

The American College of Radiology Mammography Accreditation Program: Tracking Quality Improvement

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Abstract: Category 1. Administrative Section; Subcategory- Other topics- Quality Improvement

Introduction:

In 1992, Congress passed the Mammography Quality Standards Act (MQSA) requiring all mammography facilities to meet minimum quality standards for personnel, equipment and recordkeeping, and be certified by the Food and Drug Administration (FDA) or an FDA-approved state certifying body (CB) in order to legally operate in the US. The MQSA requires that all mammography facilities in the United States be 1). accredited by an approved body, 2). certified by the U.S. Department of Health and Human Services (HHS), and 3). receive an on-site inspection by a state agency acting on behalf of the HHS (or by HHS inspectors). The American College of Radiology has been designated by the FDA as an accrediting body for both screen-film and full-field digital mammography units. A retrospective 10 year review of accreditation data is presented demonstrating the improved quality of mammography in the U.S.

Methods:

A retrospective review of data collected during the accreditation process inclusive of both the voluntary accreditation period prior to MQSA and the post implementation of Mammography Quality Standards Act (MQSA). Data is presented in tables, charts and graphs demonstrating the accreditation process.

Results:

During 1987-1991, when the mammography accreditation program was voluntary, the first-attempt pass rate was 70% of the mammography units completing the accreditation process. The first-pass attempt rate did not significantly change in 1994 and 1995 when all mammography units were required to accredit under the FDA Interim Rules. In 1994, those units repeating accreditation had a significantly higher pass rate (94.4%) relative to those repeating accreditation from 1987-1991 (87.5%).

After 1996, when the vast majority of mammography facilities had become accredited and certified under MQSA, there was a marked increase in the first-attempt pass rate (85.7%). Although there has been some fluctuation in pass rates since 1996, this higher pass rate has generally been maintained to the present. In 2003, 88.3% of the 5466 mammography units completing the accreditation process passed on the first attempt. This 18% improvement in pass rate is indicative of an overall improvement in the quality of mammography in the U.S. as a result of ACR Mammography Accreditation and MQSA.

Another indication of quality improvement is the decreased number of Scheduled-On-Site Surveys conducted at facilities after a third unsuccessful attempt at accreditation. In 1996, when the policy was initiated, the ACR needed to conduct 32 site visits. In 2003, only six were necessary.

Conclusions:

The ACR Mammography Accreditation Program has been one of the most successful quality improvement programs in radiology. Since its inception as a voluntary program in 1987, it has improved the quality of mammography performed at facilities as illustrated by the increasing pass rates. Although the number of mammography units has increased since 1994, the number of mammography facilities has clearly diminished. Most facility closures have been due to financial reasons. One way of dealing with these pressures is by consolidating mammography operations to one location. Further research needs to be done to determine if women in communities no longer being served because of these closed facilities have access to other mammography facilities within a reasonable distance.

The ACR believes that the improved quality of mammography in the U.S. as a result of accreditation and MQSA coupled with an increase in annual screening compliance have contributed to this early detection and improved survival. This is supported by the 2003 National Cancer Institute's annual Report to the Nation on the Status of Cancer.