Business of Sleep Medicine

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Clinical Sleep Operations

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University Hospitals
Office Models

- Independent Diagnostic Testing Facility or IDTF
- Physician office model
- Hospital affiliated
IDTF

- Independent of Physician Office
- Independent of Hospital
- Fixed location, or mobile
- Can be run by non-physician
- Physician oversight
- Separate Medicare Number
IDTF

- 17 performance measures
  - Comply with licensure and regulatory measures
  - Agree not to directly solicit patients
  - Disclose ownership; notify changes
  - Unannounced CMS visits
Physician office model

- Sleep lab an extension of medical practice

- Partnership between PCP
  - and sleep board certified physicians
  - OR
  - and sleep management companies
Physician Office Model

○ Pros:
  ● Keep revenues in house
  ● One provider number
  ● Payor relationships/contracts in place
  ● Continuity of care
  ● Record keeping simplified

○ Cons
  ● Need for Sleep Board certified physician
  ● Space
  ● Time/Capital/HR investment
Hospital affiliated
Outpatient/Ambulatory Department

PROS
- Access to more specialist/multidisciplinary flavor
- Higher remuneration
- Can support higher acuity of care

CONS
- Space constraints/utilization
- Noise/environment
- Complexity of administrative oversight
Oct 28 2010
OIG analyzed relationships between hospitals and sleep service providers
“Per-click fee structure” does not meet the safe harbor requirement
are “inherently reflective of the volume or value of services ordered and provided.”
Even if a provider complies with relevant .. payment rules such as the Medicare “under arrangements” requirements, an arrangement may nevertheless run afoul of the anti-kickback statute.
The sleep testing services are ordered and interpreted by physicians without a direct or indirect financial interest in the Facility.

Fees under the proposed agreement are consistent with fair market value in an arm’s-length transaction; and the fees are not determined in a way that would take into account the value or volume of referrals or other business generated between the parties.

The hospital assumes business risk and contributes substantially to furnishing the sleep testing services for which it bills, including providing necessary space, equipment, a medical director and administrative services.

The fees the Facility charges for equipment, marketing, and other services and supplies are set in advance.
Corporate Structure

- Clinical
- Operations
- Finance = accounting/billing
- Marketing/Business development
- Human Resources
- Information Technology
Business Structure

- Sole proprietorship
- General partnership
- Limited liability partnership
- Incorporated practice
  - C Corp
  - S Corp
  - LLC
Financing

- Commercial lender
- SBA programs
- Private Equity/Venture capital
- Angel Investor
Business Plan

1. Title Page
2. Nondisclosure Release
3. Vision Statement
4. Executive Summary
5. Business Summary
6. Revenue Sources
7. Market Analysis
8. SWOT
9. Financial Plan/Projections

“It’s not enough to just show up. You have to have a business plan.”

“I’m glad to see all of you share my vision for the company.”
Executive Summary

- Appears first
- Written last
- Summarizes highlights
- No more than 2 pages!
- Most important part of your plan
- Narrative Style/ Wrap up style
SWOT analysis
Business plan: Common pitfalls

- Failure to set and measure goals
- Failure to anticipate threats
- Unrealistic projections
- Not taking vision statements seriously
- Analysis paralysis
- Risk aversion
Employee Issues
PSG technicians

- Complete
  - CAAHEP program OR
  - A-STEP program
- Credentialing exam
  - ABSM
  - BRPT
  - NBRC

- State Regulations – 5 types
  - PSG licensure practice act (11)
  - General Exemption Language in Respiratory Care Act (29)
  - Specific definition of sleep technology in RCA
  - No specific definition of sleep technology in RCA
  - None of the above

"Always learn your employees' strengths and weaknesses, so you can take advantage of them."
Employee Issues
PSG technicians

○ AASM accreditation
  ● At least one tech with registered/eligible
  ● Presence >30hrs or >75% of the time
  ● All others enrolled in A-STEP
  ● CEC requirements

