Positioning Pathology and Clinical Laboratory Services to Add Value in the Era of ACOs and Medical Homes

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At the end of the session, you should…. 

- Be able to describe the emerging “values” in the accountable healthcare delivery
- Learn examples of value-add clinical services Pathology and clinical laboratories can provide to meet the market demand
- Learn examples of how one Pathology/Clinical Lab group realign its financial strategies to meet the changes of the new payment system.
Why do we care about any other value than cost?

- Five years ago, when I was appointed Chair of the Department of Pathology at the University of Miami, there were several issues about which I had great certainty
- Pressures on Pathology reimbursement were already strong
- There was likely further downward pressure on all reimbursement, especially from CMS and managed care
  - More recently, it is part of ACA to pay for expansion of services through cuts in reimbursement
  - 88305 TC cuts in 2013
- Reimbursement from our hospital partners was already being challenged
  - unilateral removal of Medicare Part A pass through
- It was clear that even if rates were not decreased on codes, that there would be further bundling to reduce overall reimbursement
  - changes in reimbursement for prostate needle biopsies to G codes, IHC reimbursement changes
- **There was a clear move away from fee for service to Pay for Performance, outcomes based reimbursement, bundled payments, and at risk arrangements, designed to drive costs down, and with particular dangers to pathology (last issue of Dark Daily!)**
- How would we deal with these challenges
“Values” of pathology services are changing

**Existing**
(defined by us)

- Turn around time
- Expertise
- Access (patient service centers)
- Proper specimen handling/processing
- QC/QM
- Providing accurate diagnosis
- Lab automation
- Barcoding and Specimen Tracking
- Tumor Summary and Electronic Cancer Checklist
- Tumor Board
- Infection Control Report
- Blood Utilization Management
- Lab Accreditations

**Emerging**
(demanded by market)

- Improve care coordination across full continuum of healthcare
- Emphasis on prevention
- Deliver outcome-driven and evidence-based practice
- Engage patients and families in their health
- Provide population health management in addition to sick individual care
- Manage overall healthcare cost and financial sustainability
- Reduce health disparities

Pathology needs to define the value proposition beyond pricing, and to incorporate non-commodity drivers of value
How are values recognized financially?

Volume Based ➔ Value Based (Shifting from fee-for service)

- Value-based Purchasing (VBP)
  - Pay-for-Performance
  - PQRS
  - Hospital Premier Quality Incentive
- HIT Meaningful Use
  - Clinical Quality Measures
  - Value Based Modifiers (VBM’s)
- Institution and Provider tiering
- Episode of Care (EOC)*
- Bundled Payments*
- Patient-centered Medical Homes (PCMH)
- ACO’s*
- Patient Incentives
- Value Based Insurance Design
  * At-Risk Arrangement

Volume-based fee-for-service schedules are being reduced and at-risk reimbursement mechanisms are expanding
Potential Opportunities in Outpatient Lab Market Share Re-distribution

• At-risk arrangements (ACO’s, Bundled payments, EOC’s) for health systems will drive internalization of labs for better care coordination, utilization and population management

• PCMH’s will identify labs with tools to help them meet NCQA standards and HIT Meaningful Use

• As a result of the above, “exclusive” national contracts will be partially challenged

• Health systems may need to decide whether to run own labs, partner or outsource with lab operators with expertise and tools to meet market demand

• Delivery of “value” will define reimbursement; “Perceived values” of Pathology and clinical lab services are driving market share to those that support accountable care and at-risk delivery models
HOW DO WE CAPTURE (CAPITALIZE ON) THE OPPORTUNITIES?

