Prepare Your Lab for PAMA: Understand How Your Costs Compare to New Reimbursements!

Brad Brimhall, MD, MPH
March 21, 2017
Financial Center Schizophrenia in the Lab

- Revenue Center
- Expense/Cost Center
- Profit Center
- Investment Center

Inpatient

Outpatient
How Medicare Pays for Care

**Inpatient**

**Prospective Payment**
- Acute inpatient
- Home health
- Inpatient psychiatric facility
- Inpatient rehabilitation facility
- Long-term care hospital
- Skilled nursing facility
- Hospice center

**Payment by Episode of Care**

**Outpatient**

**Fee For Service**
- Physician fee schedule (PFS)
- Clinical laboratory (CLFS)
- Ambulance fee schedule (AFS)
- Durable medical equipment, prosthetics/orthotic & supplies fee schedule (DMEPOSFS)

**Payment by Specified Service (Test)**
FFS: Biopsy Reimbursement Changes

HCPCS 88305
Real 2000 USD (adjusted for CPI); MAC = “Rest of Texas”
OIG Study (2011)

Compare Medicare payments to lowest of the following rates:

- Medicaid (all state programs)
- Federal employee health benefits program 1 (FEHB-1)
- Federal employee health benefits program 2 (FEHB-2)
- Federal employee health benefits program 3 (FEHB-3)
## Potential Savings to Medicare

<table>
<thead>
<tr>
<th>HCPCS</th>
<th>Description</th>
<th>Medicare Allowed Tests (2011)</th>
<th>Potential Savings to Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>80048</td>
<td>Metabolic panel, total calcium</td>
<td>8,870,790</td>
<td>$36,412,622</td>
</tr>
<tr>
<td>80053</td>
<td>Comprehensive metabolic panel</td>
<td>27,406,336</td>
<td>$130,632,849</td>
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<tr>
<td>80061</td>
<td>Lipid panel</td>
<td>20,620,917</td>
<td>$125,993,031</td>
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<tr>
<td>81001</td>
<td>Urinalysis, automated with microscopy</td>
<td>6,804,619</td>
<td>$9,801,294</td>
</tr>
<tr>
<td>81002</td>
<td>Urinalysis, nonautomated without microscopy</td>
<td>4,312,499</td>
<td>$4,427,415</td>
</tr>
<tr>
<td>81003</td>
<td>Urinalysis, automated without microscopy</td>
<td>5,078,609</td>
<td>$4,383,224</td>
</tr>
<tr>
<td>82306</td>
<td>Vitamin D, 25-hydroxy</td>
<td>5,394,421</td>
<td>$87,398,016</td>
</tr>
<tr>
<td>82570</td>
<td>Assay of urine creatinine</td>
<td>4,649,643</td>
<td>$10,457,972</td>
</tr>
<tr>
<td>82607</td>
<td>Vitamin B12</td>
<td>3,363,543</td>
<td>$25,252,596</td>
</tr>
<tr>
<td>82728</td>
<td>Assay of ferritin</td>
<td>2,401,360</td>
<td>$15,613,616</td>
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<tr>
<td>83036</td>
<td>Glycosylated hemoglobin test</td>
<td>12,678,817</td>
<td>$51,406,983</td>
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<tr>
<td>83540</td>
<td>Assay of iron</td>
<td>2,625,017</td>
<td>$10,256,188</td>
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<tr>
<td>83550</td>
<td>Iron binding test</td>
<td>2,043,112</td>
<td>$9,228,580</td>
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<tr>
<td>83880</td>
<td>Natriuretic peptide</td>
<td>1,079,558</td>
<td>$15,970,434</td>
</tr>
<tr>
<td>83970</td>
<td>Assay of parathormone</td>
<td>1,154,872</td>
<td>$22,934,465</td>
</tr>
<tr>
<td>84153</td>
<td>Assay of prostate specific antigen, total</td>
<td>3,616,338</td>
<td>$32,784,887</td>
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<tr>
<td>84443</td>
<td>Thyroid stimulating hormone</td>
<td>14,761,102</td>
<td>$140,148,947</td>
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<tr>
<td>85025</td>
<td>Complete blood count with automated diff</td>
<td>30,827,609</td>
<td>$136,848,356</td>
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<tr>
<td>85610</td>
<td>Prothrombin time</td>
<td>20,291,205</td>
<td>$24,637,107</td>
</tr>
<tr>
<td>87086</td>
<td>Urine culture colony count</td>
<td>4,703,518</td>
<td>$15,296,087</td>
</tr>
</tbody>
</table>

