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MEMORANDUM

To: All Advanced Practice Registered Nurses with Prescriptive Authority

From: The Hawaii State Board of Nursing

RE: Information from the National Transportation Safety Board ("NTSB") Regarding Concerns with Pilots' Increase Use of Over-the-Counter, Prescription and Illicit Drugs

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According to the U.S. Drug Enforcement Agency regulations, "[a] prescription for a controlled substance to be effective must be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his professional practice. The **responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner**, but a corresponding responsibility rests with the pharmacist who fills the prescription."

Hawaii Revised Statutes Chapter 329 states:

§329-38 Prescriptions. (a) No controlled substance in schedule II may be dispensed without a written prescription of a practitioner, except:

(f) The effectiveness of a prescription for the purposes of this section shall be determined as follows:

(1) A prescription for a controlled substance shall be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of the practitioner's professional practice. **The responsibility for the proper prescribing and dispensing of controlled substances shall be upon the prescribing practitioner,** but a corresponding responsibility shall rest with the pharmacist who fills the prescription. An order purporting to be a prescription issued not in the usual course of professional treatment or for legitimate and authorized research shall not be deemed a prescription within the meaning and intent of this section, and the person who knowingly fills such a purported prescription, as well as the person who

> issues the prescription, shall be subject to the penalties provided for violations of this chapter;

Furthermore, with respect to the prescribing of drugs, the Board refers to the American Nurses Association's Code of Ethics for Nurses with Interpretive Statements 1.4 (The right to self-determination) that states in relevant part:

> "Self-determination, also known as autonomy, is the philosophical basis for informed consent in health care. Patients have the moral and legal right to determine what will be done with their own person; **to be given accurate, complete, and understandable information in a manner that facilitates an informed judgment**;…".

Please see the following recommendations and information from the NTSB when dispensing controlled substances.

The NTSB, an independent federal agency, is charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation – railroad, highway, marine, and pipeline. The NTSB determines the probable cause of the accidents and issue safety recommendations aimed at preventing future accidents. As a result of a safety study "Drug Use Trends in Aviation: Assessing the Risk of Pilot Impairment, the NTSB came out with two (2) recommendations:

I-14-1
Include in all state guidelines regarding prescribing controlled substances for pain a recommendation that health care providers discuss with patients the effect their medical condition and medication use may have on their ability to safely operate a vehicle in any mode of transportation.

I-14-2
Use existing newsletters or other routine forms of communications with licensed health care providers and pharmacists to highlight the importance of routinely discussing with patients the effect their diagnosed medical conditions or recommended drugs may have on their ability to safely operate a vehicle in any mode of transportation.

NTSB Article
The NTSB recently analyzed toxicology tests from 6,677 pilots who died in a total of 6,597 aviation accidents between 1990 and 2012. The results demonstrate a significant increase in the use of a variety of potentially impairing drugs.

The study found significantly increasing trends in pilots' use of all drugs, potentially impairing drugs (those with a US Food and Drug Administration warning about sedation or behavior changes in routine use), controlled substances, and illicit drugs (those defined as Schedule I by the US Drug Enforcement Administration).

In this study, the pilot was considered to be positive for a drug if it could be qualitatively or quantitatively identified in blood or tissue; drugs identified only in urine or used as part of resuscitative efforts were excluded.

Overall, 98% of the study pilots were male and 96% were flying privately rather than for commercial purposes. The average age of study pilots increased from 46 to 57 years over the study period.

Over the course of the study, for fatally injured pilots, the following was found:

> The proportion of pilots testing positive for at least one drug increased from 10% to 40%.
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> More than 20% of all pilots from 2008-2012 were positive for a potentially impairing drug, and 6% of all pilots were positive for more than one potentially impairing drug.
>
> Overall, the most common potentially impairing drug pilots had used was diphenhydramine, a sedating antihistamine (the active ingredient in many Benadryl and Unisom products).
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> During the most recent 5 years studied, 8% of all pilots tested positive for controlled substances; hydrocodone and diazepam each accounted for 20% of the positive findings.
>
> The percentage of pilots testing positive for marijuana use increased to about 3% during the study period, mostly in the last 10 years.

The large increase in the proportion of fatally injured pilots with evidence of potentially impairing drugs suggests an increasing risk of impairment in general aviation. Aviation is the only transportation mode in which a fatally injured operator (pilot) routinely undergoes extensive toxicology testing; no similar testing is routinely performed for fatally injured operators of boats, trains, trucks, or cars. Given the general increase in drug use in the population, it is likely that there has been a similar trend in drug use among operators across all modes of transportation.

These results highlight the importance of routine discussions between health care providers and pharmacists and their patients about the potential risks that drugs and medical conditions can create when patients are operating a vehicle in any mode of transportation.