DHA TELEHEALTH CLINICAL GUIDELINES

FOR VIRTUAL MANAGEMENT

OF FATIGUE – 06

Version 2

Issue date: 21/02/2024

Effective date: 21/04/2024

Health Policies and Standards Department

Health Regulation Sector (2024)

INTRODUCTION

Health Regulation Sector (HRS) forms an integral part of Dubai Health Authority (DHA) and is mandated by DHA Law No. (14) of the year (2021) amending some clauses of law No. (6) of 2018 pertaining to the Dubai Health Authority (DHA), to undertake several functions including but not limited to:

- Developing regulation, policy, standards, guidelines to improve quality and patient safety and promote the growth and development of the health sector;
- Licensure and inspection of health facilities as well as healthcare professionals and ensuring compliance to best practice;
- Managing patient complaints and assuring patient and physician rights are upheld;
- Governing the use of narcotics, controlled and semi-controlled medications;
- Strengthening health tourism and assuring ongoing growth; and
- Assuring management of health informatics, e-health and promoting innovation.

The DHA Telehealth Clinical Guidelines aim to fulfil the following overarching DHA Strategic Priorities (2026):

- Pioneering Human-centered health system to promote trust, safety, quality and care for patients and their families.
- Make Dubai a lighthouse for healthcare governance, integration and regulation.
- Leading global efforts to combat epidemics and infectious diseases and prepare for disasters.

- Pioneering prevention efforts against non-communicable diseases.
- Become a global digital health hub.
- Foster healthcare education, research and innovation.

ACKNOWLEDGMENT

The Health Policy and Standards Department (HPSD) developed this Guideline in collaboration with Subject Matter Experts and would like to acknowledge and thank these health professionals for their dedication toward improving quality and safety of healthcare services in the Emirate of Dubai.

Health Regulation Sector

Dubai Health Authority

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Telehealth is based on Evidence Based Practice (EBP) which is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence and guidelines from systematic research.

EBP is important because it aims to provide the most effective care virtually, with the aim of improving patient outcomes. As health professionals, part of providing a professional service is ensuring that practice is informed by the best available evidence.

This guideline is presented in the format comprising of clinical history/symptoms, differential diagnosis, investigations and management. Identification of 'Red Flags' or serious conditions associated with the disease is an essential part of this telehealth guideline as it aids the physician to manage patients safely and appropriately by referrals to ER, family physicians or specialists for a face to face management.

Fatigue is a common, nonspecific symptom with a broad range of etiologies including acute and chronic medical disorders, psychological conditions, medication toxicity, and substance use.

DEFINITIONS/ABBREVIATIONS

Virtual Clinical Assessment: Is the evaluation of the patient's medical condition virtually via telephone or video call consultations, which may include one or more of the following: patient medical history, physical examination and diagnostic investigations.

Patient: The person who receives the healthcare services or the medical investigation or treatment provided by a DHA licensed healthcare professional.

ABBREVIATIONS

DHA	:	Dubai Health Authority
EBP	:	Evidence Based Practice
ER	:	Emergency Room
HIV	:	Human Immunodeficiency Virus
TFT	:	Thyroid Function Test

1. BACKGROUND

1.1. The term “fatigue” can be used to describe difficulty or inability to initiate activity (subjective sense of weakness); reduced capacity to maintain activity (easy fatigability); or difficulty with concentration, memory, and emotional stability (mental fatigue). When some patients use the word “fatigue,” careful history taking reveals that they are referring to sleepiness or an uncontrollable need to sleep Patients may report one or a combination of these symptoms, and they may occur alone or in conjunction with localized complaints.

1.2. Fatigue may be • Acute- lasting one month or less • Subacute - lasting between one and six months • Chronic - lasting over six months.

1.3. Fatigue is reported more commonly in women than men.

1.4. Causes

1.4.1. Acute fatigue

a. It is most often attributable to an acute medical condition, which can often be diagnosed based on other clinical manifestations. For example, a patient with influenza will describe fatigue in association with fever and respiratory symptoms. Acute fatigue may also be the result of a recent life stressor. Patients with acute fatigue associated with a recognizable medical or psychosocial condition require little or no evaluation.