182,683,885 $909,884,669

PAMA: Data Collection on Private Payers

• Collect payment data for private payers
• Data collected for each test
  • Payment rate paid by each private payer
  • Volume
  • HCPCS code

PAMA Timeline

2016
- Data Collection

2017
- Data Reporting

2018
- Payment System Implementation
# PAMA: Labs Required to Report

## By Laboratory

<table>
<thead>
<tr>
<th>Lab Status</th>
<th>Independent Labs</th>
<th>Physician Office Labs</th>
<th>Hospital Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required (Est)</td>
<td>1,398</td>
<td>11,149</td>
<td>0</td>
</tr>
<tr>
<td>Total (Est)</td>
<td>3,211</td>
<td>235,298</td>
<td>6,994</td>
</tr>
<tr>
<td>Percent</td>
<td>43.5%</td>
<td>4.7%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

## By Medicare Payments/Yr

<table>
<thead>
<tr>
<th>Lab Status</th>
<th>Independent Labs</th>
<th>Physician Office Labs</th>
<th>Hospital Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required (Est)</td>
<td>$3.8B</td>
<td>$1.0B</td>
<td>$0</td>
</tr>
<tr>
<td>Total (Est)</td>
<td>$3.9B</td>
<td>$1.4B</td>
<td>$1.7B</td>
</tr>
<tr>
<td>Percent</td>
<td>97.4%</td>
<td>71.4%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
PAMA Payment Target & Reduction Limits

• Weighted median of private payer payments sets target payment (beginning 2018)
• Plan to re-evaluate every 3 years
• Maximum annual payment reduction (until payment = weighted median payment)
  • 10% per year (2018-2020)
  • 15% per year (2021-2023)

Test Cost Categories

UNIT COST

$9
$8
$7
$6
$5
$4
$3
$2
$1
$0

Test

- Variable Materials
- Direct Labor
- Local Fixed
- Institutional Overhead
## Contribution Analysis (Current)

### Volume (Annual) 26,393

<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>$11.07</td>
<td>$292,171</td>
</tr>
<tr>
<td>Less Reagents, Consumables, Other Variable Costs</td>
<td>$2.25</td>
<td>$59,384</td>
</tr>
<tr>
<td>Contribution to Labor &amp; Fixed Costs</td>
<td>$8.82</td>
<td>$232,786</td>
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<tr>
<td>Less Direct Labor</td>
<td>$2.56</td>
<td>$67,566</td>
</tr>
<tr>
<td>Contribution to Local Fixed Costs</td>
<td>$6.26</td>
<td>$165,220</td>
</tr>
<tr>
<td>Service Contracts, Proficiency Tests, Other Local Fixed Costs</td>
<td>$18,211</td>
<td></td>
</tr>
<tr>
<td>Contribution to Overhead Costs</td>
<td>$147,009</td>
<td></td>
</tr>
<tr>
<td>Less Institutional Overhead Costs</td>
<td>$60,968</td>
<td></td>
</tr>
<tr>
<td>Excess of Net Revenue over Expenses</td>
<td>$86,041.18</td>
<td></td>
</tr>
</tbody>
</table>

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**UNIT PAYMENT/COST**

- **Test**
  - $12
  - $10
  - $8
  - $6
  - $4
  - $2
  - $0

---
## Contribution Analysis (2018)

