



Australian Government

Department of Education, Employment and Workplace Relations

SISFFIT523A Deliver prescribed exercise to clients with cardiorespiratory conditions

Release: 2

SISFFIT523A Deliver prescribed exercise to clients with cardiorespiratory conditions

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to deliver prescribed exercise programs to stable clients with cardiorespiratory conditions in collaboration with medical or allied health professionals.

Application of the Unit

This unit applies to specialised exercise trainers whose clients have been provided an exercise prescription from an accredited exercise physiologist or relevant medical or allied health professional.

The specialised exercise trainer is able to apply the understanding and skills to deliver the program and modify the program in terms of frequency, mode, intensity and volume to accommodate the progression of the client within the parameters prescribed by the accredited exercise physiologist or relevant medical or allied health professional.

They apply self directed application of knowledge and skills related to cardiorespiratory conditions, and exercise judgment in delivering the prescribed exercise. The specialised exercise trainer demonstrates the ability to analyse the client's responses to exercise and where appropriate consult with the accredited exercise physiologist or relevant medical or allied health professional.

This unit excludes clients with serious cardiac and respiratory conditions.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

1. Consult with referred clients presenting with stable cardiorespiratory conditions.

- 1.1. Receive exercise referral from an accredited exercise physiologist, or relevant ***medical or allied health professional***.
- 1.2. Confirm exercise referral has sufficient detail to allow flexibility for modifications to accommodate progression of the client.
- 1.3. Become familiar with typical adverse signs and symptoms that may arise during exercise for this pathology.
- 1.4. Consult with a relevant ***medical or allied health professional*** as necessary.
- 1.5. Discuss with the client their complete exercise history and their ***cardiorespiratory condition*** and co-morbidities and record information according to ***relevant legislation*** and ***organisational policies and procedures***.
- 1.6. Explain the physiology of cardiorespiratory conditions and associated ***risk factors*** to the client in simple terms and confirm client understanding.
- 1.7. Explain to the client the causes and consequences of specific ***cardiorespiratory considerations*** in the context of their effect on exercise capacity and conditions.
- 1.8. Explain to the client the role of physical activity and exercise in managing cardiorespiratory conditions and enhancing health.
- 1.9. Confirm the outcomes of a goals ***and needs analysis*** in collaboration with the client and the ***medical or allied health professionals*** if appropriate.
- 1.10. Explain to the client their need to be referred back to a medical or allied health professional if their condition becomes unstable.
- 1.11. Identify any potential barriers to exercise and discuss ***methods to enhance exercise adherence***

ELEMENT

PERFORMANCE CRITERIA

- with the client.
- 1.12. Clarify any areas of concern with the relevant medical or allied health professional in conjunction with the client.
 - 1.13. Obtain the informed consent of the client and maintain the client's *records* according to relevant legislation and organisational policies and procedures.

ELEMENT	PERFORMANCE CRITERIA
2. Deliver prescribed exercise programs.	<p>2.1. Undertake appropriate fitness assessments as required.</p> <p>2.2. Work with <i>the accredited exercise physiologist</i> or medical or allied health professional to deliver an exercise plan in accordance with recognised exercise recommendations, fitness test results, client limitations, and potential interactions of medications.</p> <p>2.3. Explain to the client the different roles of <i>cardiorespiratory conditioning</i> and <i>muscular conditioning</i>, and the reasons for their inclusion as part of the client's exercise prescription.</p> <p>2.4. Explain to the client the exercise variables to be delivered in the context of managing their specific cardio respiratory conditions.</p> <p>2.5. Apply <i>instructional techniques</i> to ensure safe and appropriate application of the <i>exercise program</i> by the client.</p> <p>2.6. Demonstrate the safe and appropriate use of selected <i>exercise equipment</i> and report or address any unsafe equipment according to organisational policies and procedures.</p>
3. Monitor and review clients responses to the prescribed exercise program	<p>3.1. Monitor perceived exercise intensity and make adjustment as required.</p> <p>3.2. Assess the client's performance and explain and correct any unsafe exercise procedures.</p> <p>3.3. <i>Monitor client responses</i> for any typical signs and <i>symptoms requiring intervention</i> that may occur during exercise.</p> <p>3.4. Apply <i>procedures to respond to signs and symptoms requiring intervention</i> as required according to relevant legislation and organisational policies and procedures.</p> <p>3.5. Recognise <i>signs of an unstable condition</i> and refer the client back to an appropriate <i>medical or allied health professional</i>.</p> <p>3.6. Report outcomes to referral source as well as client.</p> <p>3.7. Revise the client's record and advise the referral source of suggested changes to the exercise program if required.</p>
4. Provide advice regarding additional <i>lifestyle modifications</i> to enhance the	<p>4.1. Obtain information about the client's current lifestyle.</p> <p>4.2. Discuss possible barriers to behaviour change and delivery of healthy eating practices.</p> <p>4.3. Provide information in accordance with healthy</p>

ELEMENT

management of the condition.