- Provide value-add products the market wants to buy
- Develop strategies for sustainability in new payment arrangement

Change

? Winners

(no change)

Losers

Adapting to these changes will require reassessment of how laboratory services should be delivered, and how to best provide value to the health care system, thus re-aligning financial strategies in the new payment systems.
Examples of “products” that add value in accountable care
Standardizing evidence-based care and Utilization Management

Finding “worthwhile” targets for change/improvement in utilization
• High Volume
• High Cost
• High Variability

Focus on practical solutions/interventions in a specific care delivery setting
(Healthcare has never been one size fit all)
Standardizing evidence-based care and Utilization Management

Work up of Hematopoietic Malignancies (Lymphoma/Leukemia)

**Previous Requisition**

<table>
<thead>
<tr>
<th>Test</th>
<th>Clinical Implication</th>
<th>Methodology</th>
<th>Results</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1014</td>
<td>Cancer Study</td>
<td>Chromosome Analysis (Peripheral Blood/Roma Stained)</td>
<td>Chromosomes 1-22, Y</td>
<td>88277, 88559, 88260</td>
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<tr>
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<td>Cancer Study</td>
<td>Chromosome Analysis (Peripheral Blood/ Wright Stained)</td>
<td>Chromosomes 1-22, Y</td>
<td>88277, 88559, 88260</td>
</tr>
<tr>
<td>1059</td>
<td>Cell culture only</td>
<td>Cell Culture (Bone marrow/Peripheral Blood)</td>
<td>Cell culture</td>
<td>88277</td>
</tr>
</tbody>
</table>

**HEMATOPATHOLOGY PROTOCOLS: LYMPHOMAS**

**FOLLICULAR LYMPHOMA (GRADE 1-2-3)**

- **SAMPLE:** If initial diagnosis, an excisional or incisional biopsy is recommended. If enough material is received, a portion will be sent for flow cytometry and for cytogenetics (in that order), otherwise, the whole specimen will be submitted for paraffin block.

- **IMMUNOHISTOCHEMISTRY PANEL:**
  - CD20
  - CD3
  - CD5
  - CD10
  - BCL6
  - CD23
  - Cyclin D1
  - BCL2

- **FLOW CYTOMETRY (if enough tissue was available):**
  - Lymphoma Panel

- **CYTOGENETICS**
  - t(14;18) by FISH (only if diagnosis is not straightforward by morphology and IHC)
Standardizing evidence-based care and Utilization Management

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### Hematopathology Requisition Form for Flow Cytometry & Genetics

**CLINICAL INFORMATION**

**KNOWN DIAGNOSIS:**
- AML
- ALL
- CML
- CMML
- MDS
- MPN
- Myelofibrosis
- CLL
- Myeloma
- S/P BMT for
- B-Lymphoma (type:"
- Hodgkin lymphoma
- MF/T-Lymphoma (type:"
- Other (please specify:"

**FIRST DIAGNOSIS:**
- What is the clinical presentation / suspicion (check all that apply):
  - Pancytopenia
  - Suspect MDS
  - Leukocytosis
  - Splenomegaly
  - Suspect MPN
  - Suspect acute leukemia
  - Suspect lymphoma
  - Other:

**Specimen Information.**
- Specimen Type: Bone Marrow, Peripheral Blood, Lymph node, Tumor tissue, FFPE Tissue, Other
- Collection Date: Time: Technician:
- Samples to:

**Request for Flow cytometry (one yellow top):**
- Lymphoma panel
- Leukemia panel
- PNH testing
- ZAP70 analysis

**Request for Cytogenetic testing (See the list of probes on the back of the form) (one green top):**
- Karyotype
- FISH PANELS
  - CLL
  - Myeloma
  - MDS
  - ALL
  - CML
  - Eosinophilia
  - Other (please specify:"

**Request for Molecular genetic testing:**
- JAK2 mutations (one lavender top)
- Mutational analysis testing (3 lavender tops)
  - Acute leukemia: FLT3, NPM1, CEBPA, IDH1, IDH2, KIT
  - MDS: RUNX1, TP53, ASXL1, EZH2, ETV6

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**On call clinical pathology resident may be reached at 305-585-2255 ext 1199**
Deliver Personalized Care Management through Next Gen Sequencing and Genomic Medicine