<table>
<thead>
<tr>
<th>Volume (Annual)</th>
<th>Unit</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>$9.96</td>
<td>$262,874</td>
</tr>
<tr>
<td>Less Reagents, Consumables, Other Variable Costs</td>
<td>$2.25</td>
<td>$59,384</td>
</tr>
<tr>
<td>Contribution to Labor &amp; Fixed Costs</td>
<td>$7.71</td>
<td>$203,490</td>
</tr>
<tr>
<td>Less Direct Labor</td>
<td>$2.56</td>
<td>$67,566</td>
</tr>
<tr>
<td>Contribution to Local Fixed Costs</td>
<td>$5.15</td>
<td>$135,924</td>
</tr>
<tr>
<td>Service Contracts, Proficiency Tests, Other Local Fixed</td>
<td></td>
<td>$18,211</td>
</tr>
<tr>
<td>Contribution to Overhead Costs</td>
<td></td>
<td>$117,713</td>
</tr>
<tr>
<td>Less Institutional Overhead Costs</td>
<td></td>
<td>$60,968</td>
</tr>
<tr>
<td>Excess of Net Revenue over Expenses</td>
<td></td>
<td>$56,744.95</td>
</tr>
</tbody>
</table>

![Unit Payment/Cost Chart]

Test

Excess of Net Revenue over Expenses: $56,744.95
## Contribution Analysis (2023)

<table>
<thead>
<tr>
<th>Volume (Annual)</th>
<th>Unit</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td>$4.96</td>
<td>$130,909</td>
</tr>
<tr>
<td>Less Reagents, Consumables, Other Variable Costs</td>
<td>$2.25</td>
<td>$59,384</td>
</tr>
<tr>
<td>Contribution to Labor &amp; Fixed Costs</td>
<td>$2.71</td>
<td>$71,525</td>
</tr>
<tr>
<td>Less Direct Labor</td>
<td>$2.56</td>
<td>$67,566</td>
</tr>
<tr>
<td>Contribution to Local Fixed Costs</td>
<td>$0.15</td>
<td>$3,959</td>
</tr>
<tr>
<td>Service Contracts, Proficiency Tests, Other Local Fixed Costs</td>
<td></td>
<td>$18,211</td>
</tr>
<tr>
<td>Contribution to Overhead Costs</td>
<td>($14,252)</td>
<td></td>
</tr>
<tr>
<td>Less Institutional Overhead Costs</td>
<td></td>
<td>$60,968</td>
</tr>
<tr>
<td>Excess of Net Revenue over Expenses</td>
<td>($75,220)</td>
<td></td>
</tr>
</tbody>
</table>

**UNIT PAYMENT/COST**

- $0
- $2
- $4
- $6
- $8
- $10
- $12

**Test**
Examination of Five Common Lab Tests

- Current payments: Medicare CLFS 2017
- Low target estimates: Lowest payer
- “Average” target estimate: 3 payers
- Timetable of changes to Medicare payments: PAMA rule to date
- Healthcare costing: Reference lab operation, hospital testing operation
- Lab costing categories: variable, labor, fixed (local & overhead)
Payments 2021

UNIT PAYMENT/COST

$0 $5 $10 $15 $20 $25

TSH CMP CBC PT Urine Cx

TEST

Vbl Labor Local Overhead Payment Target
Payments 2023

UNIT PAYMENT/COST

$0  $5  $10  $15  $20  $25

TEST

TSH  CMP  CBC  PT  Urine Cx

Legend:
- Vbl
- Labor
- Local
- Overhead
- Payment
- Target
## Annual Revenue Changes (5 Tests)

