2021 Sustainability Benchmark Data

PracticeGreenhealth.org

Introduction and methods

Practice Greenhealth's Sustainability Benchmark Report is the premier analysis of sustainability performance data for the U.S. health care sector. The data in this report is designed to help hospitals and health systems identify sustainability opportunities by benchmarking their performance alongside other Practice Greenhealth partner hospitals. This report is organized into 11 distinct impact areas – with transportation added as a new focus area in 2020.

Leadership	Waste	Chemicals	Food	Greening the Operating Room	Transportation

Environmentally Preferable Purchasing	Energy	Water	Green Building	Climate

Each section of the report highlights a mix of qualitative performance measures (actions hospitals have taken to implement sustainability programs) and key quantitative metrics (an assessment of how well the facility is performing on different programs it has implemented). The report also includes aggregate savings or impact for a range of programs. For qualitative measures, the report presents the percent of respondents answering in the affirmative for a given question (e.g. the percent of hospitals that indicated they have a policy to address chemicals of concern or have an energy manager on staff). For quantitative metrics, Practice Greenhealth reports median performance (50th percentile) and top performance (90th percentile) points across acute-care hospitals in the data set. This year's report also highlights the data points for academic medical centers.

In the case of most quantitative performance metrics, the report makes an effort to standardize the measurement of sustainability performance for each category through normalization of the data in order to support more informative comparisons among hospitals. Practice Greenhealth normalizes the data based on the most statistically significant factors, allowing hospitals of different sizes and scopes to more accurately assess their sustainability performance. For example, instead of reporting total energy used by institutions of a certain size, it reports energy utilization per square foot.

Data tables

Data cohorts

The report provides several distinct cohorts of hospital data to allow for the most useful comparisons. The table below highlights the different ways Practice Greenhealth distills data for maximum comparability.

Cohort	Description	Cohort size
All	All hospitals with overnight beds and operating rooms that responded to a given question on either the Partner for Change or the Modified Partner for Change award application.	269 hospitals*
Small	Hospitals with fewer than 200 staffed beds. Hospitals in this cohort ranged in size from 10 to 199 staffed beds.	136 hospitals
Large	Hospitals with more than 200 staffed beds. Hospitals in this cohort ranged in size from 200 to more than 1,500 staffed beds.	130 hospitals
Academic medical center with onsite research	Hospitals that identify as academic medical centers/teaching hospitals and indicated they also have onsite research facilities.	55 hospitals
Academic medical center without onsite research	Hospitals that identify as academic medical centers/teaching hospitals but indicated they do not have onsite research facilities.	39 hospitals
Non- academic hospitals	Hospitals that do not identify as academic medical centers/teaching hospitals. This can include both community hospitals and federal health care facilities.	120 hospitals
90th	The 90th percentile is the value dividing the top 10% of high-performing hospitals from the data set. The 90th percentile informs hospitals on the long-term target, providing a data-driven determination of how well hospitals can actually perform on a given metric using valid data.	Varies

*Three applicants did not provide a valid number for staffed beds and were not included in either the small or large cohort, but were included in the "all" cohort.

Additional data sets

Practice Greenhealth provides environmental performance data for two other cohorts at the end of the report. The performance metrics for academic medical centers and long-term care facilities are broken out in separate data sets. These two subsets of participating hospitals exhibit unique activity profiles that significantly impact their overall environmental performance.

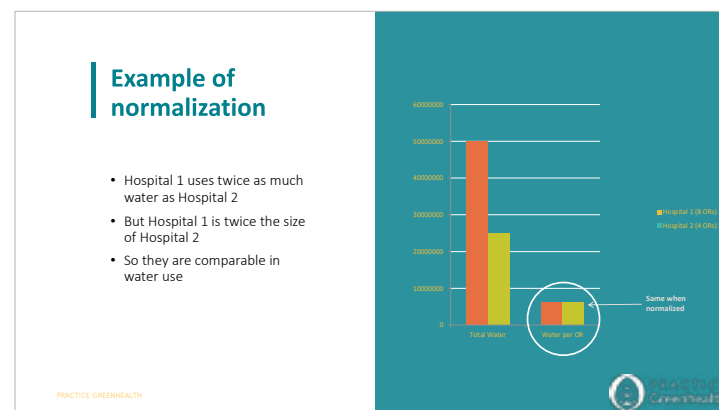| Cohort	Description	Cohort size
Academic medical centers	An academic medical center is typically a hospital attached to a university medical school and/or a teaching hospital affiliated with a medical school. These hospitals are training grounds for residents, medical and nursing students, Ph.D. candidates, and post-doctoral researchers. Some academic medical centers (126 of the 193) include on-site research facilities, which host laboratories and other research amenities that can contribute to their environmental footprint.	94 hospitals
Long-term care	Facilities with overnight beds but no operating rooms, including skilled nursing facilities, assisted living and memory care facilities, behavioral health facilities, long-term acute-care hospitals, and rehabilitation hospitals.	11 facilities

