DIGITAL BREAST TOMOSYNTHESIS:
CONSIDERATIONS FOR EMERGING BREAST CANCER SCREENING BUNDLED PAYMENT MODELS
AUTHORS

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- Nothing to disclose.

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BUNDLED PAYMENTS: DEFINED

- Bundled payment is the reimbursement of health care providers (such as hospitals and physicians) on the basis of expected costs for clinically-defined episodes of care.
- Also known as episode-based payment, global payment, or packaged pricing.
- Described as a middle ground between fee-for-service reimbursement (in which providers are paid for each service rendered to a patient) and capitation (in which providers are paid a lump sum per patient regardless of how many services the patient receives).
- Risk is shared between payer and provider.
BACKGROUND ON BUNDLED PAYMENTS

- Bundled payments have been touted as a mechanism to promote quality and reduce costs, and have attracted particular attention in primary care and surgical settings.
- A recently published study evaluated a bundled payment framework for screening mammography episodes in Medicare beneficiaries.
  - That study did not consider the role of digital breast tomosynthesis (DBT).
METHODS

- Data from a large academic health system over 4 years
- Utilized existing methodology to calibrate Medicare national allowable reference prices for 59,094 screening episodes for all women undergoing screening mammography at two large facilities prior to and after the practice-wide implementation of DBT
RESULTS

- Excluding DBT, Medicare normalized bundled prices for breast imaging in conjunction with and 364 days downstream to screening mammography are extremely similar pre- and post-DBT implementation
  - $182.86 in 2013; $182.68 in 2015
- Addition of DBT increased a DBT-inclusive bundled price by $53.16, an amount lower than the $56.13 Medicare allowable fee for screening DBT
- Addition of DBT was also associated with reduced post-DBT recall rates
  - 13.0% vs. 9.4%; (odds ratio, 0.70; 95% confidence interval: 0.66, 0.73; P < 0.0001)
- Screening episode bundled prices remained sensitive to bundle-included services, and varied little by patient age, race, residential economic status, or insurance status
## RESULTS: BUNDLE PRICING

<table>
<thead>
<tr>
<th>Bundled Breast Imaging Services</th>
<th>2013 without DBT</th>
<th>2015 without DBT</th>
<th>2015 with DBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>All screening and diagnostic mammography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Component</td>
<td>$44.44</td>
<td>$44.75</td>
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<tr>
<td>Technical Component</td>
<td>$120.46</td>
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<tr>
<td>Global</td>
<td>$164.90</td>
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<tr>
<td>All screening and diagnostic mammography and US</td>
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<tr>
<td>Professional Component</td>
<td>$46.56</td>
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<tr>
<td>Technical Component</td>
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<tr>
<td>Global</td>
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<tr>
<td>All screening and diagnostic mammography, US, and MRI</td>
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<tr>
<td>Professional Component</td>
<td>$48.10</td>
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<tr>
<td>Technical Component</td>
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<tr>
<td>Global</td>
<td>$182.86</td>
<td>$182.68</td>
<td>$235.84</td>
</tr>
</tbody>
</table>
RESULTS: EFFECT OF DBT ON BUNDLED PAYMENT COST
LOOKING AHEAD

- Prior non-DBT approaches to bundled payment models for breast cancer screening remain viable in regions where DBT has now become the standard of care.
- Increases in bundled prices are less than the price of DBT.
- Need to explore societal costs more broadly (e.g., reduced time away from work from fewer recalls) as bundled payment models evolve.