It Takes a Village to Succeed in Outcomes-Based Healthcare Models

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Objectives

• Recognize principles of intraprofessional collaboration in healthcare.
• Identify models for intraprofessional collaboration within sleep centers.
• Consider strategies for successful implementation of intraprofessional collaboration within individual clinical settings.
Additional Objectives (New)

• Discuss outcomes-based healthcare given recent relevant policy implementations
• Highlight your need to address this as an intraprofessional team
Conflict of Interest

• I have no relevant conflicts of interest to disclose
Today’s Challenges

• Cost reduction models
  – Home sleep apnea evaluation / treatment
  – Outcomes-based care focus
• Physician workforce changes
  – Working environment and supply pipeline
• Reimbursement
  – Diagnostic
  – DME
  – Clinic
• (Technology evolution)
Workforce
Physician Office Changes

• Only 1/3 of U.S. physicians will remain independent by 2017 (vs. 2000)

Physician Supply Pipeline Shortages
(Fellowship Match)
Workforce Statistics (2015)

- **MDs**: 322,740\(^1\)
  - ↑ 14% projected 2014 to 2024\(^2\)
  - ~ 8,000 sleep board certified (2012)\(^3\)
- **NPs**: 136,060\(^4\)
  - ↑ 35% projected 2014 to 2024\(^5\)
- **PAs**: 98,470\(^6\)
  - ↑ 30% projected 2014 to 2024\(^7\)
- **Specialty care (vs. primary care)**
  - 48% NPs / 57% PAs in specialty care (2010)\(^8\)
  - 40%+ of sleep centers have NP/PA (2012)
Reimbursement
Diagnostic Testing Reimbursement

• CMS / Medicare
  – Home sleep apnea testing available
  – Slowed growth of in lab testing
  – Modest / no growth in reimbursement

• Commercial insurance
  – “Encouraging” HSAT
    • Pre-auth, high deductibles, preferred providers
  – *Complicated by ACA plan uncertainty*
Medicare Yearly Sleep Studies

Medicare Studies Performed by Study Type

- HSAT
- PSG (in lab)
Medicare Payment of Sleep Studies

Medicare Payment by Sleep Study Type

- HSAT
- PSG (in lab)

- $0
- $250,000,000
- $200,000,000
- $150,000,000
- $100,000,000
- $50,000,000


2008 HSAT approved
# Medicare Payment of Sleep Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>2015*</th>
<th>2016*</th>
<th>Change</th>
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<tr>
<td>95810</td>
<td>629.20</td>
<td>630.57</td>
<td>1.38</td>
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<td>95811</td>
<td>660.82</td>
<td>662.46</td>
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<td>95806</td>
<td>170.32</td>
<td>170.18</td>
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(type III)

*Includes technical & professional components
*Based on conversion factor  $35.8279

DME Reimbursement

• CMS / Medicare
  – Home PAP treatment initiation available
  – Dramatically reduced reimbursement ↓↓↓

• Commercial insurance
  – “Encouraging” home PAP titration
    • Pre-auth, high deductibles
    • Initial AND continued therapy

• “Outcomes-based” model ??
  – Adherence-based reimbursement
  – Complicated by ACA uncertainty & plan mobility
Medicare DME Competitive Bidding

• 2013: ↓ 47% PAP/RAD + supplies

• 2016: ↓ 56-60% for CPAP rental from 2015 (additional decrease)
Question:
Do these changes negatively impact patient outcomes?
Answer: ?
Answer: NPs vs. MDs

• Multiple studies show NP care similar to physician care
  – Across multiple diseases / specialties
  – Across multiple settings
  – Includes chronic disease management

• Limitations: studies vary
  – Outcomes measured
  – Settings
  – Licensure variations across states for NPs

• Lack of PA studies

Stanik-Hutt et al (2013). The Quality and Effectiveness of Care Provided by Nurse Practitioners
Answer?: Sleep Nurse vs. Sleep MD

- Nurse-led care for mod-severe OSA
  - Non-inferior health outcomes to MD-led care\(^1\)
  - Specialist nurses home-based model vs. traditional in-lab physician model (with sleep MD back-up/consult available) in
  - PAP and dental appliance, conservative treatment options
  - Primary outcomes: ESS & adherence not-inferior
  - Secondary outcomes: FOSQ, SF-36, neurocognitive function, MWT, patient satisfaction no difference between groups
  - Reduced costs (>\$1,000 per patient)
  - Australia study

