What is clinical evidence?

Health information about treatments should be based on clinical evidence. Clinical evidence comes from clinical research.

Why does it matter?

Evidence-based health information can help you make vital decisions about your treatment and care.

How can I tell which clinical evidence is the best?

There are many types of clinical evidence.
The **pyramid of evidence** on the next page ranks evidence from high to low. It was developed by doctors to help them rate the quality of evidence. Generally, the more people included in research the more reliable the findings.

Why would lower quality evidence be used?

Guidelines and reviews do not exist for all topics. In this case, evidence from lower down the pyramid will be used.

How can I be sure about the evidence?

Research should be checked by other experts before it is published. This is called peer-review. It can be hard to be certain about clinical evidence. Health information should tell you if the evidence is uncertain or if medical experts have different opinions.

What about 'real world' patient data?

Digital tools make it easier to see what happens once treatments are used in the general population.

Real-world data is important because some groups of people are under-represented in clinical trials.

What does research tell me?

Everyone is different. Research can only tell you the most likely outcome. It can never guarantee what will actually happen to you.

Can I share my data?

You can help build evidence on your condition or treatment by giving consent for your data to be shared for research. Check how your data will be used and how your identity will be protected.

Produced by the Patient Information Forum.

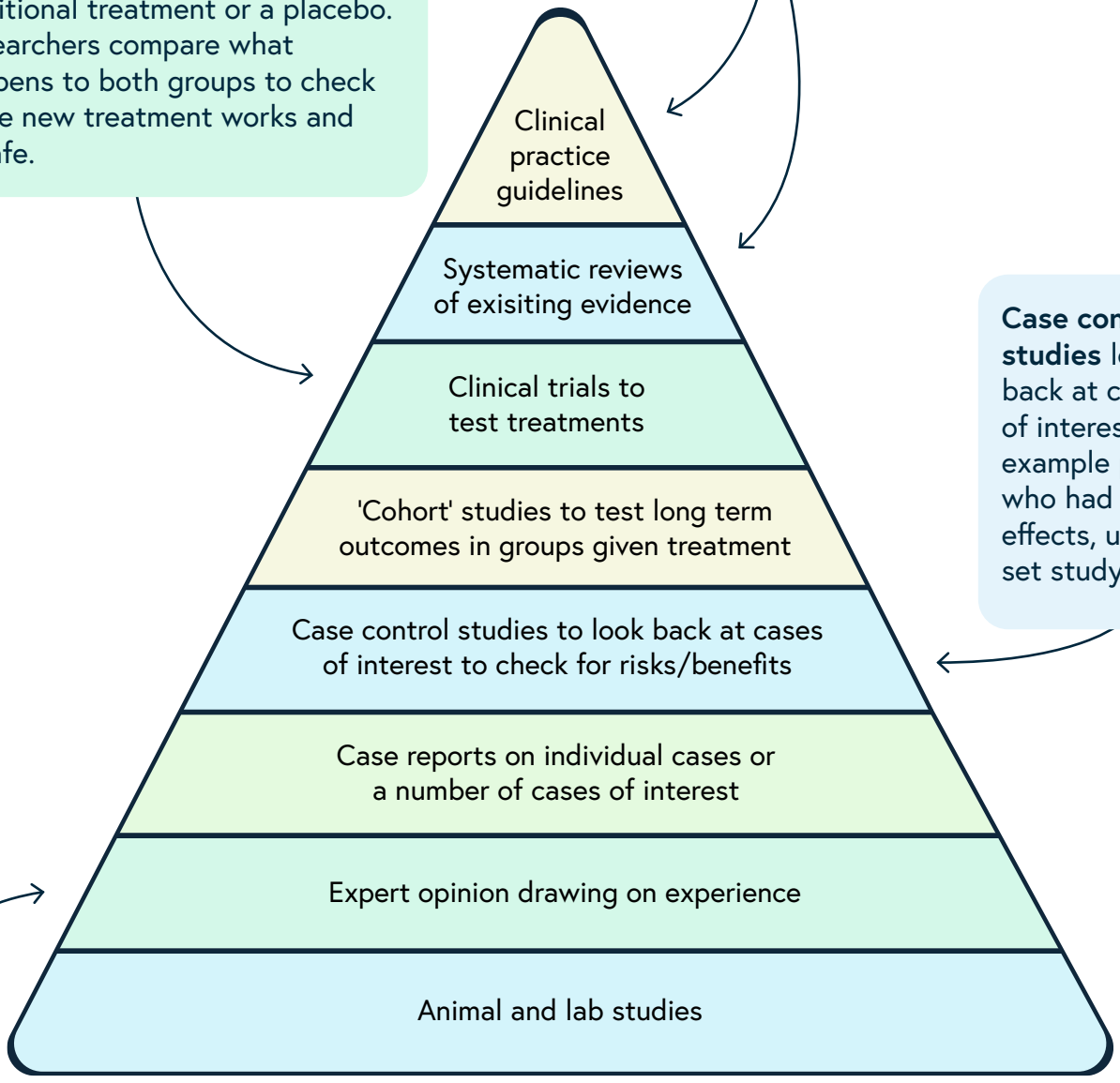
Published June 2021. Reviewed July 2023.
Next review date: July 2026.

Trusted Information Creator
Patient Information Forum

Pyramid of evidence

The best evidence is at the top. These are **clinical guidelines** and **systematic reviews**. Experts check all the clinical research and patient data available and use a set system to make recommendations based on the findings.

Clinical trials research new medicines. You might see them called randomised controlled trials or placebo studies. One group of patients is given a new treatment and a similar group is given a traditional treatment or a placebo. Researchers compare what happens to both groups to check if the new treatment works and is safe.



Case control studies look back at cases of interest, for example people who had side effects, using a set study design.

Expert opinion – medical experts give their views on a particular topic of interest based on their knowledge and experience.

Animal and laboratory studies are the earliest stage of research. It will take years of development and clinical studies before treatments are ready for patients.

Pyramid adapted from The Evidence Based Medicine Pyramid https://s4be.cochrane.org/blog/2013/02/14/the-ebm-pyramid

Produced by the Patient Information Forum.

Published June 2021. Reviewed July 2023.
Next review date: July 2026.

Trusted Information Creator
Patient Information Forum