloration, laceration, scars	**2**	Coracoid process	**1**
	1	Posterolateral acromion	**1**
Deformity AC separation (Step-off deformity)	**1**	Subacromial space rotator cuff(Musculotendinous junction of infraspinatus and supraspinatus muscle)	**2**
Muscle atrophy Supraspinatus Infraspinatus Deltoid Trapezius	**2**	Intertubercular groove (bicipital groove) and long head of biceps tendon	**2**
		Greater tuberosity	**1**
		Pectoralis & glenohumeral joint	**1**
Contour of pectoralis major, biceps, and triceps muscle	**1**	Deltoid	**1**
Sulcus sign (inferior instability)	**1**	Upper, middle, and lower trapezius muscles	**1**
Thoracic (kyphosis, scoliosis)	**1**	Scalene muscles, Levator scapulae,	**1**
Scapular winging (static and dynamic)	**1**	romboid muscles	**1**
Painful Arc 40-120 Rotator cuff or subacromial 120-180 ACJ pathology	**2**	Scapular spine, superior angle, inferior angle, and medial border	**3**
Apply's scratch test (functional screening)	**2**	Axilla	**1**

/20	**/22**

AROM and PROM		**Neurovascular**	
Forward Flexion 160–180 degrees	**/1**	Motor	
abduction 170-180 degrees	**/1**	Deltoid (**C5**-6, axillary nerve)	**/2**
External rotation 80-90degree at 90 degrees abduction	**/1**	Biceps (**C5**-6, musculocutaneous nerve)	**/2**
Internal rotation 60-100degree at 90 degrees abduction	**/1**	Infraspinatus (**C5**-6, suprascapular nerve) resisted external rotation+ teres minor	**/2**
Horizontal adduction 50-75 degree	**/1**	Supraspinatus (**C5**-6, suprascapular nerve) empty can test	**/2**
Extension 50-60 degree	**/1**	Subscapularis (**C5**-6, upper and lower subscapular nerves) lift off test	**/2**
Mention the wish to compare and do PROM	**/2**	Trapezius (spinal accessory nerve/cranial nerve XI)	**/2**
Special testing		Sensory	
(ACJ) special tests Scarf sign/Horizontal adduction test	**/2**	Dermatomes or sensory points for C4-5-6-7-8-T1	**/3**
Rotator cuff tear Drop arm test (supraspinatus)	**/2**	Peripheral (Axillary nerve (yes) Supraclavicular nerve **(no)**	**/2**
Subscapularis lift off test	**/2**	Reflexes	
Biceps tendinitis Speed's Test or Yargasson's test	**/2**	Biceps (**C5**-6)	
Impingement signs -Neer impingement sign	**/2**	Brachioradialis (C5-**6**)	**/1**
-Hawkins impingement sign		Triceps (**C7-8**)	**/1**
Laxity/Instability/Labrum		Check axillary pulse, and radial pulse	**/1**
Anterior apprehension and relocation test	**/2**	**Adjacent Body Regions**	
Posterior apprehension test or load and shift test	**/2**	myofascial triger points (comment)	**/1**
Sulcus sign (inferior)	**/2**	potential for referred pain from adjacent body regions	**/1**
O'Brien test, or Crank Test	**/2**	exam the joint above and below regions (**screen C-spine ROM comment on symmetry and pain with movements)**	**/2**
Thoracic outlet syndrome provocation testing			
Roo's test, Adson's test, or Allen's test **(good to keep it even mentioning it it has been part full shoulder exam)**	**/2**		
/28		**/24**	

Question 1:

1-List your four deferential diagnoses and what is/are the most likely diagnosis? (3 marks)

A. 1- Anterior shoulder instability 2-Rotator cuff injury 3-Rotator cuff impingement 4-Axillary nerve injury 5-Radiculopathy
B. 1-Anterior Shoulder instability 2-Rotator cuff injury

Question 2: (3 marks)

2-What is the most common nerve injury with anterior shoulder dislocation? Describe its features?

Axillary nerve injury, sensory loss upper lateral arm and weakness of the deltoid and teres minor muscles (abduction and external rotation).

FINAL SCORE: **/100**

Global rating: PASS BORDERLINE FAIL

Questioning Skills (ONE choice only)

☐	☐	☐	☐	☐	☐
Awkward, exclusive use of closed-ended or leading questions and jargon	Somewhat awkward; inappropriate terms; minimal use of open-ended questions	Borderline unsatisfactory; moderately at ease; appropriate language; uses different types of questions	Borderline satisfactory; moderately at ease; appropriate language; uses different types of questions	At ease; clear questions; appropriate use of open and closed-ended questions	Confident; skillful questioning

Professional Behavior with Patient (ONE choice only)

☐	☐	☐	☐	☐	☐
Offensive or aggressive; frank exhibition of unprofessional conduct	Negative attitude toward patient	Borderline unsatisfactory; does not truly instill confidence	Borderline satisfactory; manner inoffensive, but does not necessarily instill confidence	Attempts professional manner with some success	Overall demeanor of a professional; caring, listens, communicates effectively

Overall Organization of Patient Encounter (ONE choice only)

☐	☐	☐	☐	☐	☐
No logical flow; scattered, inattentive to patient's agenda	Counsels patient before taking history or doing physical	Minimal organization; scattered approach	Appropriate approach to patient	Skillful approach to patient	Skillful, professional approach to patient and effective use of time