Antic, N et al 2009, AJRCCM 179, 501-508
Answer?: Primary Care vs. Sleep

• Community-based nurse
  – Sleep trained primary care nurse vs. sleep center MD usual care
  – Primary care included community-based nurses with 6 hours study-provided sleep training by sleep-nurse and sleep MD in sleep center
  – Primary outcome: ESS not inferior to MD
  – Secondary outcomes: FOSQ, SASQ, SF-36, adherence, BP, weight, no difference between groups, patient satisfaction
  – Reduced cost (> $1,500)
  – Australia study

Chai-Coetzer et al 2013 JAMA 309, 997-1004
Answer?: HSAT/aPAP vs. In-lab

• Outcomes generally non-inferior / equivalent
  – ex: FOSQ, ESS, PAP “AHI”, adherence, pressure

• Variations / nuances to each study
  – Highly selected subjects in many studies
  – Variations in outcomes / parameters assessed
  – Varied aPAP devices & algorithms

• Many studies
Answer?: DME Reimbursement

• Current practices
  – ↓ $ paid
  – Document adherence to continue therapy

• Studies ??
  – No HEALTH OUTCOMES data published
  – “No negative changes in beneficiary health outcomes resulting from the Medicare DMEPOS Competitive Bidding Program have been observed to date” (2016)
    • Deaths, hospital/SNF admissions, ED or physician visits, hospital/SNF avg days

https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/Monitoring.html
Outcomes Based Clinical Care
Outcomes Based Care

• Historic approach
  – Fee for service
  – SGR method repealed 2015

• Newer models
  – Value based care
  – PQRS, value-based payment modifier, MU

• Newest model
  – MACRA – started 2017
MACRA (2017)

• Began January 2017
  – Passed in 2015, regs released in 2016
• SGR replaced
• Consolidates PQRS, VBM and MU
  – Sunset in 2018
• Quality Payment Program (QPP): 2 tracks
  – MIPS: Merit-based Incentive Payment System
  – APM: Advanced Alternate Payment Model
QPP: MIPS

- Uses 2017 data
- Links performance to payment
- Includes 4 performance categories
- Payments can go ↑ or ↓
MIPS Performance Categories

MIPS Score
Four categories, one composite score and report

Quality + Resource Use + Clinical Practice Improvement Activities + Advancing Care Information (MU) = MIPS Composite Performance Score

http://www.rheumatology.org/MACRA
Performance Categories

• Quality
  – Report up to 6 measures
  – One outcome measure
• Advancing Care Information
  – Meaningful Use
  – Ex: e-prescribe, pt access, summary of care
• Improvement activities
  – Complete up to 4 activities
  – ex: telehealth, patient engagement, registries
• Cost: CMS calculated starting 2018
• Percentages change over time

https://qpp.cms.gov/measures/quality
MIPS Payment Structure

MIPS (Merit-Based Incentive Payment System)

Adjustment to provider’s base rate of Medicare Part B payment

MAXIMUM ADJUSTMENTS

-4% 5% 7% 9%

2019 2020 2021 2022 Onward

-4% -5% -7% -9%

http://www.rheumatology.org/MACRA
QPP: APM

- Cost sharing model
  - Ex: ACO, PCMH, bundled payment models
- Similar EHR and quality measure expectations to MIPS
CMS Changes

• 2017 – Wisconsin Physician Services
  – New local coverage determination (LCD) policy for Polysomnography for Sleep studies
  – Effective 2/16/2017
    • Initial draft July 2016 e-news only
    • January 1, 2017 LCD proposal published

• Sleep lab must be accredited by AASM or other sleep-specific accreditation

• Includes changes to interpreting physician sleep certification requirements
AASM Accreditation & Outcomes
• J-1 Facility Quality Assurance Program
  – Facilities must have a QA program that addresses the following indicators:
    • A process measure for OSA
    • An outcome measure for OSA
    • An outcome measure for another sleep disorder
    • Inter-scorer reliability (standard F-7)
  – These measures may be chosen from the AASM Quality Measures

• J-2 HSAT Quality Assurance Program
  – The facility must have a QA program for HSAT that addresses two process measures and one outcome measure.
  – These measures may be chosen from the AASM Quality Measures

  – *Note: process measures are part of the outcome measure in the articles*
• J-3 Quality Improvement
  – The facility must establish minimum thresholds for the quality assurance metrics. Quarterly, the facility director must attest to the effectiveness of quality improvement efforts and address plans for remediation of metrics that do not meet the minimal threshold. Quarterly reports must be signed and dated by the facility director and maintained for at least 5 years.