1.4.2. Subacute and chronic fatigue Subacute and chronic fatigue is likely to be associated with an underlying condition include:

a. Cardiopulmonary conditions – Congestive heart failure, chronic obstructive pulmonary disease and sleep apnea

b. Endocrinologic/metabolic conditions – Hypothyroidism, hyperthyroidism, chronic renal disease, chronic hepatic disease, adrenal insufficiency and electrolyte abnormalities

c. Hematologic/neoplastic conditions– Anemia and occult malignancy

d. Infectious diseases – Mononucleosis syndrome, viral hepatitis, human immunodeficiency virus (HIV) infection, subacute bacterial endocarditis and tuberculosis

e. Rheumatologic conditions – Fibromyalgia, polymyalgia rheumatica, systemic lupus erythematosus, rheumatoid arthritis and Sjögren's syndrome

f. Psychological conditions – Depression, anxiety disorder and somatization disorder

g. Neurologic conditions – Multiple sclerosis

h. Medication toxicity – Benzodiazepines, antidepressants, muscle relaxants, first generation antihistamines, beta-blockers and opioids

i. Substance use – Alcohol, marijuana, opioids, cocaine and other stimulants.

2. SCOPE

2.1. Telehealth services in DHA licensed Health Facilities.

3. PURPOSE

3.1. To support the implementation of Telehealth services for patients with complaints of Fatigue in Dubai Health Authority (DHA) licensed Health Facilities

4. APPLICABILITY

4.1. DHA licensed physicians and health facilities providing Telehealth services.

4.2. Exclusion for Telehealth services are as follows

4.2.1. Emergency cases where immediate intervention or referral is required.

4.2.2. Prescribe Narcotics, Controlled or Semi-Controlled medications.

5. RECOMMENDATION

5.1. Initial assessment of all patients: Patients with acute fatigue associated with a recognizable medical or psychosocial condition require little or no evaluation.

5.2. The initial assessment of the patient presenting with subacute or chronic fatigue includes a comprehensive history, basic laboratory studies, and if needed further updated cancer screening interventions to identify findings that could suggest a specific underlying cause

5.3. History — Fatigue caused by an underlying medical or psychological condition usually presents as one of several reported symptoms. A specific etiology for fatigue is found less often when it is the principal or only complaint.

5.4. In taking a history, the telemedicine physician should rely upon open-ended questions, encouraging the patient to describe the fatigue in his or her own words. Questions such as "What do you mean by fatigue?" or "Please describe what you mean" may elicit responses that help distinguish fatigue from muscle weakness or somnolence. Patients should be asked if they have any ideas about what might be causing or contributing to their fatigue. The history should also determine the characteristics, severity, and temporal pattern of fatigue:

5.4.1. Onset – Abrupt or gradual, relationship to illness or life event

5.4.2. Course – Stable, improving, or worsening

5.4.3. Duration and daily pattern

5.4.4. Factors that alleviate or exacerbate it

5.4.5. Impact on daily life – Ability to work, socialize, participate in family activities

5.4.6. Accommodations that the patient/family has had to make to deal with symptom

5.5. Patients with underlying medical conditions often associate fatigue with activities they are unable to complete. By contrast, patients with fatigue that is related to psychological conditions, medication toxicity, or substance use may be tired all the time; their fatigue is not necessarily related to exertion, and it does not improve with rest.

5.6. Associated symptoms may suggest specific etiologies

5.6.1. Sleep apnea would be suspected in a patient who describe snoring and disrupted sleep

5.6.2. Anemia in a patient who reports dizziness and weakness

5.6.3. Fibromyalgia in a patient who describes chronic diffuse muscle pain

5.6.4. The presence of fever may suggest underlying infection

5.6.5. Unintended weight loss may indicate an occult neoplasm or recurrent disease in a patient with a history of malignancy.

5.6.6. All patients should be asked about symptoms suggestive of depression (e.g., sad mood, anhedonia, alteration in sleep and/or eating habits) and anxiety disorder (e.g., constant palpitations or sweating, occurrence of panic attacks and/or phobias.

5.6.7. The history should also screen for substance use (e.g., alcohol, marijuana, opioids, cocaine/other stimulants) and domestic violence.

5.6.8. The quantity and quality of the patient's sleep should be assessed

5.6.9. A complete list of medications, including prescription, over-the-counter, and complementary/alternative drugs, should be obtained. Use of benzodiazepines, antidepressants, muscle relaxants, first-generation antihistamines, beta-blockers, and opioids may be associated with fatigue.

5.6.10. A family medical history should also be performed to determine if there is a genetic predisposition to any specific cancer(s) or other chronic medical conditions.

