Patient Education Curriculum

Updated 2020

1 Introduction and Background

This document outlines the patient education needs for self-management of sleep disorders; i.e. Sleep Apnea Self-Management Education (SASME), as a standardized curriculum.

Health care is changing, patients are living longer and more care is provided within the home environment. These trends indicate how important patient education has become. Patient education must be an integral component of patient care. Goals of patient education are to contribute to the patient's understanding of their health condition, to assess the appropriate course of action and to assist in the achievement of patient long term self-management at home.

In the field of sleep health, a large proportion of the patients seen within a sleep disorders clinic are patients who are diagnosed with sleep apnea. These patients require long-term management of this serious, common and chronic condition. Long term adherence to therapy has been demonstrated to show improvement in general quality of life, cardiovascular and endocrine outcomes and neurocognitive function. [1] However, long term adherence to therapy remains difficult to achieve in spite of improvements in technology. [2]

Sleep health and hygiene education are an important component of overall health and the provision of this education for all sleep disorders patients is critically important. As indicated in the 2006 Institute of Medicine report, Sleep Disorders and Sleep Deprivation: An Unmet Public Health Problem:

> "Sleep disorders are chronic conditions necessitating complex treatments. They are frequently comorbid with other sleep disorders and other conditions (e.g., cardiovascular disease, depression, or diabetes), which, by themselves, are complex to treat. Despite the importance of early recognition and treatment, the primary focus of most existing sleep centers is on diagnosis, rather than on comprehensive care of sleep loss and sleep disorders as chronic conditions."

This influential report validates the need for optimizing the initial encounter and developing a mechanism for a standardized curriculum for follow up care. According to the Institute for Healthcare Improvement (IHI,2016) [3] self-management support for patients with chronic illness includes 1) basic information about their disease 2) understanding of and assistance with self-management skill building and 3)

ongoing support from members of the practice team, family, friends, and community. The role of the sleep health professional in administering education within a standardized format for delivery and content meets these criteria.

In that sleep is such an essential component to overall health and well-being, sleep health must be addressed at each and every patient encounter. Again, from the IHI, we are provided with support for our patient encounters. Originally developed by the Picker Institute, in 2012 they transferred the rights for "Always Events®" to the IHI. "Always Events®" refer to aspects of the "patient experience that are so important to patients and families that health care providers must perform them consistently for every patient, every time." The American Association of Sleep Technologists (AAST) believes that sleep inquiry is a component of this definition.

In 2014, the Board of Registered Polysomnographic Technologists (BRPT) in recognition of changes within the sleep health community created a new certification exam for sleep health professionals. The Certification in Clinical Sleep Health (CCSH) is offered to an array of health care professionals seeking a non-technical sleep certification.

Certification is important to other care providers, places of employment, the public and payers as a mechanism to ensure that minimum competency is achieved to provide certain services. While it is recognized that not all sleep health professionals that provide SASME will achieve this certification, and indeed it is not required, certification is an important component of the evolving field of sleep health.

A standardized patient education curriculum is the cornerstone of a unified approach for providing care for sleep apnea patients. The recommendations outlined in this document are guidelines for a standardized patient education curriculum. In order to bill for patient education provided by non-physician providers CMS requires a standardized curriculum endorsed by a medical or professional organization and published qualifications for non-physician providers.[4] These standards and curriculum may be established or recognized by a non-physician health care professional society. The AAST has developed and endorses these SASME standards when patient education is provided by qualified sleep health professionals.

The use of a standardized curriculum has been shown to improve patient outcomes, substantiate the rigor of such activities and improve recognition and reimbursement for facilities employing these standards. It is also suggested that using a standardized curriculum allows measurement, reporting and comparison of outcomes between facilities. There is precedent for using a standard mechanism for delivery of patient education in the management of chronic health conditions. The American Association of Diabetes Educators and the American Diabetes Association have developed standardized education for patients diagnosed with diabetes. [5]

It is recognized that treatment options for sleep disordered breathing are individualized. These guidelines provide a general outline which can be used regardless of the treatment method. While there is a foundational educational component for all patients, in view of the various forms of treatment utilized, the educational approach for each patient will likely be different.

Guiding principles in the creation of these guidelines include:

- Sleep apnea self-management education (SASME) is a necessary component of patient centered care
- SASME should be provided by appropriately trained individuals with the skills and knowledge necessary to effectively carry out this task
- On-going support throughout the care continuum is necessary for the achievement of long-term adherence and improved outcomes.

