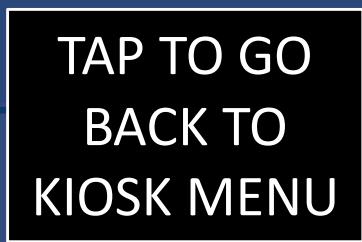


Print Management Pilot: Optimizing Our Resources

By: April Palmquist CMRP, RLLD



Introduction/Problem

Over the past three years, BIDMC has seen costs for toner replacement nearly double from \$500,000 per year to \$900,000 per year. Supply Chain was determined to find a new, effective way to utilize our existing printing resources to save on toner.

We partnered with Information Systems and our vendor Ricoh USA to explore centralized printing to the large, multifunctional devices (MFD). By shifting print jobs and other printing functions to the multifunctional devices, BIDMC could save a significant amount in direct and indirect cost savings without impacting the quality or availability of printing resources.

Aim/Goal

Supply Chain aimed to achieve three goals:

- Encourage optimal and efficient use of printing resources and develop a standard policy around printing, faxing, scanning and purchasing of printers
- Provide indirect and direct cost savings by directing print jobs to multifunctional devices rather than expensive desktop printing and reducing our carbon footprint
- Maintain and ensure security of patients and staff's health and private information by printing to a more secure device

