Adapting exercise to meet patient needs

Unit: Instructing exercise with referred patients

CONSIDER


Why is it important to monitor client progress individual and groups?
How would you monitor progress?
When would you monitor?

When?

Formal assessments at staged intervals

Other checks at every session

Monitoring progress

Why?

- Safety & effectiveness
  - Progression or regression
  - Adaptation or modification
  - Goal setting
  - Motivation
- Signpost back to GP
  - Changes in symptoms
  - New symptoms
- Scheme evaluation and monitoring
  - Data collection
  - Reporting

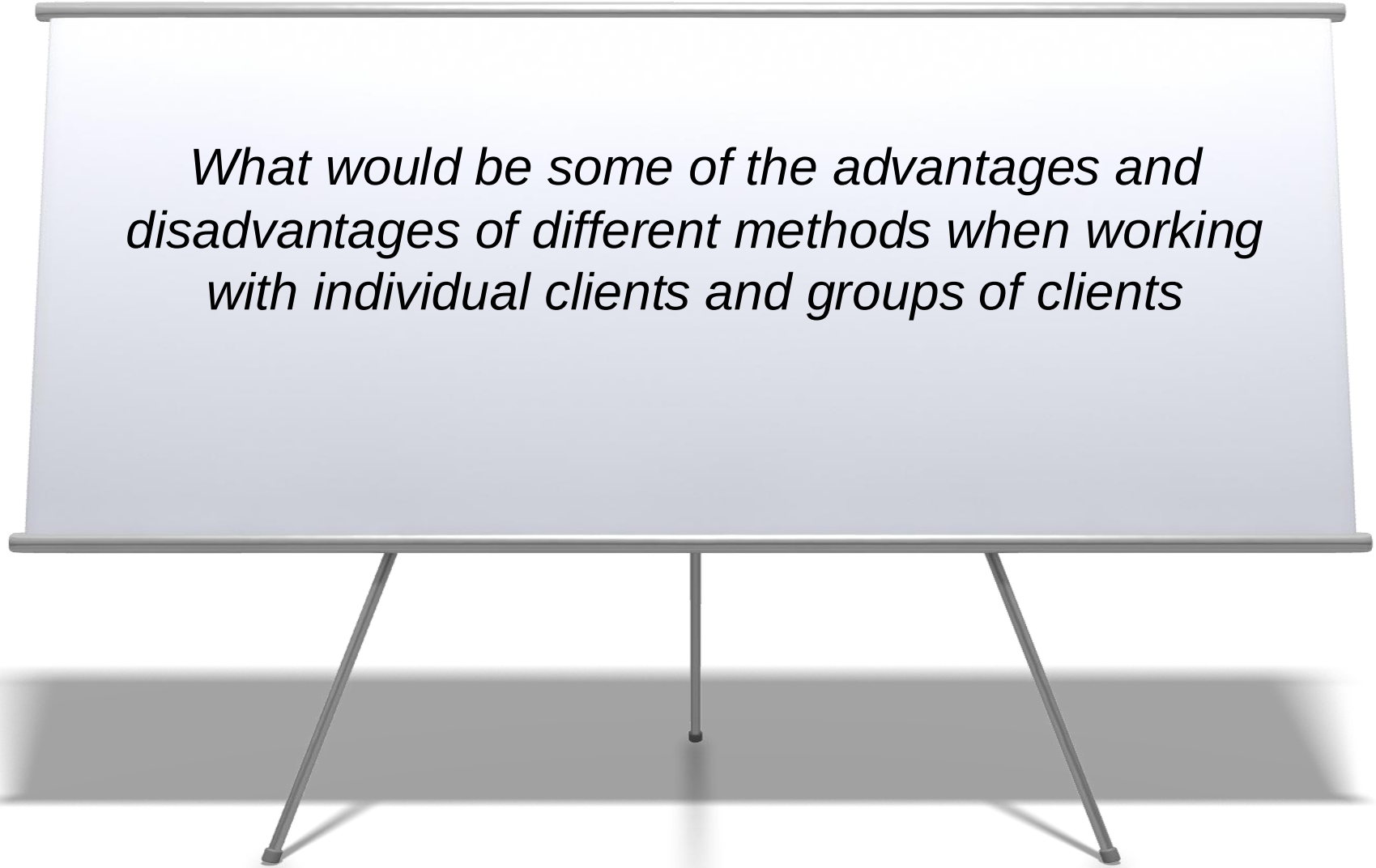
How?

- Observe
  - Posture and technique
  - Facial expression, colour
- Ask questions
- RPE scales
- Heart rate monitoring
- Talk test
- Assessments
  - BMI, blood pressure
  - EQ5D
  - IPAQ

Other performance markers

- Repetitions, resistance, sets, rests, range of motion
- Maintenance of correct technique
- Pace/speed (e.g. walking or cycling)
- Level or incline (CV machines)
- Duration (total time and interval and rest time)
- Exercise positions (including the level of support or balance required)

CONSIDER ..


What would be some of the advantages and disadvantages of different methods when working with individual clients and groups of clients

Observation

- Quick and easy to use
  - Can respond quickly, e.g. Correct exercise technique
- Some observations may be subjective
  - changes in levels of breathlessness
  - sweating
  - pallor and changes in skin colour
  - anxiety in relation to the exercise response
  - perceived discomfort via changes in facial expression and body language

Heart rate monitoring

- Individuals need to be able to take their heart rate
- Takes time and practice to learn
- Maximal heart rate is usually estimated
- Not always 100% accurate
- Some medications will effect
- Other factors impact heart rate (stress and anxiety levels, temperature, cigarette smoking, caffeine etc.)

