

## Reviving & Expanding Recycling at St. Mary's Regional Medical Center, Lewiston, Maine: A Case Study

Evaluating the existing recycling infrastructure, increasing the volume of recyclables collected, and expanding the type of materials collected for recycling were among St. Mary's Regional Medical Center's (<http://www.stmarysmaine.com/Departments-Services/departments-a-services.html>) priorities over the past 22 months. These efforts allowed St. Mary's to refocus its attention on its waste generation, revamp the facility's recycling program, rethink how to get staff interested in recycling at work, and to reduce the facility's carbon footprint.

The Northeast Recycling Council (NERC) ([www.nerc.org](http://www.nerc.org)) began working with St. Mary's Regional Medical Center in April 2011 through an EPA New England grant. NERC's efforts included conducting a waste sort of the facility's administrative offices, conducting a walk-through assessment of the recycling infrastructure, strategizing with management about how to revive and expand the existing recycling program, researching markets for hard-to-recycle materials, and maintaining the focus on recycling by conducting monthly conference calls with management to discuss the progress made.



St. Mary's Regional Medical Center, Lewiston, Maine

### Facts at a Glance

- St. Mary's Regional Medical Center is a 233-bed acute care facility.
- The Medical Center is part of St. Mary's Health System (<http://www.stmarysmaine.com/>), which includes a nursing home, clinical services, an independent living center, occupational health services, and is a member of Covenant Health Systems (<http://www.covenanths.org/>); a Catholic, not-for-profit health care system.
- St. Mary's recycling program began before 1995.
- Since NERC began working with St. Mary's staff, they have:
  - Increased the tonnage of paper recycled by 10% by promoting recycling throughout the facility.
  - Increased the tonnage of cardboard recycled by 26%, by including the cardboard from the operating rooms.
  - Began recycling beverage containers and recycled more than 1,300 pounds of plastic.
  - Diverted more than 1,000 pounds of blue wrap for reuse.

## **Recycling Program Overview**

St. Mary's Regional Medical Center is a well-respected medical facility in Lewiston, Maine; approximately 37 miles north of Portland, Maine. In addition to meeting its core priorities, St. Mary's management is also interested in reducing its environmental footprint. One of its goals is to reduce its trash.

St. Mary's recycling program was initially developed and implemented before 1995 and its recycling infrastructure is well developed. Recycling bins are visible at workstations throughout the facility, the collection of recyclables is well managed, and recycling tonnages are tracked, as well as the cost savings. However, management felt that the recycling program needed to be analyzed to make sure it was working as well as it could.

## **Evaluating Recycling**

NERC's first objective in working with staff was to identify any gaps in the recycling program. NERC accomplished this by taking a first-hand look of how recycling is being implemented, obtaining baseline information on the amount of recyclables being disposed of, and discussing opportunities with management about how to capture more recyclables and reduce the amount of trash generated.

A waste sort and walk-through assessment by NERC revealed that staff was recycling, but recyclables were still in the trash. It was also discovered that one unit was lacking recycling bins, the operating rooms were not recycling cardboard, and overall staff were not enthusiastic about recycling.

The waste sort included sifting through one day's trash and recyclables (a total of 553 pounds) from St. Mary's five primary administrative offices. This revealed that 77% of the materials generated by these offices were being recycled, 20% of it was trash, and 3% of the total was recyclables being thrown away—office paper, cardboard, beverage containers, and toner cartridges. The other observation from the sort was the significant number of Styrofoam® Dunkin Donuts coffee cups.

In addition to the waste sort, NERC conducted a walk-through of the facility to observe the recycling infrastructure and to assess its effectiveness. The assessment included searching for recycling bins and noting their placement, briefly discussing recycling with staff, documenting any noticeable gaps in the program, and reviewing recycling collection data.

The walk-through revealed that St. Mary's recycling program was well established. Recycling bins were present at most workstations and copiers, and staff was generally knowledgeable of the recycling program. One detail that was discovered through discussions with the nurses was that the nursing staff had initiated the recycling of DVT sleeves<sup>1</sup> used at the hospital. This had never been reported to the Environmental Services Department, and as a result had not been included in the recycling data for the hospital. The walk-through also revealed that one unit was lacking recycling bins.

## **Identifying Goals**

St. Mary's management was interested in improving the facility's recycling program. Working together, NERC and the management identified the following waste management goals to work on together:

- Reduce the amount of disposable coffee cups in the trash.
- Capture more recyclables from the waste stream (i.e., paper, cardboard, beverage containers).

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<sup>1</sup> A DVT (Deep Vein Thrombosis) sleeve is a vinyl sleeve that is filled with air and used as treatment to guard against blood clots in the arm, leg, and foot.

- Search for end-markets for blue plastic wrap—a hard-to-recycle material.
- Replicate St. Mary's recycling program in its residential living facility.