2 Instructions for Use

The guidelines are a tool that can be referred and used on regular basis when delivering care to patients with sleep disordered breathing. This tool should be utilized on a regular basis with each patient, and education provided should be documented in the patient medical record.

Although all components may not be reviewed during a given visit, it is highly recommended that most aspects of this education should be reviewed at each visit. The tool is designed to be used by all non-physician sleep health providers.

3 General Patient Education

Patient education should occur during a clinic visit with a healthcare provider, a sleep laboratory test visit for in-lab polysomnography (PSG), or at a home sleep apnea testing (HSAT) appointment: ideally, patient education begins during the initial interaction with the patient.

- Determine the appropriate education and communication techniques necessary based on patient's primary language, level of understanding and cultural beliefs; encourage questions and simplify answers
- Review current overall health
  - Vital signs: height, weight, BMI, neck circumference, BP, HR
  - Current medications
  - Current health care concerns
- Life style/behavior
  - Assess patient's willingness to discuss and/or adapt to suggestions for lifestyle/behavior changes
  - Discuss current lifestyle decisions including employment and work hours, typical sleep habits, dietary decisions, family dynamics, and exercise participation
  - Give examples of lifestyle and behavior changes that may have a positive impact on health
- Weight control/nutrition

- Determine patient goals
- Discuss nutrition including current dietary decisions, health benefits of food choices, optimal weight and BMI
- Give examples of nutritional food choices and how best to incorporate into lifestyle
- Offer option of nutritional expert consultation

- Sleep hygiene
  - Review sleep habits: caffeine and food consumption and timing, bedtimes and rise times, sleep environment including room temperature, TV/electronics use, bed partners, mattress type, pillow type, and external noises/disturbances, pets and co-sleeping with children
- Overview of sleep disordered breathing
  - Review the physiological impact of sleep disordered breathing and provide information related to anatomy and the upper airway, impact on neurological and cardiac function and other health-related impact
  - Review the physical manifestations of sleep disordered breathing including snoring, witnessed apnea, excessive daytime sleepiness
  - Review the emotional/psychological impact of sleep disordered breathing
  - Remind patient to make providers aware of PAP use and settings, and to be aware that respiratory suppressing medications and excessive alcohol use could be harmful
- Impact of untreated sleep disordered breathing
  - Discuss health consequences
  - Review personal and societal impact
- Interrelationship of co-morbid conditions
  - Determine concurrent disease processes
  - Discuss sleep disordered breathing impact on progression of each condition and the benefits of sleep disordered breathing treatment
- Therapeutic options
  - Review severity levels of sleep disordered breathing
  - Discuss treatment options including ENT evaluation/treatment, dental evaluation/treatment, PAP applications, surgical treatments, and other treatments (positional, airway stimulation, etc.).
- Personal and Public safety
  - Discuss workplace activities
  - Discuss recreational activities
  - Review societal impact of untreated sleep disordered breathing
  - Explain positive personal outcomes related to successful treatment of sleep disordered breathing Explain positive societal outcomes related to successful treatment of sleep disordered breathing
- Document visit findings and complete a summary in the medical record

- Communicate significant findings to primary and specialty health care providers as indicated

4 First visit after diagnosis

- Collect and review available objective diagnostic data (PSG or HSAT report, actigraphy, sleep diaries, etc.) prior to visit
- Assess sleepiness, snoring, motor vehicle accidents, workplace accidents, and quality of life using standardized questionnaire(s)
- Obtain and document current height, weight (calculate BMI), neck circumference, and blood pressure
- Reconcile medications and document allergies to determine positive and negative effects on sleep, diagnosis, and treatment
- Determine education and communication techniques based on patient's primary language, level of understanding and cultural beliefs; encourage questions and simplify answers
- Use written, audiovisual, and computer-based materials to enhance and reinforce education and communication
- Review patient's understanding and clarify misconceptions of current sleep disorder diagnosis, severity, testing, treatment, and contraindications and health benefits of treatment
- Assess and discuss patient's readiness to change behaviors and their priorities for improving sleep health
- Identify, recognize and reward patient's willingness to succeed, progress toward sleep health, and compliance with treatment recommendations