Quality Measures

Promoting high quality care in sleep medicine has always been a focus of the American Academy of Sleep Medicine (AASM), which accredited the first sleep center in 1977 and began developing evidence-based practice standards about 25 years ago. Today more than 2,500 AASM accredited sleep disorders centers across the U.S. are providing exceptional care for people who suffer from a chronic sleep disease. In keeping with its mission of promoting high quality care, the AASM has developed quality measures for assessment and management of common sleep disorders.

<table>
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<tr>
<th>PUBLISHED</th>
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<tbody>
<tr>
<td>8/2016</td>
<td>Quality Measure for Screening for Adult Obstructive Sleep Apnea by Primary Care Physicians</td>
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</table>

The following quality measures were published as a 6 part series in 2015. The first paper describes the rationale, background, and general methods development, while the remaining five papers detail the quality measures. The AASM recommends the use of these measures as part of a quality improvement program that will enhance the ability to improve the quality of care for patients with sleep disorders.

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<tr>
<td>3/2015</td>
<td>Measurement of Quality to Improve Care in Sleep Medicine</td>
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<tr>
<td>3/2015</td>
<td>Quality Measures for the Care of Adult Patients with Restless Legs Syndrome</td>
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<tr>
<td>3/2015</td>
<td>Quality Measures for the Care of Patients with Insomnia</td>
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AASM OSA Outcome Measures

- 3 outcomes, many process options
  - Improve disease detection & categorization (2 process)
  - Improve quality of life (4 process)
  - Reduce cardiovascular risk (4 process)

OSA Outcome & Process Measures

AASM

1. Improve disease detection/categorization
   – #1 Baseline assessment of OSA symptoms
   – #2 Severity assessment at initial diagnosis

2. Improve quality of life
   – #3 Evidence-based therapy prescribed
   – #4 Assessment of adherence to OSA therapy
   – #5 Assessment of sleepiness
   – #6 Assessment of MVC or near misses

3. Reduce cardiovascular risk
   – #7 Assessment of weight
   – #8 Weight management discussion (overweight / obese)
   – #9 Assessment of blood pressure
   – #10 Elevated blood pressure discussion

AASM vs. CMS Outcomes

AASM
1. Detection/categorization
   • Baseline OSA symptoms
   • Baseline OSA severity
2. Quality of life
   • Treatment prescribed (EBP)
   • Treatment adherence
   • Sleepiness assessment
   • MVC or near miss assessment
3. Cardiovascular risk
   • Weight
   • Weight management
   • BP
   • BP discussion

QPP: MIPS (MACRA)
1. Sleep Apnea
   • OSA symptoms
   • OSA severity measured
2. Sleep Apnea
   • PAP prescribed
   • PAP adherence
   • OSA “sleep symptoms”
3. Prevention/screening
   • Weight documented, abnormal weight identified
   • BP documented and abnormal identified
   • BP improvement

https://qpp.cms.gov/measures/quality
Interprofessional Collaboration
You Need a Good Team!

• Patient encounters
  – Clinical screening
  – Diagnostic testing
  – Treatment initiation
  – Follow-up

• Patient outcomes
  – Measurement
  – Analysis
  – Improvement
  – Reporting
IOM: Interprofessional Practice

• “When healthcare workers from different professional backgrounds work together with patients, families, careers, and communities to deliver the highest quality of care”

• “… engage any individual whose skills can help achieve… health goals”
Principles of Team-Based Care (IOM)

- Shared goals
- Clear roles
- Mutual trust
- Effective communication
- Measurable processes and outcomes

Mitchell 2012 (IOM Roundtable) Core Principles & Values of Effective Team-Based Healthcare
https://www.nationalahec.org/pdfs/VSRT-Team-Based-Care-Principles-Values.pdf
Define the Team

