Collection of these data requires proper coding of the data elements for efficient retrieval, often requiring considerable effort. However, once collected and calculated, these data allow measurement of one's practice outcomes by providing quantifiable evidence in pursuit of the three major goals of screening mammography:

1. Find a high percentage of the cancers that exist in a screening population (measurement: cancer detection rate, sensitivity [if calculable]).
2. Find these cancers within an acceptable range of recommendations for recall and recommendations for biopsy in an effort to minimize cost and morbidity (measurement: abnormal interpretation [recall] rate, positive predictive value).
3. Find a high percentage of small and node-negative cancers, which are more likely to be curable (measurement: rates of minimal cancers found, axillary lymph node negativity).

The numbers obtained for each of the data elements above can be compared to desirable goals recommended in Quality Determinants of Mammography Guidelines published in 1994 by the Agency for Healthcare Policy and Research (see Table 2), or other published recommendations.

Table 2. Analysis of Medical Audit Data: Desirable Goals

PPV_1 based on abnormal screening examination	5-10%
PPV_2 when biopsy (surgical, FNA, or core) recommended	25-40%
Tumors found - Stage 0 or 1	>50%
Tumors found - Minimal cancer [1]	>30%
Node positivity	<25%
Cancers found per 1,000 cases	2-10
Prevalent cancers found per 1,000 first-time examinations	6-10
Incident cancers found per 1,000 follow-up examinations	2-4
Recall rate	<10%
Sensitivity (if measurable)	>85%
Specificity (if measurable)	>90%

[1] Minimal cancer is invasive cancer ≤1 cm or ductal carcinoma in situ.

(From Bassett LW, Hendrick RE, Bassford TL, et al. Quality determinants of mammography. Clinical Practice Guideline No. 13. AHCPR Publication No. 95-0632. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services, October 1994: 83, with permission).