<table>
<thead>
<tr>
<th></th>
<th>TSH</th>
<th>CMP</th>
<th>CBC</th>
<th>PT</th>
<th>U Cx</th>
<th>Total</th>
<th>Δ (YoY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>7,418</td>
<td>30,281</td>
<td>36,630</td>
<td>7,029</td>
<td>6,334</td>
<td>87,692</td>
<td>N/A</td>
</tr>
<tr>
<td>Baseline</td>
<td>$170,985</td>
<td>$437,258</td>
<td>$390,476</td>
<td>$37,886</td>
<td>$70,117</td>
<td>$1,106,722</td>
<td>N/A</td>
</tr>
<tr>
<td>2018</td>
<td>$153,886</td>
<td>$393,532</td>
<td>$351,428</td>
<td>$34,098</td>
<td>$63,106</td>
<td>$996,050</td>
<td>($110,672)</td>
</tr>
<tr>
<td>2020</td>
<td>$124,648</td>
<td>$318,761</td>
<td>$284,657</td>
<td>$27,619</td>
<td>$51,116</td>
<td>$806,800</td>
<td>($89,644)</td>
</tr>
<tr>
<td>2021</td>
<td>$105,951</td>
<td>$270,947</td>
<td>$241,958</td>
<td>$26,288</td>
<td>$43,448</td>
<td>$688,593</td>
<td>($118,208)</td>
</tr>
<tr>
<td>2022</td>
<td>$90,058</td>
<td>$230,305</td>
<td>$205,665</td>
<td>$26,288</td>
<td>$36,931</td>
<td>$589,247</td>
<td>($99,346)</td>
</tr>
<tr>
<td>2023</td>
<td>$76,549</td>
<td>$195,759</td>
<td>$174,815</td>
<td>$26,288</td>
<td>$31,391</td>
<td>$504,803</td>
<td>($84,444)</td>
</tr>
</tbody>
</table>

### Key Points:
- **30 Outpatient Clinics**
- **4 Outpatient Dialysis Centers**
- **2 Ambulatory Surgery Centers**
- **1 Outpatient Rehabilitation Center**
- **>980,000 Outpatient Visits/Yr**
- **24% Medicare**
PAMA Other Changes

- 57 local fee schedules → Single fee schedule
- New category of “Advanced Diagnostic Laboratory Tests” with a separate fee schedule (details to be determined)

DHHS Goals for 2018

- **50.0%** Value-Based Alternative Payment Models
- **42.5%** Value-Based FFS
- **7.5%** Traditional FFS

Source: Department of HHS. Better, Smarter, Healthier: In historic announcement, HHS sets clear goals and timeline for shifting Medicare reimbursements from volume to value.
How Medicare Plans to Pay for Care

Value-Based Payment Models

New Payment Models
• Medicare shared savings models
• Accountable care organization (ACO)
• Alternate payment models (APM)

Payment adjusted for quality measurements/index
Move risk to healthcare systems / provider networks
Value-Based Purchasing (VBP)

“Rewards acute-care hospitals with incentive payments for the quality of care they provide to people with Medicare. CMS rewards hospitals based on the Quality of care provided to Medicare patients, how closely best clinical practices are followed, and how well hospitals enhance patients’ experiences of care during hospital stays. Hospitals are no longer paid solely based on the quantity of services they provide.”

[2011, CMS]
Value-Based Purchasing: Percent Withheld

Note: 2% of typical large hospital patient service revenue would be approximately $10M ($500M x 2%)

Domains: Value-Based Purchasing

## Hospital-Acquired Condition Reduction Program

Lowest performing 25% of hospitals are penalized
Penalty of -1% for all Medicare MSDRG payments
HAC Score comprised of two domains

### DOMAIN 1 (AHRQ PSI 90) 35%
- PSI 3. Pressure ulcer rate
- PSI 6. Iatrogenic pneumothorax rate
- PSI 7. Central venous catheter-related bloodstream infection rate
- PSI 8. Postoperative hip fracture rate
- PSI 12. Postoperative PE or DVT rate
- PSI 13. Postoperative sepsis rate
- PSI 14. Wound dehiscence rate
- PSI 15. Accidental puncture and laceration rate

### DOMAIN 2 (CDC NHSN) 65%
- Central line-associated bloodstream infection (CLABSI) standardized infection ratio (SIR)
- Catheter-associated urinary tract infection (CAUTI) standardized infection ratio (SIR)
- Surgical site infection (SSI) for colon surgery or abdominal hysterectomy
- Methicillin-resistant Staphylococcus aureus (MRSA) standardized infection ratio (SIR)
- Clostridium difficile (CDI) standardized infection ratio (SIR)