Methods and analysis

Data is from the 2020 calendar or fiscal year as reported on the 2021 Environmental Excellence Award applications. Hospitals completed the applications between November 2020 and June 2021. Practice Greenhealth reviews all data submitted by award applicants to identify outliers, which can sometimes indicate a mistake in reporting. Practice Greenhealth follows up with applicants where appropriate to inquire about outliers and to correct or remove data from the data set as necessary.

Throughout the report, the "N" (or sample size) for each group varies. This is because the "N" represents how many hospitals answered that question and can differ based on the number of hospitals reporting on that metric – not all hospitals respond to every question or provide data for every metric. Typically, the more hospitals that report on a metric (the larger the N), the more robust the data is.

Practice Greenhealth reports median values for quantitative measures, as these values typically provide a stronger basis for comparisons and benchmarking than averages and standard deviations. Averages and standard deviations can be influenced by outliers or incorrect data and can result in misleading conclusions. Median values (the middle value, or the 50th percentile) provide hospitals the chance to compare their sustainability performance, while the 90th percentile informs hospitals on a long-term target, providing a data-driven determination of how well hospitals can actually perform on a given metric. This data is then paired with analysis of the programmatic actions utilized by best performing hospitals to support improvement in these key metrics and identify potential opportunities for action.

Normalizing data

Normalizing data is an important step to allow comparisons of performance between hospitals and groups of hospitals, regardless of size or number of patients. Practice Greenhealth normalizes the data to help identify comparable metrics for each category. To normalize data is to determine how different characteristics are affected by other variables. For example, instead of looking at waste generation by tons alone, one would look at what variables might impact the amount of waste generated by a facility and then try to normalize or standardize data by those variables (e.g., tons of waste per patient day). Normalizing data not only helps compare metrics between hospitals but also helps a hospital compare their own data over a number of years, adjusting for variations in patient volume each year. Through the use of multiple regression techniques, Practice Greenhealth uses statistical analysis to determine which variables have the greatest impact on characteristics of interest that reveal which variables best correlate with each characteristic. The variables that emerge as important influences on each characteristic are called normalizing factors.

Example of normalization

- Hospital 1 uses twice as much water as Hospital 2
- But Hospital 1 is twice the size of Hospital 2
- So they are comparable in water use

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Data tables

Normalization factors

Practice Greenhealth analyzes each of the following normalization factors (in alphabetical order) for all of the major areas of environmental impact.