Facilitation of Informed Decision Making (ONE choice only)

☐	☐	☐	☐	☐	☐
No attempt or inappropriate attempt at information sharing (e.g., deception, slanting of facts, incorrect information)	Incomplete and / or biased information; overuses jargon; does not ensure understanding of issues	Attempts to share information; omits some critical facts; uses some jargon; attempts to ensure understanding	Gives some information on most important facts; may use jargon; attempts to ensure understanding	Gives clear information; supports patient decision making (e.g., alternatives, risks / benefits); appropriate language; ensures understanding	Organized; optimizes patient decision making; significant effort to make information relevant; clear language; attentive to patient understanding

XI SOE Station Sample**

STATION 2

Instructions to candidate:

Mr. Abdulraheem is a 35 year old gentleman. He sustained traumatic spinal cord injury three years ago. His neurological level is T4 complete (AIS A). He was discharged from your rehab ward 18 months ago. He came to the clinic with gluteal **pressure ulcer** over the left ischeal tuberosity. He has had this ulcer for the last six months. Your **resident** has evaluated him and has few questions to discuss with you:

/8

1- According to the National Pressure Ulcer Advisory Panel (NPUAP), what is his ulcer stage?
Stage IV (4)

/12

2- How did you stage it and what are the different stages according to the NPUAP? 2 each

a. **Stage 1 Pressure Injury: Non-blanchable erythema of intact skin**
Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.

b. **Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis**
Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).

c. **Stage 3 Pressure Injury: Full-thickness skin loss**
Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

d. **Stage 4 Pressure Injury: Full-thickness skin and tissue loss**
Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

e. **Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss**
Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.

f. **Deep Tissue Pressure Injury (Suspected deep tissue injury): Persistent non-blanchable deep red, maroon or purple discoloration**
Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.

/10

3- Doctor, I suspect an underlying osteomyelitis. What investigations should I consider? (examiner's prompt: List four)

2.5 each

CBC, leukocytosis in the acute phase
CRP, ESR in the acute phase
X ray
MRI
Bone scan
Biopsy

/20

4- I believe that this could have been prevented. Can you please tell me what preventive strategies should have been used? (examiner's prompt: List four)

5 each

Frequent pressure relief (15 seconds every 30 minutes). Sitting uninterrupted for 2 hours should not be allowed.
Frequent skin check (at least twice daily) for early detection
Avoid tight clothing
Ensure proper transfer and avoid shearing and friction
Ensure proper equipment such as wheelchair and transfer board.
Pressure relieving surfaces such as mattress, overlays, cushions…etc
Control other risk factors such as urine and stool incontinence, spasticity, extremes of BMI, mood disorders ..etc

/15

5- The nurses are wondering about dressing types. They gave me these three dressings.
Can you please help me identifying their classes? Also can you give me one specific **advantage** for each?
(examiner's prompt: you do not need to mention the brand name, just the class)

Dressing Class (2.5 mark each)	**Advantages (2.5 mark each)**
Transparent film	Retains moisture and promote autolysis, suitable for stage 1-2. Used for uninfected wounds. Doesn't require secondary dressing. May be used with other types such as hydrogel or hydrocolloids. Semipermeable (not to bacteria)

Foam	Provide moist healing environment, promote autolytic debridement. For partial to full thickness wounds 2-4 with minimum to moderate exudate. Can be a primary or secondary. Thermal insulation.
Hydrocolloids	Occlusive and adhesive wafer dressing that forms a gel-like substance with wound exudate, promoting moist healing and autolytic debridement. Available in various forms. Can be a primary or secondary. Stage 1-2 with minimum to moderate exudate. Impermeable to bacteria and other contaminants.

/15

6- He brought these cushions with him. I do not know much about cushions. Can you tell me what are their types? Also can you give me one specific **<u>disadvantage</u>** for each?
(examiner's prompt: you do not need to mention the brand name, just the class)

Cushion type (2.5 mark each)	**Disadvantage (2.5 mark each)**
Air cushion	More expensive than foam cushion Loss of trunk stability Bladders can be punctured. High maintenance Requires proper inflation otherwise useless or even potentially harmful
Hybrid (foam and gel) Contour molded with gel-filled inserts Gel cushion	Heavier than regular foam cushions Expensive Uncomfortable when cold
Foam cushion	No pressure relief regions Limited life. Typically wears out in 6 months to a year Retains heat and moisture

/5

7- Mr. Abdulraheem works full time as a receptionist in the local city council. He is wondering whether he can go to work?
He should not put any pressure over the wound. Sitting is prohibited until further notice. Therefore, he should not go to work.

/5

8- Is there any alternative solutions or jobs that he can do?
He can do tasks that do not require sitting. Working online is an option. He can do various tasks from home if his employer is willing to delegate such things to him.

/5

9- Can you give him a sick leave until his wound is healed?
Sick leave is justifiable until his wound issue is completely resolved particularly if other work options are not feasible.

/5

10- Do we need to follow him up?
Yes. He has to be seen by multiple disciplines including wound care nurses and plastic surgeons. We have to ensure regular and appropriate wound care either via home health care or any other available option. We then need to see him at least every couple of months. Admission can be considered if there is a need for intervention or special management.

Total

/100