Activity #1: Genetics 101

Each scenario listed below is either an example of Genetics Research or Clinical Practice. Decide if it is research or clinical practice and explain.

1. A community member with Lynch syndrome (hereditary colorectal cancer) consents to be randomized to a different colonoscopy schedule for 10 years and the outcomes are recorded.

☒ Research ☐ Clinical Practice

Explain:

Research- The patient is part of a randomized study testing different colonoscopy schedules, aiming to gather new evidence over time.

2. A doctor helps a patient with a genetic predisposition to breast cancer receive care that is based on national guidelines.

☐ Research ☒ Clinical Practice

Explain:

Clinical Practice – The doctor is applying established national guidelines to provide care, not testing a new method.

3. After a family member is diagnosed with a genetic condition, a patient visits with a genetic counselor, agrees to genetic testing and sends a biospecimen to a genetics lab. The genetic counselor contacts the patient in the following weeks to disclose testing results.

☐ Research ☒ Clinical Practice

Explain:

Clinical Practice – The genetic counseling and testing process is standard patient care after a known family diagnosis.

4. A patient is asked to take part in a program that tests a new type of breast cancer screening, where some patients get 3D mammograms instead of usual 2D mammograms.

☒ Research ☐ Clinical Practice

Explain:

Research – The program compares new (3D) and standard (2D) screening methods to evaluate effectiveness, which defines a research setting.

5. A doctor suggests a patient with Familial Hypercholesterolemia try to follow a heart healthy diet and to start a food log.

☒ Research ☐ Clinical Practice

Explain:

Clinical Practice – The doctor gives lifestyle advice and tracking tools as part of routine care for a known condition.