



Nurses' Role in Waste Management and Environmental Sustainability

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EACH DAY IN the act of caring, nurses use a wide range of products from medication administration supplies to linens, from PPE to wound care supplies. Approximately 5.9 million tons of waste is created annually by US healthcare (Healthcare without Harm & ARUP, 2019), and each patient creates approximately 29lbs of trash each day (Practice Green Health, n.d.). There is increasing concern related to climate change and microplastic formation and healthcare's role in these. Yet, the question remains can we continue to deliver excellent care and waste less? The answer is yes and that is where nurses come in! According to the Nursing Scope and Standards,

nurses are charged with practicing in an “environmentally safe and healthy manner” which includes using resources judiciously (American Nurses Association, 2021). One of the ways nurses can carry out this standard is through conscious decisions about the products used to decrease excess waste (Schenk et al., 2023). Below are some practical examples of how nurses can decrease waste.

Choose Supplies Carefully- First and foremost, nurses can avoid creating waste by carefully choosing the supplies they use and those that they bring into patient care areas. Some healthcare facilities allow unopened supplies

brought into a patient's room to be sterilized so they can be restocked for future use. Yet in many cases, the policy is that if it has entered a patient's room it needs to be discarded upon discharge (Muldoon et al., 2019). This results in unused often unopened supplies being discarded. So, nurses can dramatically affect hospital waste by carefully choosing the supplies needed for each task.

Advocate for Reusable Products- Many items used in healthcare settings such as isolation gowns, incontinence pads, and blood pressure cuffs have reusable options. In most cases, reusable products have shown decreased

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environmental impact (Drew et al., 2022). These reusable products go through the same safety testing as disposable products, and for some products such as isolation gowns the effectiveness and product satisfaction are as high for reusable as for single-use disposable (Angelopoulos, 2022; McQuerry, 2021). With the supply chain concerns experienced during the COVID-19 pandemic, use of more reusable products would ensure supply availability while simultaneously decreasing environmental impact (Baker, 2020). So if a product is necessary for a task, nurses can advocate for the use of reusable products versus single-use disposable products.

Segregate Waste

Appropriately- Items are treated differently after they are disposed. Items in “red bags” are classified as regulated medical waste and are typically incinerated to make them inert. The process of incineration creates greenhouse gas and other air pollutants which not only harm the environment but have human health impacts (Slutzman, 2022). Items thrown in the regular trash are not typically incinerated but rather sent to a landfill. Additionally, in many facilities recycling items or reprocessing items (such as DVT compression sleeves or O2 Sat probs) are available. Recycling and reprocessing are great options

to reduce waste and overall environmental impact, but do require careful consideration by the nurse concerning where to dispose of the waste (McGain, 2015; Wyssusek, 2016). So if the supply is necessary, a nurse can make sure that the waste is properly segregated to cause the least environmental impact possible.

While these recommendations above are focused primarily on acute or long-term care settings, other settings such as schools, clinics, and health departments can apply these principles as well. For example, school nurses may advocate for less plastic waste in school meals (Seven Generations Ahead, n.d.) or clinic nurses might advocate for the judicious use of gloves (NHS Grampian, 2025). Other ideas for waste management and ways to promote environmental sustainability can be found in the ANHE Sustainability Toolkit (Alliances of Nurses for Healthy Environments, n.d.).

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