NHSN: National health safety network
PSI 90: Patient safety indicator composite measure 90
Hospital Readmissions Reduction Program

Patients readmitted to hospital within 30 days of previous hospitalization
Scores rate of “Excess Admissions”
Risk adjustment for patient age, sex, diagnosis, and comorbidities.
Current maximum penalty of 3% (since 2015)

<table>
<thead>
<tr>
<th>DIAGNOSTIC GROUPS REPORTED</th>
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</thead>
<tbody>
<tr>
<td>Acute myocardial infarction (AMI)</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease (COPD)</td>
</tr>
<tr>
<td>Heart Failure (HF)</td>
</tr>
<tr>
<td>Pneumonia (PN)</td>
</tr>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>Total hip arthroplasty/total knee arthroplasty (THA/TKA)</td>
</tr>
<tr>
<td>Coronary artery bypass graft (CABG)</td>
</tr>
</tbody>
</table>
Hospital Readmissions Reduction Program

Average Penalty by Hospital Quartile Score

YEAR

MEAN PCT REDUCTION

Roberson B (Oct 2015). The Hospital Readmissions Reduction Program: Four Years of Data. Essential Hospitals Institute
Medicare Access & CHIP Reauthorization Act

MACRA
1. Medicare rewards to providers for value over volume
2. Streamlines multiple quality programs
3. Provides bonus payments for participation in eligible alternate payment models (APMs)
4. First measurement year is 2017 (applies to 2019)
## MACRA: Physician Fee Schedule Example

<table>
<thead>
<tr>
<th>Year</th>
<th>Increase Allowed</th>
<th>HCPCS 88305-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Base year</td>
<td>$33.90</td>
</tr>
<tr>
<td>2016</td>
<td>0.5%</td>
<td>$34.07</td>
</tr>
<tr>
<td>2017</td>
<td>0.5%</td>
<td>$34.24</td>
</tr>
<tr>
<td>2018</td>
<td>0.5%</td>
<td>$34.41</td>
</tr>
<tr>
<td>2019</td>
<td>0.5%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2020</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2021</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2022</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2023</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2024</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2025</td>
<td>0%</td>
<td>$34.58</td>
</tr>
<tr>
<td>2026 onward</td>
<td>0.25% - 0.75%</td>
<td>$34.67-34.84</td>
</tr>
</tbody>
</table>
# MACRA: Payment Adjustments

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternate Payment Models (APM)</strong></td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Merit-Based Incentive Payment System (MIPS)**

- MIPS Range Development: ±4% ±5% ±7% ±9%
- **Up to $500M/yr for “exceptional performers”**
Merit-Based Incentive Payment System (MIPS)

- Physician Quality Reporting Program (PQRS)
- Value-Based Payment (VBP) Modifier
- Medicare EHR Incentive Program (Meaningful Use)
MIPS*: Component Weights

*Merit-based incentive payment system
How Medicare Pays for Care

**Fee For Service**
- Physician fee schedule (PFS)
- Clinical laboratory (CLFS)
- Ambulance fee schedule (AFS)
- Durable medical equipment, prosthetics/orthotic & supplies fee schedule (DMEPOSFS)

**Prospective Payment**
- Acute inpatient
- Home health
- Inpatient psychiatric facility
- Inpatient rehabilitation facility
- Long-term care hospital
- Skilled nursing facility
- Hospice center

**New Payment Models**
- Medicare shared savings models
- Accountable care organization (ACO)
- Alternate payment models (APM)
Implications for the Lab

If payers no longer paid for laboratory testing, would healthcare systems still laboratory tests?

What opportunities will emerge for the laboratory as new payment models are enacted?

How important will it become for laboratories to accurately understand their underlying cost structure?
Value Propositions

1. Improve patient outcomes (quantifiable)
2. Improve patient satisfaction (quantifiable)

Value = \frac{Benefit}{Cost}

3. Decrease cost
4. Simplify operational tasks/improve efficiency (quantifiable)

*Profit = Revenue − Expenses

5. Increase net revenue
Questions?
Thank you!