○ Medicare
  ● NCD/Most LCD require certification
  ● IDTF – all nonphysician personnel must have licensure or certification
In late 2006, HMS Diagnostics Inc, a Houston-based sleep testing lab, got a knock on the door from the FBI, and the OIG. They wanted to look into the lab's Medicare billing practices. The lab had enrolled in the Medicare program as an "IDTF." Medicare's IDTF rules require sleep technicians be certified. The lab had obtained AASM accreditation, and no doubt had at least one RPSGT on staff. But certified personnel did not attend every overnight test. HMS agreed in January of this year to pay the government $564,532 to settle allegations of False Claim Act violations for sleep tests performed without certified techs going back for five and a half years.
"We're in good shape. Nobody understands our financial statement."
Balance Sheet

- Assets of a business ultimately valued by their ability to generate revenue
- True value determined from actual sale to third party
Balance Sheet

Total Assets - Total Liabilities = Equity

Current Fixed

Current Long-term
Assets

**CURRENT ASSETS**
- Those that will be realized in cash, sold or consumed in the current operating cycle (1 year)

**FIXED ASSETS**
- Machinery/Equipment
- Real Estate/Improvements
- Land
- Other
Balance sheet

- A statement of a firm’s financial at a particular point in time.

- Photograph of firm’s assets together with its liabilities and owner’s equity.

- Follows the accounting equation.
Income statement

*Figure 16.4*

Diane’s Java Income Statement (Fiscal Year Ending December 31)

- **Sales:** Funds received from the sale of goods and services over a specified period of time.

- **Cost of Goods Sold:** Cost of merchandise or services that generate the firm’s sales.

- **Operating Expenses:** Salaries and other operational expenses not directly related to the acquisition, production, or sale of the firm’s output.

- **Depreciation:** Noncash expenses that reflect the systematic reduction in the value of the firm’s plant, property and equipment.

- **Net Income:** Sales minus total expenses; profit after taxes.

### Diane’s Java Income Statement

<table>
<thead>
<tr>
<th>Item Description</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$17,300</td>
<td>$14,200</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>10,380</td>
<td>8,804</td>
</tr>
<tr>
<td>Gross profit</td>
<td>6,920</td>
<td>5,396</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>3,550</td>
<td>2,950</td>
</tr>
<tr>
<td>Operating profit</td>
<td>3,370</td>
<td>2,446</td>
</tr>
<tr>
<td>Depreciation</td>
<td>350</td>
<td>300</td>
</tr>
<tr>
<td>Interest expense (net)</td>
<td>98</td>
<td>75</td>
</tr>
<tr>
<td>Earnings before taxes</td>
<td>2,922</td>
<td>2,071</td>
</tr>
<tr>
<td>Income taxes</td>
<td>1,005</td>
<td>650</td>
</tr>
<tr>
<td>Net income</td>
<td>1,917</td>
<td>1,421</td>
</tr>
</tbody>
</table>

- Firm’s financial performance in terms of revenues, expenses, and profits over a given time period.
- Reports profit or loss.
- Focus on revenues and costs associated with revenues.
Cash flow statement

Figure 16.6
Diane's Java Statement of Cash Flows (Fiscal Year Ending December 31)

1. Operating Activities:
The nuts and bolts of day-to-day activities of a company carrying out its primary business. Increases in accounts receivable and inventory are uses of cash, while increases in accounts and accounts payable are sources of cash. In financially healthy firms, net cash flow from operating activities should be positive.

2. Investing Activities:
Transactions to accumulate or use cash in ways that affect operating activities in the future; often a use of cash.

3. Financing Activities:
Ways to transfer cash to or from creditors and to or from owners; can be either positive or negative.

