A study was done of women who had diagnostic procedures following a suspicious mammogram or breast exam. The real-world data was then projected to the national level.

After their initial screening exams, if something was suspicious, patients underwent one or more diagnostic procedures.

Most common diagnostic procedures:
- 8.7M diagnostic mammograms (53.3% of patients) $349 per diagnostic mammogram
- 7M breast ultrasounds (42.4% of patients) $132 per ultrasound
- 1.6M biopsies (10.3% of patients) $1,938 per biopsy

The breast biopsy shows a false positive rate of about 71.0% with an annual cost of $2.18 billion for a procedure that would be avoided if a more accurate diagnostic exam was available.

Following initial diagnostic exams, women were recalled to undergo additional procedures to ensure diagnostic confidence in their risk of breast cancer.

Frequency of multiple procedures:
- 100% (12.4M) of patients studied underwent an initial diagnostic procedure
- 49.4% (6.1M) of those patients received a second diagnostic procedure
- 20.1% (1.2M) of those patients received a third diagnostic procedure
- 10.0% (0.1M) of those patients received a fourth diagnostic procedure

Economic impact of procedures:
- 12.4M adult women
- 18.9M annual diagnostic breast imaging and biopsy procedures
- $7.91B estimated costs

In the end, clinicians are doing what guidelines and good care pathways require, but...

A technology that reduces the number of biopsies is needed.