### **Challenges, Solutions & Outcomes**

• **Challenge:** Convincing management that the time spent on addressing the issues with the existing recycling program and expanding the program to include more recyclables would be cost-effective.

**Solution:** NERC met with management and discussed the reasons why St. Mary's started its recycling program, the importance of recycling to the hospital, the potential cost savings of recycling, and how changes could be integrated into current practices.

**Outcome:** Management was engaged throughout the project.

• **Challenge:** Identifying an economical and quick way to engage staff in recycling since the hospital did not have a sustainability coordinator.

**Solution:** NERC and management discussed a variety of methods for communicating recycling to staff throughout the facility. In the end, management agreed the best way to start this effort was to include friendly reminders about recycling in the internal electronic newsletter distributed to all staff.

**Outcome:** St. Mary's management found a cost-effective way to promote recycling to staff.

• **Challenge:** Reducing the number of disposable coffee cups in the trash at a facility that served beverages in its canteen and has a Dunkin Donuts store in its lobby.

**Solution:** Management spoke to the Dunkin Donuts manager and the manager of food service and requested that they promote the special cost savings they offer to customers who bring reusable mugs

**Outcome:** The effects of this promotion are unknown.

• **Challenge:** Capturing more recyclables from the waste stream.

**Solution:** NERC encouraged management to speak with the hauler to find out what additional materials it would accept for recycling. Staff contacted the hauler and renegotiated the recycling services contract to include plastics #1 – 3, shrink wrap, and bubble wrap at no additional charge.

**Outcome:** St. Mary's collected 1,300 pounds of plastic beverage containers in four months in 2012.

• **Challenge:** Recycling cardboard from the operating rooms.

**Solution:** The hospital's Environmental Services staff spoke with the head nurse for the operating rooms and requested that she work with the other nurses to segregate the cardboard for recycling. She enthusiastically agreed and the operating rooms are now recycling cardboard.

**Outcome:** St. Mary's collected an estimated 11.7 tons of cardboard from the operating rooms over a one year period.

- **Challenge:** Making sure each workstation throughout the facility has a recycling bin.

**Solution:** Environmental Services followed up NERC's walk-through findings to make sure that each workstation throughout the facility had a recycling bin. In addition, staff was reminded about the recyclables that St. Mary's collects via articles in the monthly newsletter.

**Outcome:** St. Mary's is collecting recyclables from staff at each desk/work station throughout the hospital.

**Outcome:** St. Mary's increased the amount of paper collected for recycling by 10% in twelve months.

- **Challenge:** St. Mary's, as with any hospital, generates a substantial amount of blue wrap; a material that is hard to find recycling markets for.

**Solution:** NERC staff researched haulers that would accept this material by placing announcements on listservs and contacting colleagues, contacting a hospital that is recycling their blue wrap, and talking directly with select haulers. As a result, NERC identified two haulers that are collecting blue wrap. One of which, is based in the Portland, Maine area. NERC forwarded the hauler's contact information directly to St. Mary's management.

**Solution:** Until a more permanent solution for this material is identified, St. Mary's is trying to divert this material through local outlets. St. Mary's contacted a reuse center in Lewiston to see if they could use the blue wrap and they accepted two car loads. In addition, management offered the wrap to staff for reuse via an emailed announcement.

**Outcome:** St. Mary's diverted 1,014 pounds of blue wrap to reuse in 2012.

- **Challenge:** Expanding the recycling program at St. Mary's residential living facility, where only cardboard and newspapers are presently being recycled and most of the people are 80+ years old.

**Solution:** Management contacted their hauler and received a quote on single stream recycling collection at this facility to make it easy for the residents and to capture more recyclables.

**Solution:** NERC worked with management to identify potential storage space for expanding the recycling program at the residential facility. Management has cleaned out the closets and is ready to implement the program.

**Solution:** NERC strategized with management on configuring the recycling storage closets to be user-friendly for the residents that want to carry their items to the closets. NERC and management also discussed the possibility of having the residents place their recyclables in a container outside of their rooms. The janitors could pick them up while making the rounds for trash collection each day.

**Solution:** Since the residential units are small, management will suggest residents use their trash bin as a recycling bin and will provide them with a smaller container for their trash.

**Outcome:** Staff is prepared to implement the program, once the funding becomes available.

- **Challenge:** Management is searching for the funds to pay for the construction of a single-stream dumpster cement pad behind the residential living facility.

**Solution:** NERC contacted Covenant Health Systems, in which St. Mary's is a member, to update them on St. Mary's recycling efforts and requested that they assist St. Mary's with finding grant funds for the cement pad expenses. NERC also provided Covenant with the rationale for the expense.

**Solution:** NERC developed a PowerPoint presentation about the importance of expanding St. Mary's recycling program at its residential facility so that management can use it to justify the cement pad expense during its next budget planning cycle.

**Outcome:** Staff is prepared to defend the cost of the cement pad to management.