Introduction

Sleep studies are routinely utilized to evaluate and diagnose patients with nocturnal hypoxemia and sleep apnea, as well as to rule out any other disease processes which might interfere with the patient’s respiratory function during sleep. Clinical guidelines indicate that sleep studies are appropriate diagnostic tools for patients that may have psychological problems that can cause insomnia, side effects from medications which may cause insomnia, medical problems that may cause insomnia such as chronic pain or sleep disorders that may cause insomnia: sleep apnea, narcolepsy, restless legs syndrome. Clinical evidence also indicates that patients with sleep apnea may increase their risks of mortality related to cardiovascular conditions.

Prior to the ORH-funded project described in this brief, there were no Sleep Lab Clinic (SLC) services in the Poplar Bluff VAMC and the closest VAMC provided the service was located at John Cochran VAMC in St. Louis, MO. Because most of the rural Veterans in the eastern market have to travel up to 150 miles or more to receive Sleep Lab services, this project was designed to reduce or eliminate the need for many of these trips.

Key Findings

Extending Sleep Lab Clinic (SLC) services into the Southern tier of the Eastern Orbit within VISN 15:

- Shifted 215 encounters to a VAMC closer to home, reducing travel time and cost
- Increased Veteran satisfaction.
- Resulted in approximately $681,000 in savings for the medical center in reduction of fee based expenditures.
- Provides a template that other VAMCs can use to expand SLC services at their own facilities.
By the end of FY10, almost 90% of Veterans were not able to be seen by the Sleep Lab in the John Cochran VAMC, therefore a significant portion of these rural Veterans had to receive care in the community under Fee Services.

The estimated rural Veteran population for the twenty-seven county service areas that comprise VISN (Veteran Integrated Service Network) 15 is around 57,500, and the expansion of sleep lab services has the potential to significantly improve access to care to those utilizing this rural based facility.

The purpose of this project was: 1) to provide convenient and accessible sleep clinic services to rural Veterans in VISN 15; and 2) if successful, expand SLC services within the VISN.

**Methods**

Request for services for Veterans in Poplar Bluff VAMC with sleep apnea and nocturnal hypoxemia increased steadily in recent years. An interdisciplinary group convened to examine opportunities to improve the process of sleep studies for Poplar Bluff Veterans. This group reviewed the value of sleep studies, work load/appropriateness of requests, options for the provision of care within other VA medical centers and the community. Communication with VISN 15 leadership and other VHA facilities was an ongoing process. The decision to establish sleep study capabilities at Poplar Bluff VAMC was made.

This decision was based on the business case which demonstrated that cost reduction of fee based care related to sleep studies within the community would pay for the staff and equipment to implement the program at Poplar Bluff VAMC.

Two technicians were hired to operate the clinic. Interpretations are provided by a Staff Radiologist who has obtained additional training for such exams. Since its implementation in FY 2011, a total of 320 Veterans have had studies completed in the SLC. Rural Veterans receiving this care in FY2011 have been able to eliminate an average of 350 miles in travel (round trip), and face-to-face appointments.

**Results**

The Poplar Bluff VAMC SLC is a growing program providing Polysomnogram (PSG) and CPAP Titrations, as well as other outpatient services. Initial data indicates the program is highly successful.

Specifically, decreased wait times for sleep studies, increased timeliness of interventions for patients who have sleep disturbances, and increased efficiency in the provision of this service have been demonstrated. Less quantifiable, but equally important, is that the introduction of SLC allows Veterans to remain in their home community for care, ultimately decreasing travel time and cost while simultaneously increasing patient satisfaction.

To date, the SLC has received fourteen Heart Awards (a local award program for Veterans to recognize staff for outstanding service). The only negative feedback from both Veterans and Staff is that the program has been too successful in that demand was again outstripping capability due to a significant increase in appropriate referrals by the end of FY11, thereby increasing wait times once again. Currently the clinic is capable of completing 32 studies per month. Increases in capacity are being investigated at this time.

Over 320 sleep studies were performed in FY11 at this facility. The average community cost for a sleep study is $3,000. Poplar Bluff VAMC has been providing this service for $871 (this includes staff cost for the sleep lab, which equates to an approximately $681,000 in savings for the medical center in reduction of fee based expenditures. This allows limited medical funds to be better utilized within the organization.

Of the 320 patients who received SLC services at Poplar Bluff VAMC, 86 (27%) were eligible for travel pay. By not driving to St. Louis, the Poplar Bluff VAMC saved $12,126 in travel pay.
Conclusions

This ORH-funded rural health pilot project resulted in both significant travel savings for Veterans and expansion of necessary specialty services to Poplar Bluff VAMC. Without this pilot project opportunity, the expansion of SLC services to this population of Veterans would have taken much longer or not occurred at all.

This initiative has been well-received by Veterans as it allows them to receive care close to home, reducing both travel time and the costs associated with travel. Initial estimates indicate a substantial cost savings by providing SLC services at the VAMC, rather than utilizing “fee basis” agreements to pay for these services within the larger community.

VISN 15 and the Poplar Bluff VAMC remains committed to the VHA’s and ORH’s mission to provide effective, efficient, accessible, and convenient services to rural Veterans. In the coming fiscal year, John J. Pershing VAMC in Poplar Bluff, MO plans to continue developing, and if feasible, expanding, it’s Sleep Study Clinic in this rural setting.