Testimony in Support of SB 469
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Chair Monnes Anderson and Members of the Committee:

Since the original nurse staffing law was first enacted in 2001, the national body of evidence linking nurse staffing to patient outcomes has expanded. This review focuses on three important areas which include the relationship of adequate staffing and mortality, infection, and medication errors.

Mortality/death: The third leading cause of death in Americans is hospital error where approximately 500,000 patients die annually. Aiken and colleagues (2014) conducted a study of 422,730 patients aged 50 years or older who underwent common surgeries. An increase in a nurse's workload by one patient increased the likelihood of an inpatient dying within 30 days of admission by 7%. Needleman and colleagues (2011) used data from a large tertiary academic medical center involving ~200,000 admissions and 180,000 nursing shifts. There was a significant association between increased mortality and increased exposure to unit shifts during which staffing by RNs was 8 hours or more below the target level. The association between increased mortality and high patient turnover was also significant. This study suggests that staffing of RNs below target levels was associated with increased mortality, which reinforces the need to match staffing with patients' needs for nursing care. Aiken et al. (2002) researched 10,184 staff nurses and surveyed, 232,342 general, orthopedic, and vascular surgery patients discharged from 168 hospitals in Pennsylvania. After adjusting for patient and hospital characteristics, each additional patient per nurse was associated with a 7% increase in the likelihood of dying within 30 days of admission, and a 7% increase in the odds of failure-to-rescue. This research suggested that the likelihood of both overall patient mortality (in-hospital death) and mortality following a complication increased by 7% for each additional patient added to the average registered nurse workload.

Infection rate: Nearly 2 million patients experience hospital acquired infections annually. Recently 8 hospitals in Oregon were cited by Center for Medicare and Medicaid as having some of the highest infection rates in the country. Rogowski and colleagues (2013) studied the adequacy of NICU nurse staffing in the United States, using national guidelines and analyzing any associations with infant outcomes. Hospitals understaffed 31% of their NICU infants and 68% of high-acuity infants relative to guidelines. Substantial neonatal nurse understaffing was associated with increased risk of hospital-acquired infections and an increase in infant mortality. Cimiotti and colleagues (2012) examined urinary tract and surgical site infection, the most prevalent infections reported and those likely to be acquired on any unit within a hospital. There was a significant association between patient-to-nurse ratio and urinary tract infection and surgical site infection.

Medication Errors: Thousands of Americans die from medication errors annually. One only needs to Google the words “medication error” and “Oregon” to note unfortunate stories of Oregonians who have died from receiving the wrong medication. Frith and colleagues (2011) examined the relationship between nurse staffing and the occurrence of medication errors on medical-surgical units. The study showed a significant relationship between RNs in the skill mix and medication errors–as the proportion of RNs increased, the medication errors decreased.

Staffing Request and Documentation Form (SRDF)

Staffing Request and Documentation Forms (SRDF) are filled out by staff nurses or charge nurses and submitted to their hospital leadership/management to document the occurrence of an insufficient staffing event. The primary purpose of the SRDF is to create an opportunity for discussion of the staffing issue between a staff nurse and their leadership. Copies of the SRDF are submitted to the Oregon Nurses Association where they are stored and used as research data. Every event presented in an SRDF can be verifiable from hospital records. SRDFs are generally underreported as some nurses fear being targeted, reprimanded, or treated unfairly for submitting the SRDF.

Summary of factors related to SRDF submissions:

- Numbers of SRDFs
  - 2010—534
  - 2011—581
  - 2012—669
  - 2013—1014
  - 2014—~1000.
- There was approximately a 186% increase of SRDFs from 2010 to 2014.
- SRDFs were submitted in 2014 from 37 organizations, 30 different types of “units” represented. Nearly 33% of the SRDFs were submitted from the ICU (12.5%), General Medical (11.0%) and Emergency Room (9.2%) units

Summary of identified reasons for requesting additional staff:

- 89% note that not having enough staff was a reason for submitting the SRDF
- 59% indicate patient acuity and 44% indicate that patient intensity being too high were reasons for submitting the SRDF

Summary of consequences of the insufficient staffing event on care tasks:

- 82% of pain management, 90% of medication and 91% of medical orders and treatments were reported as being delayed or omitted due to insufficient staffing on the unit
- Not enough staff, patient intensity and patient acuity were significantly related to the delay or omission of almost all of the measured care tasks
- Delay or omission of pain management is at least 1.8 times more likely when adverse staffing event is indicated

Summary of patient safety consequences of insufficient staffing:

- 71% report that the staffing event compromised patient safety and 30% indicated that continuity of care was impacted
- There was a 1.5 to 2 times greater likelihood that compromised patient safety was reported when not enough staff, patient acuity being too high, and inappropriate staff mix were identified as a reason for submitting the SRDF

Summary of self-care consequences of insufficient staffing event:

- 78% reported missed rest breaks, 55% reported missed meal breaks, and 31% indicated voluntary overtime
- When patient intensity was indicated, there was at least a 1.7 times greater likelihood that nurses reported voluntary overtime, missing meal breaks and missing rest breaks compromised patient safety, and missed RN self-care activities

Review of Staffing Law by Dr. Jean Ann Seago

In 2010, ONA, the American Nurses Association (ANA), and the Oregon Nurse Staffing Collaboration (joint sponsorship by the Oregon Association of Hospitals and Health Systems (OAHHS) and ONA) partnered with Dr. Jean Ann Seago to report on the Oregon Nurse Staffing Law. Specifically she found by reviewing 57 health care organizations in Oregon that:

- There was significant variability with the staffing law specifically in implementation and success at different facilities
- The overall view of the law did not relate to hospital size, location, union status, affiliation, or profit status
- Key finding was that the attitude of CNO was mostly tied to view of the law and its effectiveness within each facility
- That staffing decisions were routinely made outside of the staffing committee process, incongruent with the current nurse staffing law