Diane's Java
Statement of Cash Flows

<table>
<thead>
<tr>
<th>Description</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow from Operating Activities</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>$1,917</td>
</tr>
<tr>
<td>Depreciation</td>
<td>350</td>
</tr>
<tr>
<td>Change in accounts receivable</td>
<td>(215)</td>
</tr>
<tr>
<td>Change in inventory</td>
<td>(320)</td>
</tr>
<tr>
<td>Change in accounts payable</td>
<td>80</td>
</tr>
<tr>
<td>Total cash flow from operating activities</td>
<td>1,682</td>
</tr>
<tr>
<td>Cash Flow from Investing Activities</td>
<td></td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>(760)</td>
</tr>
<tr>
<td>Change in short-term investments</td>
<td>(310)</td>
</tr>
<tr>
<td>Total cash flow from investing activities</td>
<td>(1,070)</td>
</tr>
<tr>
<td>Cash Flow from Financing Activities</td>
<td></td>
</tr>
<tr>
<td>Cash dividends</td>
<td>(450)</td>
</tr>
<tr>
<td>Sale/repurchase of shares</td>
<td>(262)</td>
</tr>
<tr>
<td>Change in notes payable</td>
<td>200</td>
</tr>
<tr>
<td>Change in long-term debt</td>
<td>100</td>
</tr>
<tr>
<td>Total cash flow from financing activities</td>
<td>412</td>
</tr>
<tr>
<td>Net Cash Flow</td>
<td></td>
</tr>
<tr>
<td>Cash (beginning of year)</td>
<td>600</td>
</tr>
<tr>
<td>Cash (end of year)</td>
<td>800</td>
</tr>
</tbody>
</table>

- Cash Inflow
  - Revenue
  - Capital contribution
  - Line of Credit

- Cash Outflow
  - Operation Expenses
  - Asset purchases
  - Debt Repayment
Liquidity Ratio

*Current ratio* compares current assets to current liabilities.

\[
\text{Liquidity Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{5,240}{2,030} = 2.58
\]

*Quick ratio* measures the ability of a firm to meet its debt payments on short notice.

\[
\text{Acid–test ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}} = \frac{(5,240 - 2,200)}{2,030} = 1.50
\]
Activity Ratio

**Inventory turnover ratio** indicates the number of times merchandise moves through a business.

\[
\text{Inventory Turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}} = \frac{10,380}{[(2,200 + 1,850)/2]} = 5.13
\]

**Total asset turnover ratio** indicates how much in sales each dollar invested in assets generates.

\[
\text{Total asset turnover} = \frac{\text{Sales}}{\text{Average total assets}} = \frac{17,300}{[(8,790 + 7,305)/2]} = 2.15
\]
Contracts

*you don’t get what you deserve you get what you negotiate*

- **Hospital**
  - Scope of Services
  - Term
  - Termination
  - Antikickback
  - Covenants - NonCompete/Nonsolicit

- **Personnel**
  - Employment/Contract/Partner
  - Scope of Services/Time Commitment
  - Covenants - NonCompete/Nonsolicit
  - Confidentiality
  - Anti-kickback/Fraud & Abuse
  - Licensure/Credentialing

- **Managed Care**
  - In Network/ OON
  - Pricing
  - Term/Renewal/Adjustments
  - Requirements
Marketing Strategy

Marketing is not advertising

Corporate and Marketing Objectives

Segmentation:
- Consider variables for segmenting market
- Look at profile of emerging segments
- Validate segments emerging

Targeting:
- Decide on targeting strategy
- Decide which and how many segments should be targeted

Positioning:
- Understand customer perceptions
- Position products in the mind of the customer

Marketing-Mix

Product Price Place Promotion People/Process
Reimbursement $$

RUC proposed major changes to RVU (2011, 2012, 2013)

Significant reduction in professional fees in 2011

Reduction in technical fees spread over three years

2011 – reduction in conversion factor by 3$; increase in 2012 by 6c

GPCI (Geographic Practice Cost Index) changes
Explosion of Sleep Studies!

Quantities

- 95810
- 95811
- HSTs


Quantities range from 0 to 450,000.
Explosion of Sleep Studies?

