Level 1/2 Vocational

Health and Social Care

1.4.2 The physical indicators used to measure health and how these are interpreted

Key terms

Physical indicator

The measurement of a physical aspect of an individual's health.

Data

Information used to find something out.

Interpretation of data

Reading and understanding data to identify what it might be telling us, such as looking for patterns or trends.

Trend

The direction in which data is moving (for example, an upward trend is an increase, a downward trend is a decrease).

Pattern

A relationship or repetition identified within data.

Normal values/comparative date

A comparison of different sets of data.

What are physical indicators?

A physical indicator is a measurement of a physical aspect of an individual's health, such as their blood pressure or weight. The information gathered from these indicators can help identify ways to support and promote an individual's health and wellbeing.

Examples of physical indicators

Physical indicator	What is it?	How and why is it measured?
Blood pressure	The force of blood pushing against artery walls as the heart pumps. Measured in mmHg.	**Ideal range:** 90/60mmHg to 120/80mmHg. High blood pressure can increase the risk of cardiovascular disease and stroke.
Peak flow	How quickly air can be blown out of the lungs. Measured in litres per minute.	**Normal adult range:** 400–700 l/min. Low scores can indicate narrowed airways, a key sign of asthma. Used to monitor respiratory conditions.
Body Mass Index (BMI)	A measure using height and weight to work out if an individual's weight is healthy.	**Ideal adult range:** 18.5–24.9. Being overweight or obese is linked to risks like high blood pressure, heart disease and depression.
Waist–hip ratio	The distribution of fat around the waist and hips.	**Recommended:** <0.85 for women, <1 for men. A higher ratio ('apple-shaped') is linked to a greater risk of heart disease and diabetes.
Resting pulse rate and recovery after exercise	The number of times the heart beats per minute (bpm) at rest and after exercise.	**Normal adult resting range:** 60–100bpm. A very high or low rate can indicate problems like infection, anaemia or heart conditions.

Interpreting health data

When we interpret data from physical indicators, we look for meaning. This involves:

- **Collecting and recording data** (for example, a week of peak flow readings).
- **Identifying trends and patterns** (for example, is blood pressure increasing over time?).
- **Comparing data** to normal values or other groups (for example, comparing the pulse rate of an athlete to a non-athlete).
- **Identifying possible reasons** for the findings.

The goal is to understand an individual's health status and decide if any action is needed, such as lifestyle changes or medical support.

Contributing factors to health trends

When looking at data for groups of people, certain factors can explain why trends and patterns exist.

- **Age:** Data shows that individuals over 75 are more likely to have high blood pressure, as age-related factors like inactivity and obesity increase risk over time.
- **Environment:** Fewer children now spend time playing in natural environments compared to previous generations. This decline, linked to safety concerns and indoor technology, raises worries as outdoor play supports children's physical activity, mental health and wellbeing.
- **Lifestyle:** The number of people in the UK who have never smoked is increasing. Measures such as banning smoking in the workplace and public places, not allowing the advertising of cigarettes, and support to quit smoking are thought to have contributed to this trend.
- **Sex:** Some health patterns differ between males and females. For example, men are often less likely to seek help for mental health issues.