• Leveraging research infrastructure to reduce start-up requirement
• Ensuring financially sustainable technology migration
• Re-investing in infrastructure and expertise expansion
Academic Subspecialty Expertise

- Supporting Specialty Care
  - integrated reporting of complex results and technologies standardizes patient management and improves outcome
  - telepathology and digital pathology expands sub-specialty diagnostic expertise and efficiency

- Outreach

- Reverse reference labs, especially in tests requiring specialized expertise and regional delivery
  - e.g., Special Coag, Renal, Bone/Soft tissue, Muscle/Nerve, Hemepath

• Academic pathology labs can continue to play a unique role in new payment models by adding value aligned with their mission
Close the loop of Patient care:

Significant Pathology Follow up

- **LIS flags**
  - Critical
  - Significant
  - Abnormal

- **SMS and Email**

- **EHR**
  - Results delivered to provider inbox
  - Open a “Significant Result Encounter”

- Disease/Condition known to patient, No contact needed
- Patient/Guardian contacted on __________

Adding value through informatics and IT
Patient access to results

**Result Release Guidelines:**

**Group 1:**
Genetic test results – these will be released only manually by the physician.

**Group 2:**
Cytology/Anatomical pathology results – all (normal and abnormal) to be released after seven days.

**Group 3:**
All other results, release normal after one day; release abnormal after three days.

*The following labs will NOT be released:*
- Inpatient results.
- STD’s, HIV’s, and any sensitive results.

Adding value through informatics and IT
Patient access to results (Patient views)

Adding value through informatics and IT
Patient access to results

• Providers and others can monitor patient review activities
• Providing patient access has been integrated into patient registration and checkout process
• Currently at UM, more than 52% of ambulatory patients access her/his own results
Supporting PQRS and PCMH

Benefit From: NCQA lists DRP Recognitions on the Web site at www.ncqa.org
Recognition: The list of DRP Recognitions is widely distributed to health plans, employers and others.
Rewards: Many health plans and employers will offer rewards and other benefits to DRP Recognized clinicians.

<table>
<thead>
<tr>
<th>Clinical Measures</th>
<th>Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c Poor Control &gt;9.0%</td>
<td>≤15% of patients in sample</td>
<td>12.0</td>
</tr>
<tr>
<td>HbA1c Control ≥8.0%</td>
<td>60% of patients in sample</td>
<td>8.0</td>
</tr>
<tr>
<td>HbA1c Control ≥7.0%</td>
<td>40% of patients in sample</td>
<td>6.0</td>
</tr>
<tr>
<td>Blood Pressure Control ≥140/90 mm Hg</td>
<td>≤35% of patients in sample</td>
<td>15.0</td>
</tr>
<tr>
<td>Blood Pressure Control &lt;130/80 mm Hg</td>
<td>25% of patients in sample</td>
<td>10.0</td>
</tr>
<tr>
<td>Eye Examination</td>
<td>90% of patients in sample</td>
<td>10.0</td>
</tr>
<tr>
<td>Smoking Status and Cessation Advice or Treatment</td>
<td>80% of patients in sample</td>
<td>10.0</td>
</tr>
<tr>
<td>LDL Control ≥130 mg/dl</td>
<td>≤37% of patients in sample</td>
<td>10.0</td>
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<tr>
<td>LDL Control &lt;100 mg/dl</td>
<td>36% of patients in sample</td>
<td>10.0</td>
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<tr>
<td>Nephropathy Assessment</td>
<td>80% of patients in sample</td>
<td>5.0</td>
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<tr>
<td>Foot Examination</td>
<td>80% of patients in sample</td>
<td>5.0</td>
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<tr>
<td>Total Points</td>
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<td>100.0</td>
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<tr>
<td>Points Needed to Achieve Recognition</td>
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<table>
<thead>
<tr>
<th>Summary HA1c</th>
<th>Total</th>
<th>Percent</th>
<th>Target Goal</th>
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<tbody>
<tr>
<td>Total HA1c for Q2 2009</td>
<td>211</td>
<td>53%</td>
<td>&gt; 40%</td>
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<tr>
<td>Total HA1c &lt; 7%</td>
<td>112</td>
<td>53%</td>
<td>&gt; 40%</td>
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<tr>
<td>Total HA1c &gt; 9%</td>
<td>30</td>
<td>14%</td>
<td>≤ 15%</td>
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<tr>
<td>Average HA1c Result Overall</td>
<td>7.47</td>
<td></td>
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<tr>
<td>Average HA1c Result &lt; 7%</td>
<td>6.31</td>
<td></td>
<td></td>
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<tr>
<td>Average HA1c Result &gt; 9%</td>
<td>11.28</td>
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<table>
<thead>
<tr>
<th>Summary LDL</th>
<th>Total</th>
<th>Percent</th>
<th>Target Goal</th>
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<tbody>
<tr>
<td>Total LDL for Q2 2009</td>
<td>657</td>
<td>78%</td>
<td>&gt; 63%</td>
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<tr>
<td>Total LDL &lt; 130 mg/dl</td>
<td>511</td>
<td>78%</td>
<td>&gt; 63%</td>
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<tr>
<td>Total LDL &lt; 100 mg/dl</td>
<td>312</td>
<td>47%</td>
<td>&gt; 36%</td>
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<tr>
<td>Average LDL Result Overall</td>
<td>106</td>
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<tr>
<td>Average LDL Result &lt; 130 mg/dl</td>
<td>92</td>
<td></td>
<td></td>
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</tbody>
</table>