PERFORMANCE CRITERIA

eating guidelines for to improve general health and reduce the risk of cardiovascular disease.
4.4. Recommend other lifestyles changes to improve current disease status.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills appropriate to the age and values of referred clients with cardiorespiratory conditions
- problem-solving skills to identify adverse signs and symptoms requiring intervention and unsafe exercise performance and to recommend appropriate changes in consultation with an appropriate medical or allied health professional
- team work skills to work collaboratively with medical or allied health professionals according to legal and ethical conditions
- literacy and numeracy skills to enable the accurate interpretation of referrals and to record client exercise programs and calculate and adjust exercise duration and frequency
- analytical skills to interpret information on the health and functional status of clients with cardiorespiratory conditions in terms of their medical conditions, risk factors, medical treatments and exercise history
- decision making skills to determine appropriate instructional techniques
- literacy skills to accurately document and report on client progress
- instructional skills to ensure safe and appropriate application of the exercise program
- report writing skills to relay written information to both client and referral source

Required knowledge

- structure and function of the cardiovascular and respiratory systems to enable understanding of cardiovascular responses to exercise and their relationship to cardiorespiratory conditions and the needs of clients including:
 - structure of the heart, coronary circulation and cardiac conduction including abnormalities
 - the interrelationship between the phases, timing and heart sounds of the cardiac cycle
 - cardiovascular physiology and regulation of the cardiovascular system
 - respiratory physiology
- circulatory and respiratory volume changes occurring in response to exercise, the structural and physiological changes consistent with the pathology of cardiorespiratory conditions in relation to the needs of the client
- body systems and their relationship to cardiorespiratory exercise to support safe and effective exercise outcomes including:
 - musculoskeletal system and its relationship to safe and effectively rehabilitate exercise outcomes
 - nervous system and its relationship to the control of cardiovascular regulation and respiration
 - digestive system and its relationship to good health

- causes and consequences of cardiorespiratory conditions in the context of their effect on exercise capacity and the role of physical activity in managing cardiorespiratory conditions and enhancing health
- coronary risk factors in relation to screening, fitness testing and exercise participation
- contraindications associated with cardiorespiratory conditions to enable the provision, monitoring and adjustment of safe and effective exercise
- classes of medications used to manage cardiorespiratory conditions, their effects on the condition, potential interactions of exercise and medication, and effect on exercise performance
- common clinical tests used to evaluate functional capacity and the normal and abnormal values of physiological responses of the cardiovascular and respiratory systems in relation to these tests
- recognised recommendations for exercise testing and prescription for cardiorespiratory conditions
- medical and anatomical terminology to interpret referrals from medical or allied health professionals
- motivational psychology to enable identification and mitigation of barriers to exercise adherence
- nutritional aspects of cardiovascular disease
- legislation and organisational policies and procedures to enable safe and effective exercise planning delivery and evaluation and to maintain the confidentiality of client information.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- communicates effectively with accredited exercise physiologist *or relevant medical or allied health professionals* regarding relevant health and functional status of the referred client and discusses aspects of exercise prescription with clients.
- when appropriate, reacts to adverse events to deal with exercise program problems and issues
- ability to correctly interpret the exercise prescription and makes modifications consistent with prescribed parameters and scope of practice
- safely and effectively delivers exercise for referred clients with cardiorespiratory conditions and recommends appropriate alterations according to client's physical and motivational responses
- monitors and maintains the safety of clients, exercise equipment and the exercise setting and applies effective contingency management techniques to deal with problems and issues that may arise during the exercise program
- applies all relevant legal and ethical requirements when discussing and recording client information
- demonstrates appropriate manner, empathy and patience when working with clients.

Context of and specific resources for assessment

Assessment must ensure demonstration of skills over a period of time within a facility where a variety of exercise modes and equipment are available to support effective exercise for clients with cardiorespiratory conditions.

Assessment must also ensure access to:

- a range of clients with real or simulated cardiorespiratory conditions from a range of ages
- a range of real or simulated medical or allied health professional referrals for a range of referred clients with cardiorespiratory conditions and risk factors
- relevant documentation such as client record forms
- demonstration of skills on sufficient occasions to determine competence in interpreting relevant

information and delivering the prescribed exercise program for a range of clients with a range of cardiorespiratory conditions.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of consulting with clients and carers and adjusting standard exercise prescriptions in consultation with an appropriate medical or allied health professional to account for a range of cardiorespiratory conditions and risk factors to focus on functional capacity and health rather than physical fitness
- observation of dealing effectively with a range of contingencies such as real or simulated client injuries or inability to complete the exercise prescription
- oral or written questioning to assess knowledge of the physiology of cardiorespiratory conditions, medications and associated risk factors
- third-party reports from a supervisor detailing work performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- SISFFIT524A Deliver prescribed exercise to clients with metabolic conditions.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Medical or allied health professional may include:

- sports physician
- sports doctor
- general practitioner
- physiotherapist
- accredited exercise physiologist
- occupational therapist
- remedial massage therapist
- chiropractor
- osteopath
- accredited practising dietician
- psychologist
- aboriginal health worker.