Rating of perceived exertion (RPE)

- 0-10 scale more user-friendly method
- 6-20 more commonly used with specialist programmes such as L4 Cardiac
- Takes time and practise to become proficient
- Very subjective
- Need to focus on all sensations of exertion (breathlessness, strain and muscle fatigue) and rate this to their overall feelings
- Works most effectively with individuals who are more experienced at training and rating the sensations they experience

Formal assessments

- Follow protocols for accuracy
- Record information
- Most have to be completed on individual basis, e.g. Blood pressure
- Questionnaires could be completed collectively
- Need time to give feedback and discuss outcomes

Talk test

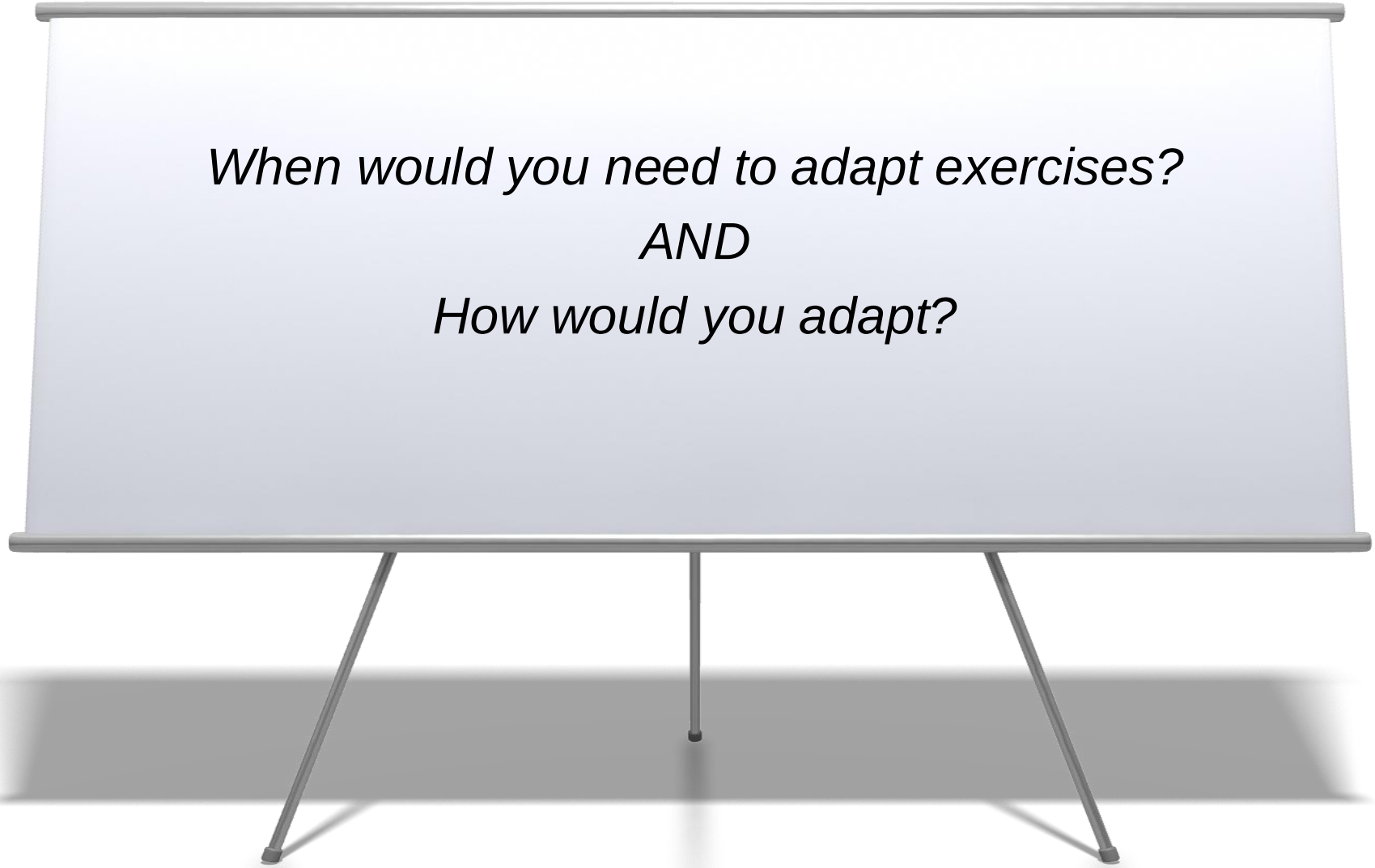
- Simple to use
- Quite subjective
- Depends on being able to hold a conversation and breathe comfortably

On-going monitoring

During the exercise session, on-going monitoring is essential to:

- determine how well clients are coping
- check how patients are feeling
- identify any changes in the client's response
- identify any changes that need to be made
- provide continuing help and support

TASK


When would you need to adapt exercises?
AND
How would you adapt?

When to adapt planned exercise

The client is:

- finding the exercises too challenging (too hard)
- not finding the exercises challenging (too easy)
- not enjoying the current exercise(s)
- has poor technique
- has limited range of motion
- Unable to balance
- symptoms have changed
  - e.g. returning after a flare up

- Environment and equipment
  - Specific exercise equipment is unavailable or not enough
  - Temperature, space

How to adapt exercises and modify intensity

- Frequency
- Intensity
  - repetitions and sets, resistance, rate/speed, range of motion
  - training systems
- Time
  - total time, timing of components, work/rest intervals
- Type
  - component of fitness
  - weight-bearing or non-weight bearing
  - positions - stability - balance
  - machines – body weight - small equipment