Normalizer	Definition	Median (50th percentile)
Adjusted patient days	Adjusted patient days (APD) take into account inpatient and outpatient activity and are generally calculated as: APD = (total patient days)x(total patient revenue/inpatient revenue); where total patient revenue = inpatient + outpatient revenue.	93,173
Cleanable square feet	Cleanable square feet denotes the space routinely cleaned by environmental services. To calculate cleanable square feet when a measured value is not available, the facility can estimate that cleanable square feet = gross square feet minus walls (1.5% of gross square feet) minus square footage of non-cleanable areas (i.e. electrical closets, mechanical rooms, storage rooms).	588,947
Gross square feet / gross floor area	The gross floor area (GFA) is the total property square footage, measured between the outside surface of the exterior walls of the building(s). This includes all areas inside the building(s), including supporting areas. GFA is not the same as rentable space, but rather includes all area inside the building(s), including lobbies, tenant areas, common areas, meeting rooms, break rooms, atriums (count the base level only), restrooms, elevator shafts, stairwells, mechanical equipment areas, basements, and storage rooms. Not included in GFA: exterior spaces, balconies, patios, exterior loading docks, driveways, covered walkways, outdoor courts (tennis, basketball, etc.), parking, the interstitial plenum space between floors (which house pipes and ventilation), and crawl spaces (per ENERGY STAR Portfolio Manager glossary).	670,024
Licensed beds	The maximum number of beds a hospital is licensed to staff.	236
Operating rooms	An operating room is defined as a room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing surgical operations or other invasive procedures that require an aseptic field. This is in contrast to a procedure room, which is defined as a room for the performance of procedures that do not require an aseptic field but may require the use of sterile instruments or supplies.	12
OR procedures	A count of total surgical cases with a primary surgical procedure(s) performed in an operating room. This count should not include the number of procedures that occur during a single surgical case, but rather the total number of surgery cases. This would be a total count of patient in OR to patient out of OR events. This count should include surgeries performed in hospital-based ORs and operationally affiliated ambulatory surgery center ORs.	6,405
Outpatient visits	A count of outpatient visits annually. An outpatient visit/use/event is any visit made during the person's reference period to a hospital outpatient department, such as a unit of a hospital (or a facility connected with a hospital) providing health and medical services to individuals who receive services from the hospital but do not require hospitalization overnight. Examples of outpatient clinics include well-baby clinics/pediatric OPD; obesity clinics; eye, ear, nose, and throat clinics; family planning clinics; cardiology clinics; internal medicine departments; alcohol and drug abuse clinics; physical therapy clinics; and radiation therapy clinics. Hospital outpatient departments may also provide general primary care.	192,946
Patient days	A unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour on two successive days (synonymous terms include inpatient day, inpatient service day, census day, bed occupancy day, occupied bed day).	42,829
Staffed beds	The number of beds available for use by patients during the reporting period. A bed means an adult bed, pediatric bed, birthing room, or newborn bed maintained in a patient care area for lodging patients in acute, long-term, or domiciliary areas of the hospital.	193
Total on-site full-time equivalents (FTEs)	Total on-site FTEs is the sum of full-time equivalent employees plus FTE physicians, FTE medical students, and FTE contracted full-time employees (such as environmental services, food services, and pharmacy services). The number of full-time equivalent workers should be computed as the total number of hours worked by all workers in a week divided by the standard hours worked by one full-time worker in a week. Workers may include employees of the property and volunteers who perform regular on-site tasks. Workers should not include visitors to the property such as clients, customers, patients, or subcontractors.	1,637

COVID-19	All	Small	Large	Academic	NonAcademic
Facility partnered with the community to address community needs brought on and/or exacerbated by the COVID-19 pandemic	48%	46%	51%	57%	40%
How the facility's sustainability work has been impacted by the COVID-19 pandemic:					
Increased focus on sustainability	9%	8%	10%	10%	9%
Reduced capacity for/focus on sustainability	63%	67%	61%	56%	70%
Sustainability work on hold for at least 3 months	4%	3%	5%	8%	1%
Sustainability work on hold for at least 6 months	4%	4%	5%	3%	6%
Sustainability work on hold until further notice	2%	3%	1%	2%	2%
Sustainability program eliminated	0%	1%	0%	1%	0%
Other	9%	9%	10%	14%	5%
Sustainability staff changes as a result of the COVID-19 pandemic:					
Furloughed	10%	8%	12%	11%	9%
Eliminated	2%	1%	3%	2%	3%
No change	68%	70%	66%	77%	58%

