**Facility:** Pacific Northwest National Laboratory (PNNL)

**Best Practice Title:** Evaluation of Medical Travel Variance Requests for Other than Coach Class Seating to Address National Nuclear Security Administration Guidance.

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**Brief Description of Best Practice:** This “best practice” identifies a useful approach to the evaluation of medical travel variance requests. The current process was developed to apply a consistent and objective method to the evaluation and application of medical travel variances and to address the guidance set forth by the National Nuclear Security Administration (NNSA). Several variations of this approach are in use at other locations across the DOE complex.

**Why the best practice was used:** The evaluations for travel variance requests prior to implementation of this revised process were essentially a cursory approval or acceptance of an outside, non-occupational physician’s recommendation. The revised approach was developed to 1) make certain travel variances are supported by evidence based medicine as much as possible, 2) implement a consistent and reliable process, and 3) align with the National Nuclear Security Assurance guidance to justify, monitor, and validate medical waivers for business-class travel.

**What are the benefits of the best practice:** Implementation of this travel variance best practice provides near uniform outcomes, resulting in better acceptance of a process meant to control travel costs while being less subjective and less likely open to challenge if a variance is granted or denied.

**What problems/issues were associated with the best practice:** A small percentage of staff members with a history of unchallenged air travel seating upgrades found their long-standing variances reviewed against a new standard. Through this process the Site Occupational Medical Director (SOMD) quickly discovered how limited the literature was regarding evidence based medicine related to general travel and specifically in regards to airline seating arrangements. A number of staff members with prior variances were not granted continuation of those variances as a result of PNNL’s decision to require travel variances be founded on “evidence-based medicine” to comply with DOE guidance.

Several pre-existing travel variances that were based on deep vein thrombosis (DVT)/pulmonary embolism (PE) risk were discontinued when the literature did not support seating upgrades. This resulted in a reduction of approved travel variances due to this condition to two to three at the time of this report. Of note, the literature was found to be robust on this subject, presumably because the travel industry has so much at stake. Alternatively, the literature is very limited on travel and degenerative spinal disorders with and without associated radiculopathies, which presented another set of challenges. Even with this information, an assumption was applied that radicular symptoms implied possible, additional nerve damage, which allowed the separation of “comfort” from potential injury. A further gradation was made for a measurable decrease in function post-travel if a seating upgrade (travel variance) was absent. For example, an individual with significant degenerative disorders but without any radiculopathies, experienced significant, functional impairment with overseas travel in coach seating, which was measurable in absenteeism and substantiated by his manager, resulting in the
recommendation for a variance. Presenteeism may also be a factor; however it was not assessed for this case.

**How the success of the Best Practice was measured:** Success is measured based on the overall reduction of medical travel variances issued with no basis in science. Success is also assumed, when there is significant likelihood that granting a variance will avert an adverse outcome and achieve good stewardship of DOE funds.

**Description of process experience using the Best Practice:** The process is initiated with submission of the two-part *Travel Variance: Other than Coach Class Seating Request* form. Part 1 is completed by the staff member requesting the variance and Part 2 is for the manager to complete. Each form is submitted separately to the occupational medicine provider.

Part 1 of the form asks the staff member to report if they have any substantial medical conditions or impairments, the reason for the variance request and if any other accommodations are requested. Part 2 asks the manager to describe essential job duties related to the travel assignment and any fitness for duty (FFD) concerns. If concerns are identified, it asks if they are requesting a formal FFD evaluation.

The SOMD and an occupational medicine provider review the requests to identify the medical conditions the variance is centered on, such as degenerative conditions with or without radiculopathy, DVT/PE risk, gastrointestinal disorders necessitating close proximity to the restroom, or other reasons. The results of these reviews guide requests to the personal health care provider (PHCP) to identify additional medical information that may be required to validate the variance request. The staff member is asked to sign a release of information in order to request information from the PHCP through a questionnaire or discussion.

The PHCP is sent an *Air Travel Accommodations* questionnaire from the occupational medicine provider requesting feedback on the following items:

1. What is the specific diagnosis prompting the air travel accommodation request (travel variance).
2. Is the medical condition temporary or chronic?
3. What is the date of onset and when was the employee last treated for the condition.
4. Is your patient able to tolerate airline seating for any period of time? If yes, for how many hours?
5. Describe the functional limitations present related to airline travel over ___hours.
6. Will periodic movement around the cabin or periodic in-flight exercise be sufficient to accommodate your patient’s condition?
7. List specific travel restrictions caused by the medical condition.
8. Do the restrictions apply to your patient’s other work activities?
9. If the proposed restrictions relate to seating, can the medical condition be accommodated by one or more of the following?: __Aisle seating __Exit row __Bulkhead __Coach with extended leg room

After the return of the questionnaire, the occupational medicine provider meets with the staff member to discuss the request, the feedback from their PHCP, and gather additional information the employee chooses to provide.
The SOMD reviews all the questionnaires, and the results of the discussion between the mid-level providers and the staff member, then discusses the case with the PNNL occupational medicine program manager before a written report is issued for either recommending or not recommending a travel variance.

Observations on types of medical conditions reported and recommendations for variances.

The travel variance requests have primarily divided into three medical conditions as listed below. For all three conditions, there was no medical evidence to suggest first class/business class is any safer for travelers, however, exceptions for recommending the variances are noted.

1. **Risk of DVT/PE.** Travelers are provided literature containing the best available guidance, including use of compression stockings, and in some cases, use of low molecular weight (LMW) heparin by PHCP prescription. There were two exceptions where the variance was recommended - one for an individual with recent DVT/PE who was still on LMW heparin and considered stable, but with multiple risk factors; the other was for an individual with familial thrombophilia, a family member deceased from PE, and a strong personal belief that they will die from the disorder.

2. **GI disorders.** Disorders have included inflammatory bowel disorders (Crohn’s, ulcerative colitis) and irritable bowel syndrome. Two employees with these diagnosis reported occasional urgent need for restroom access. This issue was deemed reasonable for recommending a travel variance with a seating upgrade.

3. **Degenerative spine disorders.** The requests based on disorders associated with radiculopathies or with documented functional deficits were addressed by exception. Each case is reviewed in an attempt to sort out “comfort” from safety issues (i.e. additional injury to nerve roots, functional incapacitation as previously documented by absenteeism or presenteeism).

**Summary**

This process supports an Integrated Safety Management System by providing a process allowing employees to self-identify their health concerns if they elect to request a travel variance for non-coach class seating. The process has been successful in the use of objective findings and evidence-based medicine to support an upgrade in seating if deemed appropriate to mitigate a health hazard. This process has been applied in other requests for upgraded seating and are not necessarily unique to the travel guidance outlined by NNSA.