Cardiorespiratory condition may include:

- Asthma (controlled)
- Hypertension: controlled
- Anaemia
- Coronary artery disease
- stable angina

Relevant legislation may include:

- Occupational Health and Safety
- duty of care
- privacy
- codes of practice
- fair trading.

Organisational policies and procedures must include:

- Occupational Health and Safety
- emergency procedures
- risk management
- use of client record systems
- collection and use of client information
- equipment use and maintenance
- incident reporting
- client history gathering procedures
- client referral procedures.

Risk factors may include:

- family history such as myocardial infarction, coronary artery disease, sudden cardiovascular death before 55 years of age in father or other male first-degree relative or before 65 years of

age in mother or other female first degree relative

- cigarette smoker
- hypertension; systolic blood pressure of ≥ 140 mm Hg or diastolic ≥ 90 mm Hg confirmed by measurement on at least two separate occasions, or taking any antihypertensive medication
- hypercholesterolaemia; total serum cholesterol of ≥ 5.0 mmol/l or high density lipoprotein cholesterol of < 1.0 mmol/l, or on lipid-lowering medication
- impaired fasting glucose; fasting blood glucose of ≥ 6 mmol/L by measurements on at least 2 separate occasions
- obesity; body mass index of ≥ 30 kg/m² or waist girth of ≥ 100 cm for males, ≥ 88 cm for women or waist/height ratio of ≥ 0.5 cm
- sedentary lifestyle; persons not participating in a regular exercise program or accumulating 30 minutes or more of moderate physical activity most days of the week.

Goals and needs analysis may include:

- timeframes
- appropriate exercise program adjustments
- barriers
- motivation
- stage of readiness for behaviour change
- opportunities and enablers.

Methods to enhance exercise adherence may include:

- rewards for attendance and participation
- statement of intent
- perceived choice
- goal setting.

Records may include:

- electronic
- hand written.

Cardiorespiratory conditioning may include:

- Choice of exercises and location:
 - appropriate to condition and health needs
 - emphasis on functional capacity and activities of daily living such as mobility
 - gait, coordination, balance limitations
 - low initial fitness level, easily fatigued
 - inefficient movement
 - possible cognitive impairment
- integration with muscular training:
 - prior improvement in strength, balance and range of motion
 - use of exercise machines and circuit training
- low fitness level and need for gradual progression.

Muscular conditioning may include:

- muscular endurance
- muscular strength
- muscular power.

Instructional techniques may include:

- establishing rapport
- instructional position
- communication
- demonstration and motivational strategies
- positive feedback.

Exercise program may include:

- Program variables include mode, intensity, frequency, duration and volume
- exercise variety
- logical progression.

Exercise equipment may include:

- cardiorespiratory equipment:
 - stepper

- rowing machine
- stationary bicycle
- treadmill
- free weight equipment
- resistance training machines
- aquatic equipment
- resistance bands.

Monitor client responses may include:

- rating of perceived exertion (RPE)
- heart rate measures
- 'talk test'
- direct observation.

Symptoms requiring intervention may include:

- pain, discomfort or other typical symptoms of angina equivalent in the chest, neck, jaw, arms or other areas that may be due to ischemia
- shortness of breath at rest or with mild exertion
- dizziness or syncope
- orthopnea or paroxysmal nocturnal dyspnea
- palpitations or tachycardia or bradycardia
- intermittent claudication
- unusual fatigue or shortness of breath with usual activities
- acute febrile illness or sickness
- complaint
- unaccustomed lack of functional strength
- signs and symptoms of acute inflammations and infections such as fever, temperature, redness
- fractures
- recent muscle injury
- haematoma
- joint instability
- acute and or sudden joint swelling
- neck soreness or strain
- pain on movement of any body part
- inability to bear weight through a limb
- cyanosis.

Procedures to respond to symptoms requiring intervention must include:

- cessation of activity
- first aid
- emergency medical assistance
- referral.

Signs of unstable condition may include:

- fatigue and weakness
- cardiac pain
- breathlessness
- oedema
- palpitations
- claudication pain
- dizziness.

Lifestyle modifications may

- moderation of alcohol consumption

include:

- cessation of smoking
- increased incidental activity
- stress reduction
- provision of health eating guidelines
- provision of healthier choices.

Unit Sector(s)

Fitness

Competency Field

Fitness