

Resource Management (RM)

Lemuel Shattuck Hospital

The Lemuel Shattuck Hospital, located in Jamaica Plain, Massachusetts, is the primary provider of outpatient and inpatient services for the Massachusetts Department of Public Health in the Metro-Boston Area. The hospital has 278 inpatient beds, and an additional 125 beds in its detoxification and AIDS treatment programs. There is also secure 20-bed inpatient correctional unit.

In March 2003, Shattuck issued a Request for Proposal to solicit RM services. Three vendors responded, and Save That Stuff, Inc. (STS), a recycling company based in Charlestown, Massachusetts, was chosen as the RM contractor. STS subcontracts with a trash hauler and medical waste company. Within the first year of the program, Shattuck has experienced significant benefits as a result of RM contracting, including comprehensive recycling services, more transparent reporting and billing, and optimized waste hauling services.

Organizational Profile

Industry: Health Care - Hospital

Contractor: Save That Stuff, Inc.

Program start date: July 2003

Contract structure:

3-year contract, with 3 one-year renewal options

Waste:

- Separate pick-up hauling fee and per ton waste disposal fee

Recyclables:

- Per pick-up hauling fee
- Rental fee for equipment (compactor)
- Incentives: 50/50 split of cost savings

Program Overview (July 03 through June 04):

- Trash tonnage to landfill decreased by 11%
- Recycling tripled (from 14 tons to 58 tons)

Progress to Date

STS has expanded the original paper and electronics recycling programs to cover 4 new materials. Results of the program to date:

Material (all values in tons)	Pre RM (7/02 to 6/03)	After RM (7/03 to 6/04)	Notes/Service levels
Trash	807.3	715.7	Total Decrease of 11.3%. Decreased service levels from 3 times weekly to 2.
Mixed and confidential paper	13.3	19.8	48.4% Increase. On call pickup with an average of 1.5 tons/month
Electronics	0.7	3.7	Greater than 4 fold increase. On call pickup with an average of 0.6 tons/pickup
Cardboard <i>(new service)</i>	0	1.5	New compactor installed in April 04 so only reflects first 3 months during startup. Anticipate 2 tons/month for 05.
Organics <i>(new service)</i>	0	10.5	On call pick up with an average of 1 ton/pickup. Sent to a local composting facility
Wood pallets <i>(new service)</i>	0	3.6	On call pick up with an average of 0.7 tons per pickup
Scrap metal <i>(new service)</i>	0	18.4	On call pick up with an average of 2.5 tons per pickup
Recycling Totals	14.0	57.5	Recycling tonnage tripled. Overall recycling rate increased from <2% to 7.5 %

The Extra Value of RM Services

- The amount of waste sent to the landfill has decreased 11% due to increased recycling of mixed paper, electronics and five new materials. Since all the new programs were instituted at different points during 2004, Shattuck expects all recycling tonnage to increase in 2005 as each program is now fully operational.
- In order to institute cardboard recycling, STS had to build out an area of the loading dock to fit a new compactor. STS proposed and designed the innovative dock rebuild and put up the capital for the construction and the new compactor.
- Shattuck understands that engagement of key internal stakeholders is crucial to the success of an RM Program. A cross functional team was formed when Shattuck was first considering RM to provide input on the development of the Request for Proposal for RM services, and to assist in evaluation of bid proposals. The RM program reports up through the existing Shattuck "Green Team". STS attends the quarterly Green Team meetings to report results of the RM program and to solicit ideas.
- STS instituted several operational changes to eliminate the use of a bulk box where people just dumped miscellaneous items in (or often just near) the box. This has benefited Shattuck through the appearance of a cleaner facility and has helped win over the building and grounds personnel to the value of RM. Material is now segregated and either recycled or thrown away as appropriate.
- The frequency of waste pick-up was reduced from 3 times weekly to twice a week by replacing the 35-yard waste compactor with a 40-yard compactor. STS anticipates the frequency can be further reduced to 1.5 times a week in 2005 when recycling tonnage is captured for the entire year.
- STS provides more transparent billing, with waste and recycling tonnage and costs broken down by material stream. STS also provides quarterly reports documenting waste minimization/recycling progress, performance, and costs/savings.

Looking forward

- The data for June 03 to June 04 does not capture a full year for recycling tonnage. It is estimated that recycling will increase from 58 tons to at least 82 tons (42% increase) in the next year.
- Management of medical waste, which is not under the initial scope of service of the RM program, will be overseen by STS starting in 2005. STS plans to conduct an audit of red-bag waste to determine ways to improve segregation.

Finances and Cost Savings

- Shattuck saved roughly \$11,000 in its first year of RM. These savings were used to offset landfill tip fee cost increases.
- The financial success of this RM program is in controlling costs. Shattuck's previous contract had a contracted landfill tip fee of \$55/ton that represented favorable market rates several years ago. The current tip fee for any hauler is \$81/ton which would have been applied for any new contract. Without RM, Shattuck was looking at an increase of \$21,000 on tip fees alone (an increase of 30% on their disposal costs). Through RM, Shattuck has been able to offset more than ½ of this cost increase in the first year.

For more information about Shattuck's experience with RM contracting, please contact Tom Campbell at (617) 971-3438 or send an e-mail to <thomas.campbell@state.ma.us>.

Additional RM information and resources are available on the WasteWise Web site at <www.epa.gov/wastewise/wrr/rm.htm>.