The above HA1c and LDL target goals are consistent with established NCQA Diabetes Recognition Criteria as of 07/21/2009.

Dear Mr. George Bush,

According to our records, you may be due for your follow up lab testing to monitor your health condition(s). Please contact your physician, Dr. James Badmau, to schedule an appointment. If you have done so already within the past 3 weeks, please disregard this notice.

We have partnered with your physician to offer this service to help monitor your health, please call Cognoscent Patient Service at 321-445-6696. THANK YOU.

Sincerely,

Philip Chen, MD, PhD
Medical Director
<table>
<thead>
<tr>
<th>Accession #</th>
<th>Chart#</th>
<th>Request Date</th>
<th>Patient Name</th>
<th>Ordering Physician</th>
<th>Sex</th>
<th>D.O.B</th>
<th>Diagnosis Codes</th>
<th>HA1C</th>
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<td>10/10/2005</td>
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<td></td>
<td>SMITH, JOHN</td>
<td>COOPER MD ANDERSON</td>
<td>M</td>
<td>12/19/1933</td>
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<td>10/5/2005</td>
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<td>CHEN MD PHILIP</td>
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<td>CHEN MD PHILIP</td>
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<td>F</td>
<td>7/27/1968</td>
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<tr>
<td>10/31/2005</td>
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<td></td>
<td>M</td>
<td>5/12/1949</td>
<td></td>
<td>12</td>
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<td>10/10/2005</td>
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<td>9/14/1947</td>
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**NEJM 370;16 pp1514-23 April 17, 2014**
Care coordination

Glycemic Control Algorithm

Lifestyle Modification
( Including Medically Assisted Weight Loss)

ENTRY A1c < 7.5%

ENTRY A1c ≥ 7.5%

ENTRY A1c > 9.0%

MONOTHERAPY*
- Metformin
- GLP-1 RA
- DPP4-i
- AG-i
- SGLT-2
- TZD
- SU/GLN

If A1c > 6.5% in 3 months add second drug (Dual Therapy)

DUAL THERAPY*
- GLP-1 RA
- DPP4-i
- TZD
- SGLT-2
- Basal insulin
- Colesvelam
- Bromocriptine
- AG-i
- SU/GLN

If not at goal in 3 months proceed to triple therapy

TRIPLE THERAPY*
- GLP-1 RA
- TZD
- SGLT-2
- Basal insulin
- Colesvelam
- Bromocriptine
- AG-i
- SU/GLN

If not at goal in 3 months to dual therapy

NO SYMPTOMS
- Dual Therapy
- Insulin

SYMPTOMS
- Insulin ± Other Agents

It starts with our data!

