Overview of the 2005 IOM Report
Improving Breast Imaging
Quality Standards
Goals of 2005 Report


• “...to determine whether additional steps could be taken to increase the accuracy of mammography interpretation and whether regulations should be modified to improve the oversight process.”

• To assess the effect of the study recommendations on access to services and to identify steps to assure the effective use of other screening or diagnostic tools, given the evolution of technology.
Recommendations Overview

• Improve mammography interpretation.
• Revise MQSA regulations, inspections and enforcement.
• Ensure an adequate workforce for breast cancer screening and diagnosis.
• Improve breast imaging quality beyond mammography.
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• 2. Facilitate a voluntary advanced medical audit with feedback.
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- 3. Designate specialized Breast Imaging Centers of Excellence and undertake demonstration projects and evaluations within them.
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• 4. Further study the effects of CME, reader volume, double reading and CAD.
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6. Verify data collection and analysis at FDA inspection.
What were the required elements of the MQSA medical audit in 2005?

• Recording of all mammograms interpreted as BIRADS 4 or 5.
• Obtain all biopsy results.
• Designate an interpreting physician per case.
• Analyze results annually and share them with the interpreting physician. (No specific metrics were required.)
Today’s MQSA Audit

• Define positive mammogram (BIRADS 4 and 5).
• Have a method to follow-up positive mammograms.
• Have a method to obtain pathology results for all biopsies performed.
• Have a method to correlate path results with final assessment categories.
• Review audit data for the whole facility and individual physicians at least annually.
Revise MQSA Audit

Changes were made but most of the IOM’s specific suggestions were NOT implemented.
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Verify data collection and analysis at FDA inspection.
Facility must show inspector that path reports are collected and analyses are performed.
Improve Mammography Interpretation

2. Facilitate a voluntary advanced medical audit with feedback.
Facilitate Advanced Medical Audit with Feedback

1. Collect patient characteristics and tumor staging.
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2. Create a central data and statistical center to collect and analyze the data and to provide feedback to interpreting physicians, help develop, implement and evaluate self-improvement methods for interpreting physicians and report aggregate data to the public.
Facilitate Advanced Medical Audit with Feedback

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2. Create a central data and statistical center to collect and analyze the data and to provide feedback to interpreting physicians, help develop, implement and evaluate self-improvement methods for interpreting physicians and report aggregate data to the public.
3. Develop incentives (pay for performance) for participation in these audits and meeting performance criteria.
Facilitate Advanced Medical Audit

Not implemented by government.
Some pay for performance mammography metrics have been implemented by some payers.
ACR National Mammography Database
Started in 2009, 276 Centers
NMDR Data Elements

• Patient demographic characteristics
• Indication for examination
• Breast density
• BIRADS® assessment category
• Follow-up recommendations
• Mammographic findings (mass, calcs, etc)
• Use of CAD/double read
• Biopsy results, including size and stage
NMDR Reports

Includes all IOM-recommended audit metrics and allows comparison with national benchmarks through comparison with National Breast Cancer Surveillance Consortium Data.
Improve Mammography Interpretation

3. Designate Breast Imaging Centers of Excellence and undertake demonstration projects/evaluations within them.
Centers of Excellence

1. Participate in both basic and advanced audits.
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5. Linked with facilities that provide comprehensive and multidisciplinary care.
ACR program started in 2007.
No governmental program exists.
ACR Centers of Excellence

• Companion program to Breast Cancer Centers of Excellence, sponsored by National Consortium of Breast Centers

• Awarded to 1225 centers that achieve excellence by seeking and earning accreditation in all of the ACR’s voluntary breast imaging accreditation programs and modules.
  – Mammo
  – US
  – Stereotactic biopsy
  – MRI (will be required as of 1/1/2016)
ACR Breast Imaging Centers of Excellence
5/4/15
1234 Total # Breast Imaging Centers of Excellence (home facilities)
Other ACR/SBI Programs for improved Mammography Interpretation

• ACR Breast Imaging Boot Camps
  – 3 day course in Reston, VA
  – Allows radiologists to meet MQSA requirements for DM, Tomo, and CME for stereo and US bx

• ACR Mammography Case Review
  – On line self-paced review of 118 breast imaging cases (mammo, US, MRI) for CME credit

• SBI “PERFORMS”
  – Screening self-assessment case set imported from UK
  – Provided at annual SBI symposia
In Conclusion

Most of the 2005 IOM recommendations have been implemented through new programs provided by professional societies.

We don’t really know whether these efforts have improved mammography image interpretation.
Questions?

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