

Allina Health



Organization Background

A llina Health is a healthcare system that serves Minnesota and Western Wisconsin. Allina Health has over 90 clinics, 12 hospitals and 20 urgent care facilities with a total of over 29,000 employees. In its hospitals, Allina provides nutrition services.



Olivia D'Sousa Industrial and Systems Engineering University of Minnesota Twin Cities

"I am very grateful to have worked with Allina and MnTAP this summer. I've learned a lot about the importance of reducing food waste and I've grown a lot this summer. I feel like I've made a difference with my work" ~ OD

Project Background

Allina Health made a commitment to sustainable practices with the introduction of its Climate Action Plan, with the goal to reduce greenhouse gas emissions by 50% and reduce and divert 50% of waste going to the landfill or incinerator by 2030, from a baseline of emissions and waste in 2019. The reduction of excess food and diversion of food waste helps with both goals.

Incentives to Change

To reduce food waste, a couple of simple strategies are already in use. First in, first out (FIFO) refers to using the oldest foods first to prevent spoilage of foods in stock. Mercy Hospital - Unity Campus (Unity) has little food being lost to spoilage. Another strategy is to track the amount of food waste produced in the kitchen. Unity has a technology called Leanpath that tracks the weight of the food and food type. Allina wants to expand the use of food waste prevention strategies such as Leanpath and reduce the amount of excess food produced to reduce spending.

"We would never have been able to dig deeply into food waste at Mercy Unity Hospital without the work that Olivia did this summer. Her recommendations give us a way to reduce our waste in this important area."

-Suzanne Savanick-Hansen, Sustainability Manager Allina Health

SOLUTIONS

Excess Food Reduction

Tracking excess food is key to reducing it. Quick reminders during daily meetings, assigning certain staff to measure excess food, and ensuring staff are trained in how to use Leanpath are all key measures to ensure tracking gets done. The more consistent and specific measurements are taken, the more insight there is into what sorts of foods to order and prepare less of.

A recommendation to reduce the amount of excess food produced, specifically for the At-Your-Request (AYR) service, is to use hospital admittance numbers to estimate demand. The amount of food needed to adequately feed patients is directly correlated to the number of patients admitted to the hospital. If there are 160 patients, cooks should prepare just enough food for 160 people, and scale that number when more patients are present. For the cafeteria, past retail data should be used to forecast the amount of food needed, especially considering weekends and holidays diverge from weekday patronage. This variability is critical to preparing the right amount of food in advance.

For the entire kitchen to reduce excess food, cooks should prepare less food in advance, and if or when certain food runs out, cooks should only make more as

Solutions

it's ordered, especially for sandwiches and burgers, as these can be made quickly. Less food would need to be prepared in advance, saving employees time and energy. This ensures that there is less waste at the end of a meal and that customers are getting fresher food. Reduction of excess food has the potential to save Unity Campus up to \$28,000 in ordering costs as well as 8 tons of excess food annually.

Food Donation

MealConnect

The Unity kitchen should use MealConnect to donate excess food. MealConnect is an app to connect organizations with extra food to food shelves. The donor initiates a pickup by uploading information like food type, weight, potential allergens, and a picture of the food being donated in the app. The donation is available on the platform until accepted and a pickup time is arranged, or until a total of six hours has passed without anyone accepting the donation. This has the potential to reuse all excess food with little additional cost to Unity.

Food-to-Hogs

For the post-consumer side of food, a food-to-hogs program should be implemented. This captures and reuses post-consumer food waste that is currently sent to the landfill. Five other hospitals within the system have implemented food-to-hogs successfully. United Hospital Hastings Regina Campus has been using the program for over a year and has diverted over 22 tons of food from the landfill. Unity is in the service area for Barthold Farms, located in St. Francis. Barthold Farms takes care of pickup, cleaning and re-lining of the buckets that store food. Compared to the normal waste hauling costs, having Barthold Farms pick up post-consumer food is \$470 cheaper annually. It's also a more sustainable way to manage food waste.

Compost

Another recommendation is to use excess produce to either start a new compost pile or contribute to an existing compost pile in the community gardens on site. There are currently 62 plots and community members have access to it from late-May until October. To easily compost food, it is recommended that only remaining produce from the salad bar and trim scraps from produce are composted. During summer months, from May to September, this could easily recycle 500 lbs of food on site at Unity.



Recommendation	Annual Reduction	Annual Savings	Status
Make-to-order cafeteria and AYR foods	Up to 8 tons	Up to \$28,000	Recommended
Donate excess food to MealConnect	TBD	NA	Recommended
Divert post-consumer food waste from landfill to hogs	19 tons	\$470	Recommended
Compost salad bar scraps in community gardens during summer months	500 lbs	\$0	Recommended
Divert recyclables to recycling (paper, plastic, cardboard)	2.3 tons	TBD	Recommended

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