Quantity Y/Y Growth Rates

2009 HST growth is 625%
# Medicare Reimbursement

## 2010

<table>
<thead>
<tr>
<th>Code</th>
<th>Work</th>
<th>Practice</th>
<th>MP</th>
<th>Total</th>
<th>CF</th>
<th>Total</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>95806</td>
<td>1.66</td>
<td>3.79</td>
<td>0.07</td>
<td>5.52</td>
<td>$36.87</td>
<td>$203.54</td>
<td></td>
</tr>
<tr>
<td>95810</td>
<td>3.52</td>
<td>17.08</td>
<td>0.18</td>
<td>20.78</td>
<td>$36.87</td>
<td>$766.22</td>
<td></td>
</tr>
<tr>
<td>95811</td>
<td>3.79</td>
<td>18.94</td>
<td>0.21</td>
<td>22.94</td>
<td>$36.87</td>
<td>$845.86</td>
<td></td>
</tr>
</tbody>
</table>

## 2011

<table>
<thead>
<tr>
<th>Code</th>
<th>Work</th>
<th>Practice</th>
<th>MP</th>
<th>Total</th>
<th>CF</th>
<th>Total</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>95806</td>
<td>1.25</td>
<td>4.03</td>
<td>0.08</td>
<td>5.36</td>
<td>$33.98</td>
<td>$182.11</td>
<td>-10.5%</td>
</tr>
<tr>
<td>95810</td>
<td>2.50</td>
<td>17.72</td>
<td>0.21</td>
<td>20.43</td>
<td>$33.98</td>
<td>$694.14</td>
<td>-9.4%</td>
</tr>
<tr>
<td>95811</td>
<td>2.60</td>
<td>19.22</td>
<td>0.23</td>
<td>22.05</td>
<td>$33.98</td>
<td>$749.18</td>
<td>-11.4%</td>
</tr>
</tbody>
</table>

## 2012

<table>
<thead>
<tr>
<th>Code</th>
<th>Work</th>
<th>Practice</th>
<th>MP</th>
<th>Total</th>
<th>CF</th>
<th>Total</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>95806</td>
<td>1.25</td>
<td>4.07</td>
<td>0.08</td>
<td>5.40</td>
<td>$34.04</td>
<td>$183.80</td>
<td>+0.9%</td>
</tr>
<tr>
<td>95810</td>
<td>2.50</td>
<td>16.76</td>
<td>0.21</td>
<td>19.47</td>
<td>$34.04</td>
<td>$662.71</td>
<td>-4.5%</td>
</tr>
<tr>
<td>95811</td>
<td>2.60</td>
<td>17.93</td>
<td>0.23</td>
<td>20.76</td>
<td>$34.04</td>
<td>$706.62</td>
<td>-5.7%</td>
</tr>
</tbody>
</table>
Medicare Reimbursement
2010 → 2012
Sleep Benefits Management Program

- Targets spending on OSA through two key elements:
  - Transition of in-lab to home sleep testing (approximately 50% of all sleep studies)
  - Ongoing payment for PAP therapy based on 90-day patient compliance levels.
- These programs can result in greater than 25% savings to the payer.
- Current Per Member Per Month OSA spend is between $1.50 - $4.25
Utilization Management Firms

- Many payers outsource these programs to a utilization management (UM) firm who may already be providing other services to the payer.

- Selling points:
  - Increased demand for testing
  - Lower cost testing alternative available, but not used
  - Fragmentation of care
  - DME provider lack of accountability
  - Compliance tracking technology is available

- American Imaging Management
- CareCentrix (owns their own HST provider)
- Care Core National
- MedSolutions
- National Imaging Associates
Utilization Management Firms

Elements
- Policy and Practice Development
- Authorization review policies
- Workflow design
  - Program Communication
  - Network Management
- Diagnostic site of service
- Titration site of service

Opportunities
- Decentralize care: less bedrooms, community-based
- Reach OSA patients wary of in-lab testing
- Improve integration of care, if allowed
- Provide cost-effective long-term care
OOCST

- **In lab**
  - Evidence-based
  - Low failure rate
  - Multi-diagnostic
  - Attended by technical staff
- **However**
  - Expensive
  - Complex
  - Limited locations

- **Portable**
  - Inexpensive
  - Used at home
- **However**
  - Failure rate?
  - What populations?
  - Single Diagnosis (OSA)
OOCST

Select a Device
- Issues to Consider:
  - # of Sensors
  - Cost per Study (Disposables, Data Mgmt)
  - Scoring (Local vs. Company)
  - Software Integration
  - Ease of Patient Use / Failure Rate
  - Cost of Device ($3000 - $5000)
  - Chain of Custody?