5.6.11. A social history should be obtained with emphasis on any changes or stressors in the home or work environment.

6. RED FLAGS

6.1. Recent onset of fatigue in a previously well older patient (malignancy, anemia, cardiac arrhythmia, renal failure, diabetes mellitus)

6.2. Unintentional weight loss (malignancy, HIV infection, diabetes mellitus, hyperthyroidism

6.3. Abnormal bleeding (anemia, gastrointestinal malignancy)

6.4. Shortness of breath (anemia, heart failure, cardiac arrhythmia, chronic obstructive pulmonary disease)

6.5. Unexplained lymphadenopathy (malignancy)

6.6. Fever (serious infection, hidden abscess, HIV infection)

6.7. Recent onset or progression of cardiovascular, gastroenterological, neurological or rheumatological symptoms

6.8. Other features of malignancy

6.8.1. Hemoptysis

6.8.2. Dysphagia

6.8.3. Rectal bleeding

6.8.4. Altered bowel habit

6.8.5. Breast lump

6.8.6. Postmenopausal bleeding

6.9. Suicidal tendency

7. DIFFERENTIAL DIAGNOSIS

7.1. Cardiopulmonary: congestive heart failure, chronic obstructive pulmonary disease, peripheral vascular disease, atypical angina

7.2. Disturbed sleep: sleep apnea, gastroesophageal reflux disease, allergic or vasomotor rhinitis

7.3. Endocrine: diabetes mellitus, hypothyroidism, pituitary insufficiency, hypercalcemia, adrenal insufficiency, chronic kidney disease, hepatic failure

7.4. Infectious: endocarditis, tuberculosis, mononucleosis, hepatitis, parasitic disease, human immunodeficiency virus, cytomegalovirus

7.5. Inflammatory: rheumatoid arthritis, systemic lupus erythematosus

7.6. Rheumatologic: fibromyalgia, polymyalgia rheumatic

7.7. Medication use (e.g., sedative-hypnotics, analgesics, antihypertensives, antidepressants, muscle relaxants, opioids, antibiotics) or substance abuse

7.8. Psychological: depression, anxiety, somatization disorder

8. INVESTIGATIONS

8.1. The following initial laboratory tests are advised in patients with subacute or chronic fatigue as the primary symptom:

8.1.1. Complete blood count with differential count

8.1.2. Chemistries (including glucose, electrolytes, calcium, renal and hepatic function tests

8.1.3. Thyroid-stimulating hormone, TFT

8.1.4. Creatine kinase (if muscle pain or weakness is present)

8.1.5. Chest radiograph

8.2. Other diagnostic studies should be considered based on evaluation through teleconsultation history.

8.3. For suspected history of infection, malignancy or others, patients will be referred as appropriate to the concerned specialist or Family Physician for a face to face consultation.

8.4. Patients without an identified cause following the initial evaluation should be reassessed in 1 to 3 months and have baseline laboratory studies repeated at that time if there continue to be no localizing symptoms or signs.

8.5. Patients who remain undiagnosed with an identifiable condition after 6 months are designated as having idiopathic chronic fatigue.

9. MANAGEMENT

9.1. Refer to APPENDIX 1 for the Virtual Management of Fatigue Algorithm.

9.2. Establishing a supportive relationship — The telemedicine physician should accept the symptom of chronic fatigue as real and potentially debilitating and act to establish therapeutic goals, which may include:

9.2.1. Accomplishing activities of daily living

9.2.2. Maintaining interpersonal relationships

9.2.3. Returning to work (if applicable)

9.2.4. Addressing underlying medical conditions — Patients with an identified cause of chronic fatigue based upon the initial evaluation should be treated specifically for this condition. Their fatigue should be monitored with management of the underlying condition to see if it improves or resolves. If it does not, further evaluation may be warranted to determine if there is an alternative explanation. Repeating the initial evaluation is worthwhile in this setting to make sure that other potential diagnoses were not missed.

9.2.5. Addressing residual or idiopathic fatigue — In patients with residual or idiopathic fatigue a referral and further assessment for psychological or psychiatric condition is mandatory.

10. REFERRAL CRITERIA

10.1. Referral to ER

10.1.1. Shortness of breath (severe Anemia, heart failure, cardiac arrhythmia, chronic obstructive pulmonary disease)

10.2. Referral to Family Physician/ Specialist

10.2.1. Recent onset of fatigue in a previously well older patient

10.2.2. Unintentional weight loss

10.2.3. Unexplained lymphadenopathy (malignancy)

10.2.4. Fever (serious infection, hidden abscess, HIV infection)

10.2.5. Recent onset or progression of cardiovascular, gastroenterological, neurological or rheumatological symptoms

10.2.6. Other features of malignancy (hemoptysis, dysphagia, rectal bleeding, altered bowel habit, breast lump, postmenopausal bleeding)

10.2.7. Suicidal tendency

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APPENDIX 1 – VIRTUAL MANAGEMENT OF FATIGUE ALGORITHM