Leadership for environmental stewardship	All	Small	Large	Academic	NonAcademic
Member of the executive leadership team actively implemented or led strategies to improve environmental performance or address sustainability considerations	64%	63%	65%	59%	69%
Has appointed or hired someone to lead sustainability efforts at the facility level	67%	69%	65%	77%	57%
Of the 180 facilities indicating a sustainability lead, the position is:					
Full-time: Facility level	23%	21%	27%	33%	13%
Part-time: Facility level	7%	4%	11%	8%	6%
Other duties within existing job assignment	70%	76%	62%	59%	82%
Has appointed or hired someone to lead sustainability efforts at the facility level	89%	95%	83%	84%	94%
Of the 240 facilities indicating a sustainability lead on the system level, the position is:					
Full-time: System level	69%	66%	73%	77%	63%
Part-time: System level	23%	26%	19%	12%	32%
Other	8%	8%	8%	11%	6%
Identified clinical champion(s) to lead efforts on clinical engagement and education	59%	57%	62%	73%	46%
Activities clinical champions participate in:					
Participates in sustainability committee	81%	83%	80%	85%	76%
Participates in health professional sustainability team	28%	26%	30%	29%	25%
Participates in HCWH's Physician Sustainability Network	11%	8%	15%	13%	8%
Participates in Nurses Climate Challenge	10%	12%	9%	9%	11%
Leverage clinical research/practice to support sustainability goal-setting	38%	28%	49%	45%	27%
Educates staff	78%	86%	73%	74%	84%
Educates patients	26%	28%	25%	27%	25%
Conducts research	26%	19%	33%	28%	22%
Writes articles/blogs	21%	17%	25%	24%	16%
Professional presentations	33%	33%	34%	39%	24%
Other	12%	14%	10%	14%	8%

Leadership commitment	All	Small	Large	Academic	NonAcademic
Established an organizational environmental commitment statement/principles/charter for integrating environmental sustainability that is approved by top leadership	81%	85%	77%	77%	84%
Conducted a materiality assessment to inform sustainability priorities	14%	17%	12%	22%	8%
Established a team charter	32%	34%	30%	45%	21%
Developed a minimum of three SMART sustainability goals	50%	51%	49%	65%	38%
Of those that developed SMART goals:					
Goals are publicly available	56%	62%	49%	63%	47%
Created a strategic sustainability plan that aligns with other organizational priorities or embeds sustainability objectives or goals within the overall strategic plan	55%	61%	50%	68%	45%

Human resources	All	Small	Large	Academic	NonAcademic
Added sustainability measures into performance objectives/evaluations for leadership staff	42%	48%	37%	49%	37%
Added language to job descriptions on the organization's commitment to the environment and the role that each employee plays	40%	46%	33%	44%	36%
Included an overview of organizational sustainability goals in new employee orientation	50%	50%	52%	68%	36%
Included questions about sustainability/environmental stewardship program in its employee engagement/satisfaction survey	11%	18%	5%	16%	8%
Employed or hosted interns, students, or residents related to sustainability	27%	20%	35%	42%	14%

Finance	All	Small	Large	Academic	NonAcademic
Formulated a sustainability program budget	50%	52%	47%	65%	38%
Developed a green revolving fund	24%	27%	21%	33%	17%

Reporting	All	Small	Large	Academic	NonAcademic
Implemented annual sustainability reporting to the Board of Directors/Trustees	60%	66%	53%	64%	57%
Reported sustainability initiatives within its Community Benefit Report to the IRS (for non-profit organizations) through IRS Schedule H, Form 990	48%	40%	55%	40%	54%
Of the 100 facilities publishing a community benefit report with sustainability information, they also include sustainability in the following reports:					
Sustainability report	14%	14%	15%	18%	11%
Sustainability report using GRI framework	5%	5%	5%	8%	3%
Annual report	22%	28%	18%	24%	21%
Other report	1%	0%	2%	3%	0%

Communication	All	Small	Large	Academic	NonAcademic
Developed a formal communication/branding plan with the Marketing/Communications team to convey the organization's sustainability initiatives	43%	44%	44%	35%	50%
Methods used to communicate sustainability efforts:					
Internal webpage for staff	64%	63%	68%	71%	59%
Public webpage	37%	36%	39%	52%	24%
E-learning modules	19%	18%	20%	27%	11%
Newsletter	55%	58%	53%	50%	59%
Poster campaign	24%	29%	19%	33%	16%
Social media	50%	50%	52%	51%	50%
Electronic bulletin	38%	40%	37%	36%	39%
Townhall meeting	15%	18%	12%	20%	11%
Screen savers	10%	8%	12%	17%	4%
Internal recognition	29%	30%	29%	40%	20%
Advertising	6%	7%	5%	8%	4%
Blog	24%	25%	23%	15%	32%
Other	16%	15%	17%	20%	12%
Educated the community on environmental topics	48%	46%	51%	57%	40%
Shared its environmental sustainability successes in a media story	23%	23%	23%	30%	17%
Featured a sustainability topic connecting health and the environment in at least one grand rounds event	14%	10%	18%	24%	5%
Presented publicly on the organization's sustainability efforts	21%	18%	25%	31%	12%
Provided mentoring to other health care facilities either within health system or externally	39%	36%	44%	55%	25%

