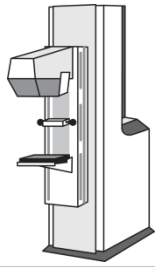


# CR Mammography: Digital Mammography at a Reduced Cost

## Computed Radiography (CR) Mammography



### Technology In Brief

**What Is It:**

- Retrofitted to analog mammography units, CR mammography uses existing infrastructure to convert film/screen mammography studies to digital images.

**How Does it Work:**

- Computed radiography uses existing mammography infrastructure to convert film to digital mammograms. A special CR cassette containing a phosphor screen (instead of traditional film) is placed in the gantry to capture images from a film mammography unit and convert them to digital.

**Adoption Status:**

- 84% of centers offer digital mammography (CR or FFDM)

**FDA Status:**

- Approved

**Major Vendors:**

- Fuji, Carestream

**Competing Products:**

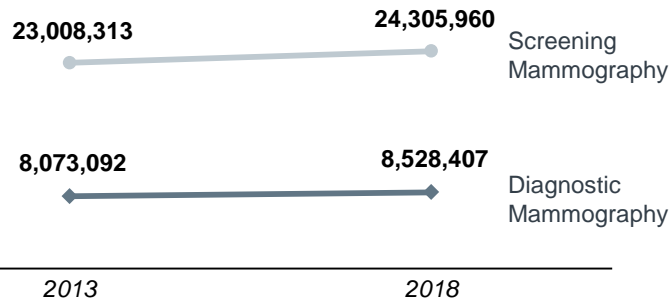
- Full field digital mammography, 3D breast tomosynthesis

Consideration	Service Line Strategy Advisor's Take
<b>Clinical</b>	<ul style="list-style-type: none"> <li>• Computed radiography (CR) mammography provides similar image quality to FFDM with only minor image degradation</li> <li>• Average glandular dose similar to that seen with digital mammography allowing use as a screening tool</li> </ul>
<b>Reimbursement</b>	<ul style="list-style-type: none"> <li>• CR mammography allows for additional payment over film systems and is paid at the same rate as FFDM</li> </ul>
<b>Cost</b>	<ul style="list-style-type: none"> <li>• Upgrades of existing film mammography units cost \$175K to \$250K per unit for plates, processor, and workstation</li> <li>• CR mammography provides a lower cost option for centers desiring an upgrade to digital</li> </ul>
<b>Payer Coverage</b>	<ul style="list-style-type: none"> <li>• All private payers and Medicare pay additionally for digital mammography (both CR and FFDM) over film studies</li> </ul>
<b>Market Potential</b>	<ul style="list-style-type: none"> <li>• All women over 40 currently recommended for annual screening mammogram</li> <li>• Debate over screening guidelines and economic downturn may deter some women from seeking out an elective, "well woman" exam</li> </ul>
<b>Operational Needs</b>	<ul style="list-style-type: none"> <li>• Time to process images and digitally display them for interpretation amounts to half the time it would otherwise take to develop and hang films allowing improvements in throughput</li> </ul>
<b>Impact in Accountable Care</b>	<ul style="list-style-type: none"> <li>• Screening mammography now covered by all new insurers without additional co-pay or co-insurance, decreasing cost barriers for women to receive screening</li> </ul>
<b>Competitive Take</b>	<ul style="list-style-type: none"> <li>• CR mammography unlikely to provide competitive or market advantage given high penetration of digital (FFDM and CR) in market</li> <li>• CR offers no productivity advantage compared to FFDM, and is unable to do dynamic imaging like tomosynthesis, limiting its usefulness for future applications</li> </ul>
<b>Position on the Adoption Curve</b>	<ul style="list-style-type: none"> <li>• Conservative</li> </ul>

# CR Mammography Provides Low Cost Option to Provide Digital Imaging

## Market & Financial Overview

### Market Estimates



### Reimbursement Rates

HCPCS	2013 Final Rate	2014 Final Rate	Percent Change
G0202 – Screening	\$104.11	\$126.32	21%
G0204 – Diagnostic	\$125.89	\$154.17	22%
G0206 - Diagnostic	\$98.67	\$121.39	23%

## Clinical Considerations

### Current Recommendations for Screening Mammography

	Guidelines
<b>USPSTF<sup>1</sup></b>	• Biennial screening for women ages 50 to 74
<b>ACOG<sup>2</sup></b>	• Annual screening for all women over 40 (update from previous recommendation of screening beginning at 50)
<b>ACS<sup>3</sup></b>	• Annual screening for all women over 40

Recent studies examining the lifetime impact of screening mammography on breast cancer incidence and mortality have called into question the value of annual screening. While most societies still recommend annual screening begin at 40, some providers are now cautioning women of the high false positive rate associated with screening in younger women which may deter some patients from seeking out the exam.



### Keys for Investment Success

- Evaluate all options for screening mammography (film, CR, FFDM, tomosynthesis) to determine which technology best fits each center's volume and operations
- CR is an option for lower-volume facilities that may not experience significant throughput and capacity gains with a more expensive FFDM investment, while still capturing the higher per-scan revenue of a digital mammography study
- Few (if any) additional build-out costs required since existing analog acquisition units utilized to capture new digital images

1) USPSTF: US Preventative Services Task Force  
 2) ACOG: American College of Obstetrics and Gynecology  
 3) ACS: American Cancer Society