Chair Prusak and members of the committee:

My name is Andrea Dyer, I am an operating nurse. I have worked in the OR for more than a dozen years – as a circulator, as a scrub nurse and most recently an educator.

I am here today in support of House Bill 2622 which requires hospitals and ambulatory surgical centers to have and implement policies to use smoke evacuation systems during surgical procedures. Surgical smoke is a harmful byproduct of using heat producing devices such as lasers and electrosurgical knives on human tissue. There are harmful effects that are well documented that impact both patients and perioperative staff.

In my past clinical practice, I encountered many clinical situations where the lack of knowledge prevented staff from utilizing surgical smoke evacuators. One particular area where knowledge is lacking that I want to address today is the issue of the cost of smoke evacuation. Many clinical staff believed smoke evacuation is expensive and converting to smoke evacuators would be cost-prohibitive. That is not necessarily the case, and there are opportunities for facilities to negotiate equipment costs and packages that make smoke evacuation highly achievable. In my experience at Legacy Health System, we obtained over 140 smoke evacuator machines for free from our vendor. These typically cost 1500-4000 dollars depending on functionality and safety features included. The average per patient cost of disposables for laparoscopic cases is about 14 dollars, and for open procedures ranging from about 15-25 dollars per patient.

Every surgery requires a disposable electrosurgical tool, i.e. bovie. These cost anywhere from 7-17 apiece. If smoke evacuation is added, the cost could go up to 15-25 dollars.

Other cost-effective solutions include the use of a reusable inline filter, converting the hospital's existing wall suction system, and making them smoke evacuators at approximately 14-18 dollars apiece. These inline filters are replaced once per week per operating room. The surgeon or assistant will hold a suction device next to the surgical smoke, to evacuate the smoke at or near the point of incision.

I gave one example of one facility's costs for adopting surgical smoke evacuation as practice. Costs will vary depending on the smoke evacuation equipment chosen by the surgeons, the contract with the supplier and the volume of surgeries done in a facility. But it can be done. All operating rooms in Oregon can and should go smoke-free.

HB 2622 would ensure that harmful surgical smoke is evacuated from every operating room in Oregon. Thank you for considering this important legislation.

Andrea Dyer, CNOR, MSN, RN