Build a HST Plan
- Distribution Plan
  - How to Send the Device Out?
  - How to Get the Device Back?

- Interpretation Plan
  - Who is Interpreting the Studies?

- Determine the number of devices you need
### Table 1—SCOPER Categorization System

<table>
<thead>
<tr>
<th>Sleep</th>
<th>Cardiovascular</th>
<th>Oximetry</th>
<th>Position</th>
<th>Effort</th>
<th>Respiratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>S₁ – Sleep by 3 EEG channels with EOG and chin EMG</td>
<td>C₁ – more than 1 ECG lead – can derive events</td>
<td>O₁ – Oximetry (finger or ear) with recommended sampling</td>
<td>P₁ – Video or visual position measurement</td>
<td>E₁ – 2 RIP belts</td>
<td>R₁ – Nasal pressure and thermal device</td>
</tr>
<tr>
<td>S₂ – Sleep by less than 3 EEG without EOG or chin EMG</td>
<td>C₂ – Peripheral arterial tonometry</td>
<td>O₁₁ – Oximetry (finger or ear) without recommended sampling (per Scoring Manual) or not described</td>
<td>P₂ – Non-visual position measurement</td>
<td>E₂ – 1 RIP belt</td>
<td>R₂ – Nasal pressure</td>
</tr>
<tr>
<td>S₃ – Sleep surrogate: e.g. actigraphy</td>
<td>C₃ – Standard ECG measure (1 lead)</td>
<td>O₂ – Oximetry with alternative site (e.g. forehead)</td>
<td>E₃ – Derived effort (e.g. forehead versus pressure, FVP)</td>
<td>R₃ – Thermal device</td>
<td></td>
</tr>
<tr>
<td>S₄ – Other sleep measure</td>
<td>C₄ – Derived pulse (typically from oximetry)</td>
<td>O₃ – Other oximetry</td>
<td>E₄ – Other effort measure (including piezo belts)</td>
<td>R₄ – End-Tidal CO₂ (ETCO₂)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C₅ – Other cardiac measure</td>
<td></td>
<td></td>
<td>R₅ – Other respiratory measure</td>
<td></td>
</tr>
</tbody>
</table>

Proper oximetry sampling is defined as 3 s averaging and a minimum of 10 Hz sampling rate (25 Hz desirable). "EEG channels defined as frontal, central and occipital. EEG, electroencephalography; EOG, electrooculography; EMG, electromyography; ECG, electrocardiography; RIP, respiratory inductance plethysmography."
Increased Emphasis on Compliance

- CMS: Continued payment for PAP after 3 months requires demonstration of:
  - > 4 hrs use for > 70% of nights over a 30 day period
  - Subjective improvement determined in face-to-face meeting with treating clinician
  - 3rd party payers introducing similar requirements
  - Some requiring modem use to document PAP use

- Need to develop compliance management and documentation program
Accreditation

- Joint Commission
- Accreditation Commission for Health Care
- AASM

Types of AASM Accreditation

- AASM Center Standards – last major revision 2008, last update early 2011
- AASM Out of Center Sleep Testing (OCST) Standards – 2010
- AASM Durable Medical Equipment (DME) Standards – 2009
Number of Accredited Centers

AASM Accredited Centers 1977-2010
Does certification or accreditation matter?

Proportion of patients rejecting PAP therapy, %

Both (n=307) One (n=99) None (n=38)

P=0.001

P=0.04

n=444

Accreditation

**CONS = $$$**

- Professional training and credentialing
  - ABMS certification
  - CME
- Registered Sleep Technologists (ABSM, NBRC, BRPT)
- Technical considerations
  - RIP belts
  - Pressure transducers and thermistors
- Digital Sleep System requirements
- Patient to technician ratio
- Physical requirements for the facility
- Fees
Accreditation standards

B-2 – Medical Director Responsibilities (MANDATORY)
- The medical director:
  - a. is responsible for the direct and ongoing oversight of testing,
  - b. is responsible for the qualifications of all medical and technical personnel,
  - c. must be present in the sleep facility on a regular basis and **not less than 8 hours each month**.