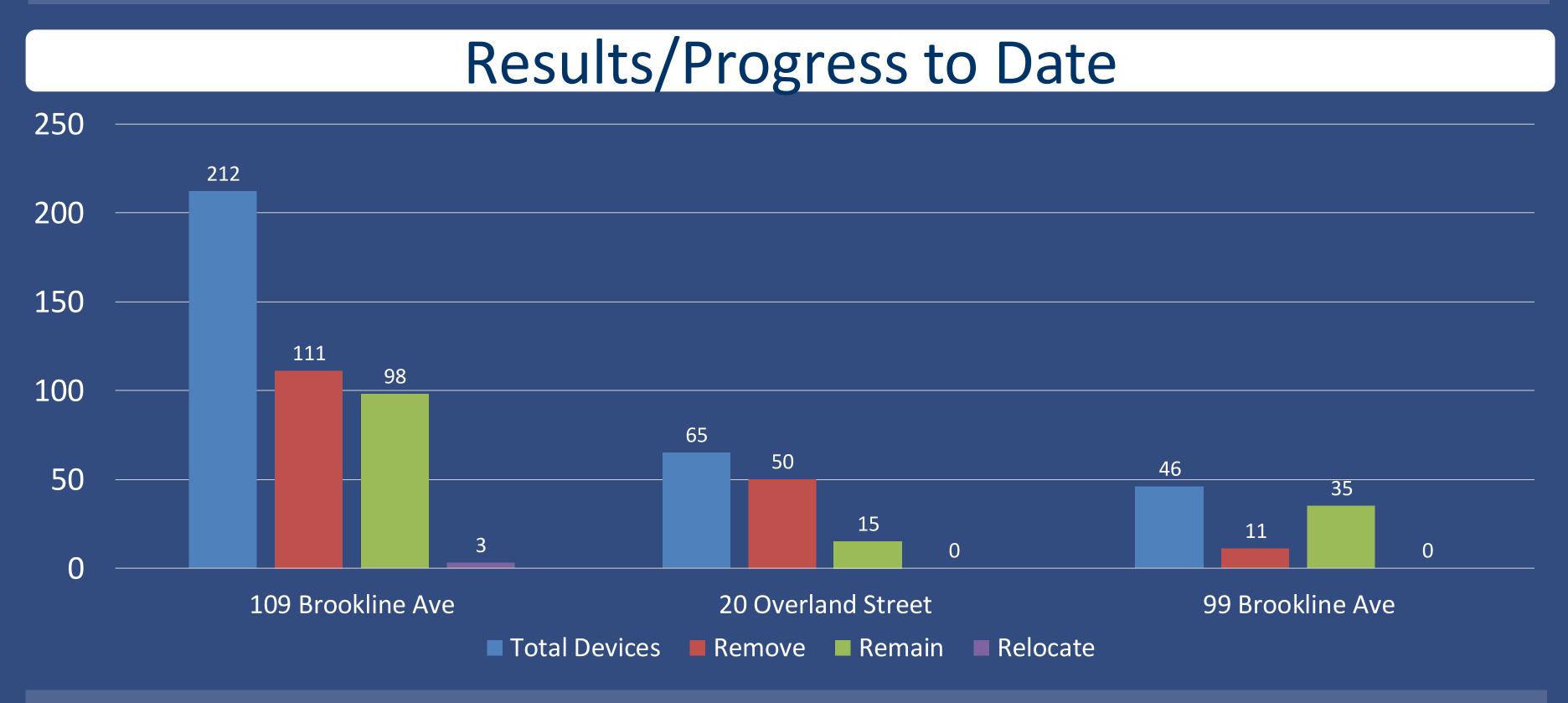
The Team

- Chip McIntosh, Senior Director Supply Chain
- Patrick Thomas, Capital Contracts Manager
- April Palmquist, Contract Specialist
- Monte Nelson, Manager Desktop Services
- Robert Hurst, Sr. Technical Project Manager

The Interventions

Focusing on administrative departments first, centralized printing was implemented in the Pharmacy and Contracting. After a few months, the pilot was expanded to include other administrative areas at 109 Brookline Ave, 99 Brookline Ave, and 20 Overland Street. We collected data on the number of desktop printers, total toner consumption, and developed 'print area maps' to better identify where centralized printing would be most impactful.

Coordination and support from IS was key during the early stages of the pilot. IS assisted with installing appropriate print drivers and performed computer upgrades. Additionally, enhanced communications and engagement with department leadership was essential to the pilot's success.



Inventory of total printers remaining, being relocated, or flagged for removal at three BIDMC off-site locations

For more information, contact:





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More Results/Progress to Date

Environmental Impact:

This pilot allows BIDMC to reduce consumption of toner cartridges, printers, and paper which reduces the electricity used and the amount of waste an office produces.



Each year, the US produces 9.4 million tons of e-waste. By recycling 1 million laptops, the amount of energy saved is equivalent to the amount of energy used by used by 3,657 US homes in a year.



It takes over 1,000 years for toner cartridges to fully decompose in a landfill, and every day 1 million toner cartridges are thrown away. The remnants of toner inside cartridges leak harmful toxins into the surrounding environment, which harms plants and enters water supplies.



By reducing usage of toner cartridges, BIDMC will decrease Carbon Dioxide (CO₂) emissions equivalent to consuming approximately 138 gallons of gasoline in the first year of this project.

BIDMC partners with Environmental Integrity, LLC to recycle the Medical Center's e-waste and WB Mason to recycle toner cartridges.

Enhanced Security:

Materials will not print, copy, fax, or scan without an employee tapping their ID badge on the printer, keeping patients and staff's health and private information secure

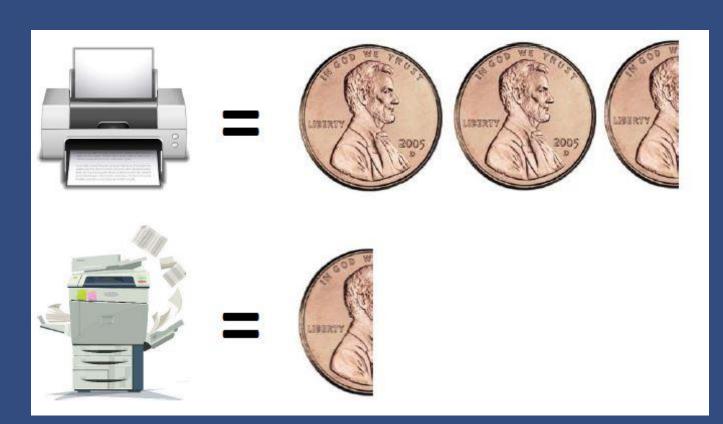


It's Healthier:

Walking to retrieve print jobs gives the added benefit of exercise

Financial Impact:

- Printing a page from a desktop printer costs 2.5¢
- Printing a page from an MFD costs less than half a penny



Once fully implemented, BIDMC could save up to \$400,000 annually

Lessons Learned

- > Additional capacity and devices may be needed for areas with significant print volume
- > The value of communication with end users was highly beneficial

Next Steps

- Remove identified desktop printers in administrative department's and recycle
- Evaluate the remaining administrative departments at 1135 Tremont Street, 169 Pilgrim Road, 171 Pilgrim Road, and 1 Brookline Place for centralized printing
- Develop and implement a standard policy around printing, faxing, scanning and purchasing of printers
- Based on results of the pilot evaluate clinical administrative areas for centralized printing

For more information, contact: