

March 2023 MITE Hot Topic: Eight Wastes in Health Care

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Learning Objectives

1. Identify the eight wastes in health care.
2. Recognize value-adding vs non value-adding steps in any process.
3. Determine opportunities to remove waste and streamline processes.

The Waste Wheel

Within Lean Six Sigma (LSS), a variety of tools can be utilized to increase process efficiency and reliability. One of these tools is the Waste Wheel. It is used to identify and remove sources of waste within any health care environment and helps us to better utilize the resources we have. LSS categorizes waste into eight different buckets:

- **Over Processing** can include activities like excessive lab testing, treatments, or unnecessary or inefficient scheduling of steps, or having multiple forms that ask the same questions.
- **Defects** include wrong or missing information or actions that cause rework. Some healthcare examples are medication errors, incorrect medication dosage, missing medical information in a patient's EMR, or having the incorrect patient for a procedure or consultation.
- **Motion and Transportation** are similar, but refer to different activities. Motion is the movement of people and transportation is the movement of materials. If someone transported supplies to the wrong location (transportation waste), then you would waste your time and energy walking around searching for it (motion waste).
- **Overproduction** is when too much of a product is produced at one time or is produced too soon and needs to be kept in storage. A healthcare example of this would be collecting large amounts of data and cluttering a patient's EMR, then you can't find the important information when you need it.
- **Inventory** is excessive materials that take up space. Examples include: cluttered hospital hallways, over-packed medical supply closets, and crowded patient rooms.
- **Talent** considers potential abilities or knowledge of staff members that are not being used. This is a wasted opportunity to use individual strengths to help improve the team or workplace.
- **Waiting** is our last waste on the wheel. Healthcare examples of this waste are the waiting room, waiting for bed assignments and admissions, waiting on signatures, emails, calls, or waiting on lab results.



Value-Added VS. Waste

The first step when using the Waste Wheel is identifying waste by looking at which steps in the process add value for the patient. We can put all steps of a process into three categories: value added; non-value added, but required; and non-value added. There are three conditions that process steps must meet to be considered value adding.

1. The patient desires something and is willing to pay for it.
2. The step in the process moves the patient closer to what they want.
3. Things are done right the first time, i.e. no rework or unnecessary work.

In a perfect process, every activity would meet these conditions. However, there are always other steps which are non-value added, but required to deliver care. In order for process steps to fall under this category, they must meet one of the following two criteria:

1. Something the customer would not pay for, but we have to do in order to do something the customer would pay for. Adding information to the patient's chart is an example of required, but non-value added. A patient would not pay for you to add information to their EMR, but it must be done in order for providers to continue services.
2. It's required by Joint Commission, CMS, Payors, the State or any other regulating body that could revoke the hospitals ability to do their business.

If process steps do not fall in one of the first two categories, then they will automatically be put in the third: WASTE! This is non-value added, not required, and the patient would not pay for it. The goal once process steps are identified and placed into one of these three categories is to:

- Improve and expand upon value added activities
- Reduce and mediate the impact required steps have upon a patient's experience
- Eliminate any and all identified waste

References

1. Center for Public Health Quality. (n.d.). Identifying Waste in the Process. *Center for Public Health Quality*, 3.
2. Cunningham, J. (2020, January 18). *Lean Enterprise Institute*. Retrieved from The Eight Wastes of Lean: <https://www.lean.org/the-lean-post/articles/the-eight-wastes-of-lean/>
3. Breyfogle III, F. (2007). Lean Tools That Improve Processes: An Overview. *Integrated Enterprise Excellence*, 8.