If treatment has been initiated

- Review and discuss current therapy and treatment, including type, duration, parameters, problems, and barriers
- Identify and discuss chronic and acute health issues that interfere with treatment and management
- Acknowledge therapeutic and health challenges, reinforce processes that reduce barriers
- Discuss patient's subjective assessment and problem solve discrepancies between objective and subjective treatment compliance
- Develop achievable, individualized, written treatment goals with patient
- Recognize the influence of patient needs, family, work, health, and other barriers on treatment goals and outcomes
- Review and reinforce therapeutic compliance and suggest processes for improvement if needed
- Review and reinforce impact of untreated or poorly treated sleep disordered breathing on health and public safety
- Provide patient education materials, community and web-based resources
- Document visit findings and complete a summary in the medical record

- Communicate significant findings to medical provider and/or durable medical equipment (DME) provider

5 Follow up visits

- Collect and trend objective therapeutic data (PAP download, actigraphy, etc.) prior to visit, evaluate for positive and negative trends
- Collect and trend BMI, neck circumference, and blood pressure, evaluate for positive and negative trends
- Reconcile medications and allergies, identify new medications and their effects on sleep health and treatment
- Assess sleepiness, snoring, motor vehicle accidents, workplace accidents, and quality of life using standardized questionnaire(s); trend findings and evaluate for positive and negative variations
- Review and clarify current diagnosis and treatment with patient, ask patient to summarize understanding in their own words
- Review written treatment goals established with the patient at the previous visit
- Discuss patient's subjective assessment of progress toward established goals and improved health; identify patient comfort concerns with interface or other aspects of treatment
- Discuss positive and negative trends in treatment compliance and how they influence established goals
- Eliminate or minimize barriers to success through problem solving with patient
- Reinforce compliance with treatment, healthy lifestyle, sleep needs, diet and exercise
- Identify new or review chronic health issues that interfere with treatment and management goals
- Identify, recognize and reward patient's progress and successes, no matter how small
- Acknowledge therapeutic goals and health challenges, reinforce processes to reduce barriers, suggest actions for improvement and interventions to achieve goals
- Discuss status of co-morbid medical conditions, review interrelationship between sleep disorders and treatments, evaluate for positive and negative trends
- Discuss impact of poor sleep and untreated/undertreated sleep disordered breathing on health and public safety, evaluate questionnaires and patient responses for positive and negative trends
- Review and encourage participation in community and web-based support groups
- Document revised or updated goals, progress, and problem solving in the medical record
- Communicate significant findings, concerns and recommendations to medical provider and/or DME provider

6 Documentation Using the SOAP Note

History:

The SOAP note was first used by Lawrence Weed, MD in the 1970's. Originally, it was named the POMR, or problem oriented medical record. At that time, medical documentation did not include an objective review of the patient, which some claim contributed to providers making unscientific decisions at treatment. The SOAP note provided an opportunity for more effective problem based documentation incorporating the objective assessment of the patient's clinical status, which is described as the examination of patient systems. SOAP note documentation provides a standardized method to communication with other providers, and it is the standard methodology for documentation in the electronic medical record. This standard provides a uniform format to retrieve data from the patient's medical record, which increases the ability to share clinical information with other providers rendering care to the patient.

Definition:

SOAP documentation is divided into four parts: **Subjective, Objective, Assessment, and Plan.**

The subjective note describes the patient's clinical condition or chief complaint for the current encounter. This is the reason for the patient's visit to the provider. Often it is described in the patient's own words.

The key components of a **Subjective** note include:

- Onset of the chief complaint
- Chronology or the timing of the problem: Has it gotten better or worse since onset? Does it occur every day/night? Is there a change with _____? Has it gradually worsened with weight gain?
- Quality of the chief complaint: restless sleep, inability to sleep, dryness, fatigue or sleepiness; feels like smothering or suffocating.
- Modifying factors: what changes the problem: sleeping on the couch, sleeping with many pillows, resting in a recliner, not a problem when on vacation or on the weekend, "nothing I do changes the ____."
- Context or the setting in which the problem generally occurs: every evening, only in the morning, usually with driving, no consistent pattern for the problem to occur; only when watching TV.
- Associated signs and symptoms: rapid heart rate, morning headaches, sour taste in the mouth each morning, changes in thinking, memory, and concentration; difficulty at work; increased absences from work; inability to maintain responsibilities at home; falls asleep while on a long drive.
- Treatments: medication, use of PAP, oral appliance, diet, exercise, positional therapy, nutritional changes, counseling, or prayer, or other treatment.

