The Future of Sleep Medicine

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Disclosure

I have nothing to disclose.

Outline of Talk

• What changed the landscape?
• What immediate changes can you expect?
• What is the future of Sleep Medicine?

What Changed the Landscape?

• Concern by payors about rapid growth of diagnostic costs for in-lab studies for sleep apnea
• Studies in USA showing sleep apnea could be effectively diagnosed with home sleep testing and CPAP titration by auto-adjust – had been used in European countries for years
Changes Started in Massachusetts

- Fallon Community Health Plan (FCHP), then Tufts (THP) contracted with Sleep Mgmt Solutions (SMS) and CareCorp (gatekeeper)
- CareCorp decided which pt gets which test; SMS did HST and provided DME
- As expected most patients were steered to HST
- Then, Harvard Pilgrim HealthCare (HPHC) added similar program but allowed other providers to do the HST/DME
- Reduced PSG tests – estimates are by 50-60%

The prestigious Sleep Center program closed (see “A Warning Shot Across the Bow: The Changing Face of Sleep Medicine”, Quan SF, Epstein LJ, J Clin Sleep Med 9:301-302, 2013) (or is it a torpedo?)

What Happened in Philadelphia?

- As of September 1, 2013 – Blue Cross employed a benefits management company
- Requires pre-certification for sleep studies/titration done by auto-adjust
- Deny repeat sleep studies
- 62% of studies approved at Penn go to home studies
- Dramatic effect on revenues
- Increased volume of patient referrals and visits
- Had to terminate 20% of our technologist workforce
- Closing facilities (had short-term leases in hotels)

THIS IS SHORT-TERM – NOT PRETTY!!

Percentage of Lab PSG Studies Depends on Pre-Certification

- Companies offering a service to deal with pre-certification are developing (e.g., Azalea)
- Was approached by local for-profit company to do this for us
  - Claimed that they got 96% of lab studies with Philadelphia IBC! (We get 38%)
- United Health Care report epidemic of periodic limb movements on pre-certs

Our already tarnished reputation as a field could be further tarnished.

A GROUP OF OUR FIELD CONTINUE WITH THE FAILED STRATEGY – PROTECT THE PSG

What About the Future?

American Academy of Sleep Medicine Held a Future of Sleep Medicine Meeting in Chicago: November 16-17, 2013

Conclusions

- Sleep medicine is about diagnosing and treating all sleep disorders – not just sleep apnea
- Sleep medicine is not a diagnostic discipline but a chronic care management discipline with outcomes
- Practice of sleep medicine requires teams
- Sleep medicine is ideal for telemedicine approaches to diagnosis and management
What Are the Outcomes?

• Under the leadership of Dr. Morgenthaler, the AASM has a task force with multiple groups determining outcomes for all sleep disorders
• Anticipate a report this year (by summer)
• Outcomes can be captured in EMR – need to approach EMR providers (in process)

Telemedicine - Why Now?

Imagining our Future…
- Emphasis on Patient Management
- Influx of New Patients
- Decreased Reimbursement
- Reaching Rural Populations
- Patient Directed Care

REQUIRES LICENSE IN STATE PATIENT IS IN MULTIPLE LICENSES IN DIFFERENT STATES
(From Nate Watson)

Current Reimbursement

- Medicare – reimbursement for rural telemedicine
- Private payers – policy variability
- Coding and Billing
- State Legislation – Mandated Coverage

(From Nate Watson)

State Legislation – Mandated Coverage
TeleSleep: Patient Screening

- Self-Screening
- Automated Phone Surveys
- Self-Education

(From Nate Watson)

TeleSleep: Management Plan and Long-Term Management

Virtual Video Conferencing:
- PCP-to-Sleep Consultation
- Initiates patient evaluation
- CBT-I Delivered by BSM Specialist
- Follow-up of patients – discussion of adherence

(From Nate Watson)

TeleSleep: Monitor and Report Outcomes

- PAP adherence monitored using internet-based tools
- PAP adherence monitored via modem technology

SleepMapper - Somnware - CareTouch

(From Nate Watson)

Do Integrated Programs Like This Exist?

Yes – in integrated health care systems
- VA (Philadelphia)
- Kaiser Permanente
Integrated Program at Philadelphia VA (Sam Kuna)

- Website (REVAMP)
  - Questionnaires—clinical history
- Uses telemedicine to remote sites – nurse practitioner
- Telemedicine link to educate how to apply home testing equipment
- Website has educational videos plus FAQ
- Website provides CPAP adherence – tracks outcomes
- Integrates with EMR – creates notes

COVERS MULTIPLE FACILITIES IN EASTERN PENNSYLVANIA/DELAWARE – SPOKE/WHEEL

Existing Model versus REVAMP

- In-person Diagnostic
  - Little Data for Providers / Difficult Data Collection
  - Anecdotal Promotion of Compliance

- Home Diagnostic
  - Lots of Data for Patients and Providers
  - Transparent, Meaningful Engagement

REVAMP Provides Standardized, Patient Outcome-Based Management of OSA

- Standardized history and sleep study collection
- Wireless PAP Data
- Patient centered outcomes

Sleep Medicine in Kaiser System (Dennis Hwang)

- Outcomes-based Medicine
- Team-based approach to care

(Has IT infrastructure similar to REVAMP)
Team Approach—Who is the Team? (Dennis Hwang)

Patient Volume (per month)
- 1700 visits
- 5000 telephone
- 180 inlab PSG (night)
- 20 inlab PSG (day)
- 390 HST (diagnostic)
- 400 APAP trials

Personnel
- 3 Physicians
- 1 PA
- 2 RN
- 5 RPSGT (days) (re-trained technologists)
- 10 RT (days)
- 6 RPSGT/RT (nights)
- 1 MA
- 2 supervisors (day/night)
- 1 Department administrator
- 4 Clerical/receptionist

COVERS WHOLE SYSTEM
SYSTEM USED BY KAISER

What About This Type of Program in More Traditional Setting?

What is role of primary care physician (PCP)?

Options
- PCP does diagnosis + management
- PCP refers to sleep center for diagnosis + management
- PCP builds “detection” into EMR → sleep center

FEE-FOR-SERVICE PAYMENT SYSTEM IS A MAJOR BARRIER TO CHANGE

University of Pennsylvania Sleep Medicine Program in Primary Care (CCA Network)

EMBEDDED SLEEP MEDICINE PHYSICIAN AND NURSE PRACTITIONERS (NPs)

- Have sleep medicine practitioners in different primary care locations
- Have NPs in same locations – follow-up care, adherence management, CBT-I
- Have mask clinics in each location.
- Multiple sleep labs for different locations (all provide HST)


- Bundled payment has been proposed as means to drive improvements in health care quality and efficiency
- Currently limited data on how to design and administer
- Can control costs, integrate care delivery
- Health reform – national pilot of bundled payment models for Medicare by 2013
- Have been some early success stories

DO WE NEED PILOT BUNDLED PAYMENT PROGRAMS FOR SLEEP DISORDERS?
Conclusion: What Should Our Future Be?

- Develop integrated programs in collaboration with our primary care physicians
- Give primary care physicians education and tools (e.g., questions in EMR) to identify sleep disorders
- Do cost-effective diagnosis – appropriate use of HST
- Define and track outcomes for all sleep disorders (not just sleep apnea)
- Deploy care management – use telemedicine, IT
- Utilize non-physician extenders – nurse practitioners, sleep medicine coordinators (develop team approach)
- Change accreditation standards to emphasize quality outcomes of care
- Could AASM accredited centers be a national quality care network?