B-5. Interpreting Physicians (MANDATORY)
- Must have a valid state license

B-6. **Boarded in Sleep Medicine (MANDATORY)**
- Same requirement as the Medical Director

B-7. CME
- 10 credits hours/year in sleep medicine averaged over
- 3 years (MANDATORY)
Accreditation standards

H-4 – PAP Assessment

- Patients prescribed positive airway pressure treatment by the sleep facility medical staff must be offered a follow-up positive airway pressure assessment within 12 weeks of treatment initiation.
- Positive airway pressure assessment must minimally include a measurement of treatment use and clinical response to the therapy as determined by:

  a. direct patient inquiry,
  b. office encounter with sleep facility technical or medical staff,
  c. the referring physician,
  d. questionnaires,
  e. telephone inquiry to the referring physician or the patient,
  f. an informatic system capable of obtaining positive airway pressure use and a metric of clinical response.

- The patient medical chart must contain documentation of the assessment as described above, or written evidence of follow-up attempts to obtain the positive airway pressure treatment assessment.
Accreditation for OOCST

- **Requirements**
  - Follow AASM Clinical Guidelines
  - Medical Director and study interpreter must be Board Certified Sleep Specialist

- Appropriate training for technical personnel
- On-call coverage
- **Provide patient management**
  - Provider Affiliation with AASM accredited Center
- Quality Assurance Program
Accreditation: what will be new

- Greater emphasis on longitudinal care
- Focus on outcome measures (PAP adherence etc)
- Emergency policy to include issue of AED use; environmental and other threats
The Physician Quality Reporting System is a voluntary reporting program that provides an incentive payment to practices who satisfactorily report data on quality measures for covered Physician Fee Schedule (PFS) services furnished to Medicare Part B Fee-for-Service (FFS) beneficiaries.
"Doctors who have not mastered the Medicare physician quality reporting system by the end of this year might find themselves locked into a lower Medicare pay rate a few years down the road."

Beginning "in 2013, physicians who don't report enough quality measures will not only forgo a bonus but also see an across-the-board cut in Medicare pay for 2015."

According to a report by the Centers for Medicare & Medicaid Services, "participation in the quality program has been lackluster."
### PQRS

<table>
<thead>
<tr>
<th>Year</th>
<th>eRx</th>
<th>EMR</th>
<th>PQRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2.0%</td>
<td>none</td>
<td>2.0%</td>
</tr>
<tr>
<td>2010</td>
<td>2.0%</td>
<td>none</td>
<td>2.0%</td>
</tr>
<tr>
<td>2011</td>
<td>1.0%</td>
<td>$18,000</td>
<td>1.0%-1.5%</td>
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<tr>
<td>2012</td>
<td>1.0%</td>
<td>$12,000-$18,000</td>
<td>0.5%-1.0%</td>
</tr>
<tr>
<td>2013</td>
<td>0.5%</td>
<td>$8,000-$15,000</td>
<td>0.5%-1.0%</td>
</tr>
<tr>
<td>2014</td>
<td>No bonus</td>
<td>$4,000-$12,000</td>
<td>0.5%-1.0%</td>
</tr>
<tr>
<td>2015</td>
<td>No bonus</td>
<td>$2,000-$8,000</td>
<td>No bonus</td>
</tr>
<tr>
<td>2016</td>
<td>No bonus</td>
<td>$2,000-$4,000</td>
<td>No bonus</td>
</tr>
</tbody>
</table>

Sources: 2012 Medicare physician fee schedule; Medicare and Medicaid EHR Incentive Program Basics, Centers for Medicare & Medicaid Services
PQRS: Reporting

- **1. CPT – II code (Claims-based; at least 3 quality measures)**
- **2. Report through registry (Disease group)**
  - A. Software
  - B. Claims
  - C. Individual
PQRS: Physician Quality Reporting System
Sleep Apnea Measures Group

i. Sleep Apnea: Assessment of Sleep Symptoms
   ○ % of visits for pts > 18 yrs with a diagnosis of OSA that includes documentation of an assessment of symptoms, including presence or absence of snoring and daytime sleepiness

ii. Sleep Apnea: Severity Assessment at Initial Diagnosis
   ○ % of visits for pts > 18 yrs with a diagnosis of OSA who had an AHI measured at the time of initial diagnosis
iii. Sleep Apnea: PAP Therapy Prescribed
- % of visits for pts > 18 yrs with a diagnosis of moderate or severe OSA who were prescribed positive airway pressure therapy

iv. Sleep Apnea: Assessment of Adherence to PAP Therapy
- % of visits for pts > 18 yrs with a diagnosis of OSA that were prescribed PAP therapy who had documentation that adherence to PAP therapy was objectively measured
### DME – YES / NO ??