- Define role
  - Clinical, diagnostic, treatment, management
- Define skills
  - Basic: licensure, education, training
  - Core: role-based skills (clinic, testing, treatment)
  - Soft: clinical interests, team skills, leadership skills, technology comfort level
Build the Team

• Team dynamics
  – Establish shared goals
  – Define roles

• Team engagement
  – Communication
  – Involvement
    • Ex: team-based QA/QI
  – Establish and maintain trust
    • Listen and communicate response (!)
  – Have fun
Build the Team (continued)

• Establish team expectations
  – Measurable processes and outcomes
  – Review & evaluation
  – Plan for improvement
• Team training
  – On site (consultants are helpful)
  – Continuing education (webinars, conferences)
• Team resources
  – Be prepared to evolve
  – Health system / office resources
  – Social networks / sleep colleagues
Team Evolution and Redesign

• Sleep will change
• Healthcare will change
• Technology will change

• Continuously evaluate & evolve
  – PDCA
    • Plan, Do, Check, Act
  – SMART
    • Specific, Measurable, Achievable, Relevant, Timed
  – SWOT
    • Strengths, Weaknesses, Opportunities, Threats
Team Building is an Art

Sometimes, art is in the eye of the beholder
Reminder:

The patient is also part of the team (CMS program includes patient engagement)
Interprofessional Approaches to Outcomes-Based Care in Sleep Centers
OSA Outcome Example

• AASM
  – Outcome #1: Improve disease detection and categorization
  – Process #1: Baseline assessment of OSA symptoms
  – Process Measure #1: Proportion of patients aged 18 years and older with a diagnosis of obstructive sleep apnea that have documentation of assessment of OSA symptoms at initial evaluation, including, but not limited to, the presence of snoring and daytime sleepiness

• CMS QPP/MIPs
  – Quality Measure Sleep Apnea Assessment of Symptoms
  – Percentage of visits for patients aged 18 years and older with a diagnosis of obstructive sleep apnea that includes documentation of an assessment of sleep symptoms, including presence or absence of snoring and daytime sleepiness
Discussion

• How would you accomplish this goal?
  – Adults with OSA
  – Snoring
  – Daytime sleepiness
  – (?baseline vs. ongoing)
Discussion (cont)

• Adult OSA, snoring/EDS, baseline/ongoing
• Questions (PDCA model)
  – Plan: define goal (is it measurable?)
  – Do: collect data
  – Check: analyze data (at measurable goal?)
  – Act: next steps for below / at / above threshold
  – (Report)
    • AASM: quarterly, signed, stored
    • CMS: good luck! (you need a team)
Challenges with Outcomes / QA

- **Plan**
  - How do you establish your initial threshold?
  - Do you know your numbers?
- **Do**
  - Who collects / analyzes data?
  - Do you have the manpower and expertise?
- **Check**
  - Does your team meet routinely? (lab and clinical)
  - Is QA already a regular agenda item?
- **Act**
  - Do you have time on current agenda to make changes to plan?
  - How do you ensure / communicate accountability?
- **Report**
  - Is someone taking notes?
  - How do you report to accreditor / insurer?
What is Feasible?

• Sophisticated EMR?
  – Define patient population (Dx, age, clinic, HSAT)
  – Start with readily available EMR data
    • Digital / common data: weight, BMI, BP
  – Get to know your data analyst
  – Look over preliminary data, QA data in patient charts
  – Begin planning clinically relevant data (ex: ESS)

• Less sophisticated EMR?
  – Determine how to identify your patient visit denominator (OSA, age, data range)
  – Establish plan for chart review (% of charts)
  – Designate staff to complete tasks
  – Give staff time to complete tasks
Tips

• Review your accreditation standards with EACH update
• Don’t over promise and under deliver
  – It will take longer than you think
• Know your EMR
  – Do you / can you collect sleep-specific data ?
    • OSA
    • Other sleep disorder *(RLS: can you get ferritin from EMR?)*
• Know your team resources
  – Can you sustain a chart review model ?
  – Who can type fast in taking notes ?
• Be organized
  – Have a QA report template
• Brainstorm with colleagues
  – Who works in your EMR system
    • I’m looking for EPIC users !
Discussion