* Order of medications listed are a suggested hierarchy of usage
** Based upon phase 3 clinical trials data

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Population Management: Identify the AT RISK Individuals

- 5/50 and 20/80 Rules
- 2/3 of top spenders comes from low spenders pool from prior year
- Using Bang model to identify “time bombs”

### Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
<th>Enter your score (enter 0, if you don’t know)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How old are you?</td>
<td>&lt;40 years (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49 years (1 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-59 years (2 points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 years or older (3 points)</td>
<td></td>
</tr>
<tr>
<td>2. Are you a woman or man?</td>
<td>Woman (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man (1 point)</td>
<td></td>
</tr>
<tr>
<td>3. Do your family members (parent or sibling) have diabetes?</td>
<td>No (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes (1 point)</td>
<td></td>
</tr>
<tr>
<td>4. Do you have high blood pressure or are you on medication for high blood pressure?</td>
<td>No (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes (1 point)</td>
<td></td>
</tr>
<tr>
<td>5. Are you overweight or obese? (see chart below to answer this question more accurately)</td>
<td>Not overweight or obese (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overweight (1 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obese (2 points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extremely obese (3 points)</td>
<td></td>
</tr>
<tr>
<td>6. Are you physically active?</td>
<td>No (0 point)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes (-1 point)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SCORE** (add points from questions 1-6)

If your TOTAL SCORE is ≥4, you are at high risk of having undiagnosed diabetes or pre-diabetes.
If your TOTAL SCORE is ≥5, you are at high risk of having undiagnosed diabetes.
See your doctor for a blood test to look for diabetes if your score is high.
Example of financial strategies to meet the challenges of the new payment schemes
Follow the Money: Alignment with Hospitals, Health Systems and “ACO’s”

• Economy of Scale laboratory consolidations produce shared savings
• “Second dollar” reduces impact of FFS cuts
• Alignment prepares for further at risk Arrangements
• FFS market expansion through own and affiliated ambulatory clinics
• Combining “new values” and new informatics tools with a sound consolidation and financial strategies are central to our competitive advantage
Shared savings and at-risk arrangement

• Need to know your customers’ business (payor mix, case mix, case rate, per diem and other contractual arrangements)
• MUST be able to manage utilization
• Contract rate is based on historical expenditure
• **Contract before deploying utilization management!**
• The worse the prior utilization, the better at-risk financial opportunities
• Anticipate reaching optimal utilization and prepare for replacement strategies
• **MARKET SHARE EXPANSION** using your newly freed up marginal capacity!!
Contract negotiation Strategies with payors

• Leveraging Health System in lab contracting, “carved-in” 92% of payors
• Protecting CP Professional Component billing
• Directly engaged in changes due to Medicaid privatization
• Highlighting “values” over volume (including impact of downstream healthcare resource utilization)
Summary

• Volume-based fee-for-service schedules are being reduced and at-risk reimbursement mechanisms are expanding
• Delivery of “value” will define reimbursement; “Perceived values” of Pathology and clinical lab services are driving market share to those that support accountable care and at-risk delivery models
• Pathology needs to define the value proposition beyond pricing, and to incorporate non-commodity drivers of value
• Adapting to these changes will require reassessment of how laboratory services should be delivered, and how to best provide value to the health care system, thus re-aligning financial strategies in the new payment systems
• Academic pathology labs can continue to play a unique role in these new payment models by adding value aligned with their mission
• Information is an important value and value driver; informatics must be part of the retooling