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<th>PROS</th>
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Medicare LCD for PAP

- Starting Nov 1 2008 all beneficiaries who undergo a HST must, prior to the test, receive instruction on how to properly apply the device.
- This instruction must be provided by the entity conducting the HST and may not be performed by a DME supplier.
- No aspect of an HST, including but not limited to delivery and/or pick up of the device, may be performed by a DME supplier.
DME : CMS view

“"We believe that Medicare beneficiaries and the Medicare program are vulnerable if the provider of a diagnostic test has a financial interest in the outcome of the test. This creates incentive to test more frequently than is medically necessary and to interpret a test result with bias that favors the self-interest."
DME Accreditation

- AASM Non-Medicare DME Accreditation
  - September 2010 Applications Accepted
  - Combined Fee Structure
  - 33 Standards; 5 Mandatory Standards
  - 8 Provisos Denies Accreditation
  - 5 Year Accreditation
  - Combined Site Visit
  - Based on CMS Requirements

- DME Supplier Availability (A-2)
- Appropriate Equipment (A-3)
- Financial Management Policies (B-1)
- Personnel Training/Technical Staff (E-1, E-2)
- Patient Complaints (F-3)
- Verification of Patient Training (G-1)
- Quality Assurance Program (H-1)
- Product Verification (I-5)
- Fraud, Waste and Abuse Policies (J-2)
Integrated Services Model

- For CMS Patients with OSA
- Awaiting CMS Approval
- Improves Care Coordination
- Increases Adherence to PAP Therapy
- Reduces Co-Morbidities
- Enhances Patient Satisfaction
- Realizes Significant Cost Savings
- Transforms Healthcare Model
Integrated Services Model

Integrated Care Center

- Treatment
  - DME
  - Dental
  - ENT
  - Behavioral
  - Primary Care
  - Sleep Specialist

- F/U Care

- Education
  - Community
  - Professional
  - In-Lab Testing
  - Out of Lab Testing

- Testing
Integrated Services Model

- Sleep Centers Enroll & Recruit CMS Patients
  - Stipend for participation
- Patients Tested for OSA
  - In-lab
  - OCST
- Care Coordinated by Board-Certified Sleep Specialist
  - Individualized care plan
  - Patient education & community outreach
- PAP Dispensed by Sleep Center DME
  - Stark Laws waived
  - PAP adherence monitored
- Outcomes Tracked
  - PQRS parameters & others
  - Data collection
Integrated Services Model

Innovation Team Proposal: Dx Testing

Treatment Pathway for PAP Therapy

Board Certified Sleep Physician (BCSP)
Accountable Care Organizations (ACOs)

- Section 3022 Affordable Care Act
- Shared savings program promotes accountability
- Coordinated care
- Reduced utilization & expenditures
- Driven by efficiency, quality & outcomes, not quantity
- Integration of physician groups & hospital systems
ACO : value emphasis

“an organization that agrees to be accountable for the quality, cost, and overall care of beneficiaries”

- emphasis on value- care provided per given unit of cost - as opposed to cost control alone.
FRAMEWORK FOR VALUE

STAKEHOLDER
- Consumer
- Provider
- Organization

UTILITY

PRODUCTION

EFFICIENCY

VALUE
Value in Healthcare

- Patient Initial Conditions
  - Processes
    - Protocols/Guidelines
    - E.g., Staff certification, facilities
  - Indicators
    - E.g., Hemoglobin A1c levels of patients with diabetes
  - (Health) Outcomes
    - Patient Reported Health Outcomes
  - Patient Compliance
  - Patient Satisfaction with the Care Experience