Objective documentation integrates measurable assessments of the patient to include:

- Vital signs, age, BMI, and neck size, Epworth score
- Findings from the provider's physical examination: general appearance, cardiac arrhythmias, edema in the legs, mood, or affect, scalloped tongue; or Mallampatti scores.
- Lab results: thyroid, ferritin levels, A1C3 levels, EKG, echo, stress tests.

The **Assessment** correlates the clinical conditions that will be addressed with the health care provider's diagnosis. It links the subjective and objective documentation with the care plan. The assessment needs to document the important problems or issues that need to be addressed, and may include repeating information documented in the subjective and objective documentation.

The **Plan** describes what the Sleep Health Professional will be doing to complement the health care provider's plan. It describes the future clinical work, and may include specific interventions, homework, documentation in a sleep diary, or use of other tools for gathering more information and measurement of the interventions' effectiveness to change the chief complaint. Caregivers make decisions about how they will provide care that is based on specific needs and abilities of the patients. The plan needs to be realistic and measurable such that effectiveness can be evaluated and includes treatments, medications, education and consults to other members of the team. For an example review Appendix A.

Summary:
A good SOAP note is designed to improve the quality of patient care by assisting providers to document clinical information in a more systematic process, and to measure changes in the patient's health status in a professional manner.

The SOAP note should be detailed enough for an outside provider without previous contact with the patient to understand the patient's problem, the patient assessment of the chief complaint, and the plan for care.

7 References

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[4] Winter-Rosenberg, C. Billing codes for sleep technologists providing patient education. A2 Zzz 24.4; December 2015 Retrieved 12/30/16 from https://go.aastweb.org/Resources/PDF/A2Zzz24_4/BillingCodes.pdf

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Appendix A (AAST case study)

Soap Note Example:

Case Study: 52 y/o man with a c/o daytime sleepiness. He is a loud snorer with episodes of witnessed apnea that has worsened recently. He is an active sleeper, often tossing the bedclothes on the floor and sweating during the night. He typically takes more than half an hour to fall asleep and has frequent awakenings during the night to urinate. He has no symptoms of narcolepsy or restless legs syndrome. Spouse does not sleep in the same room but confirmed as a witness. He is referred by his PCP for a sleep study with a split night approved based on suspected sleep apnea. [6]

- ***Past Medical History***: He has type II diabetes with onset at age 25. Bedtime blood glucose has been around 95 and hemoglobin A1C is 5.8 indicating that he has reasonable control with insulin, in recent history. Patient reported taking several years to stabilize the diabetes. He has mild hypertension and is a moderate drinker, reporting 2 beers per night.
- ***Physical Exam***: He is 72" tall and weighs 285 lbs, resulting in a BMI of 41.1. Mallampati III of IV. Blood pressure in the clinic was 125/88 and pulse 77 and regular. Lungs are clear and an abbreviated neuro exam was normal.
- ***Prior to the sleep study***: He has reported gaining about 15 lbs over the holidays and has made a New Year's resolution to change his diet and begin an exercise program. Today was his first day on a physician supervised calorie restricted diet and his first at the gym. After leaving the gym, he felt anxious about the sleep study and stopped at a bar on the way to the center. He stated he limited himself to two beers, but the technologist noted he was a bit unsteady and was slurring his speech.
- ***Subjective***: C/o daytime sleepiness. Loud snorer with episodes of witnessed apnea that has worsened recently. Active sleep, include tossing bedclothes and sweating during the night. Takes 30min to fall asleep, with frequent awakenings to urinate. No symptoms of narcolepsy or restless legs syndrome. Reported several years to stabilize his diabetes. Mild hypertension, moderate drinker, 2 beers/night. Reported weight gain of 15 lbs over the holidays. Beginning an exercise and MD supervised calorie restricted diet. Today 1st day at the gym. States was anxious over study so had 2 beers on the way to the study.
- ***Objective***: Type 2 Diabetes onset age 25; Bedtime bl glucose 95 and hg A1C 5.8. Ht 72"; wt 285 lbs (BMI 41.1) Mallampati III of IV. BP today 128/88 and HR 77 and reg. Lungs clear and abbreviated neuro normal. Tech notes he's a bit unsteady and slurring his speech.
- ***Assessment***: Client could be inebriated or having a blood sugar issue due to exercise and diet changes.
- ***Plan***: Perform sleep study if appropriate based on assessment. Obtain previous records to review management concerns with blood sugar levels. Monitor patient and follow protocol for any concerns regarding patient safety.
- If unable to perform study, then call family member to take the client home and reschedule.