Community Connections	All	Small	Large	Academic	NonAcademic
Undertook any intentional work on racial equity (internally or externally)	79%	74%	85%	80%	77%
Racial Equity Activities					
Internal evaluation of racial equity	76%	79%	73%	69%	83%
Internal committee focused on racial equity	66%	69%	62%	75%	57%
Designated staff	61%	58%	63%	71%	51%
Internal programs (anti-racism curriculum and trainings with administrators, clinicians and staff)	80%	83%	77%	79%	81%
Issued statement internally or externally	79%	77%	80%	79%	78%
Action to identify and address inequities in patients' health outcomes based on race and other socio-demographic factors	48%	39%	56%	65%	30%
Intentional effort to partner with community organizations representing Black, Indigenous, and People of Color (BIPOC)	72%	70%	73%	69%	75%
Advocacy efforts	63%	70%	56%	58%	68%
Other	29%	34%	24%	27%	30%
Sustainability team reviewed its organization's community health needs assessment (CHNA) to align sustainability priorities with external community needs	36%	40%	34%	29%	44%
Facility educated the community on environmental topics	48%	46%	51%	57%	40%
Facility partnered with the community to address community needs brought on and/or exacerbated by the COVID-19 pandemic	62%	62%	62%	73%	51%
Facility needs additional support in building and sustaining meaningful community partnerships	14%	18%	11%	14%	15%

Waste

Median tons of waste by type as a percent of total waste	All	Small	Large	Academic	NonAcademic
Solid waste	66%	64%	67%	66%	67%
Recycling	26%	28%	24%	25%	26%
Regulated medical waste	6.3%	5.0%	7.8%	7.4%	5.6%
Hazardous waste	0.3%	0.3%	0.5%	0.5%	0.2%

Percentile percent of waste by type as a percent of total waste	90th Percentile
Recycling (high is better)	45%
Regulated medical waste (low is better)	2.9%
Hazardous waste (low is better)	0.1%

Across the report, Practice Greenhealth will occasionally provide the 90th percentile performance point when possible. This is to provide a sense of what target is feasible and realistic to aim for.

Median cost of waste disposal by type as a percent of total waste	All	Small	Large	Academic	NonAcademic
Solid waste	28%	32%	27%	30%	27%
Recycling	14%	15%	13%	14%	13%
Regulated medical waste	34%	28%	36%	33%	35%
Hazardous waste	12%	12%	11%	13%	10%

Average tons of waste by type as a percent of total waste

- Solid waste — 64.0%
- Recycling — 28.0%
- Regulated medical waste — 8.0%
- Hazardous waste — 0.8%
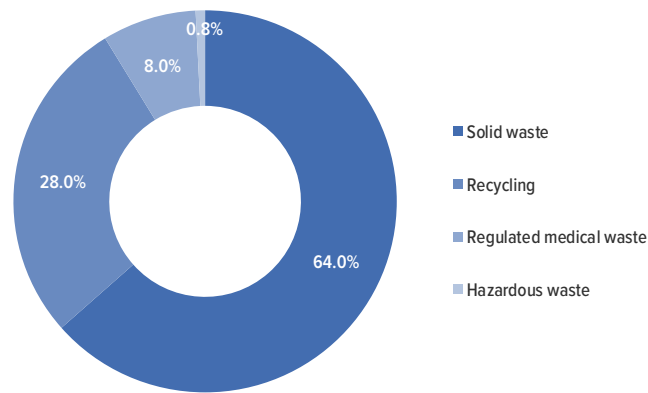
Average cost of waste generation by type as a percent of total waste

- Solid waste — 31.2%
- Recycling — 15.9%
- Regulated medical waste — 36.8%
- Hazardous waste — 16.1%

Waste

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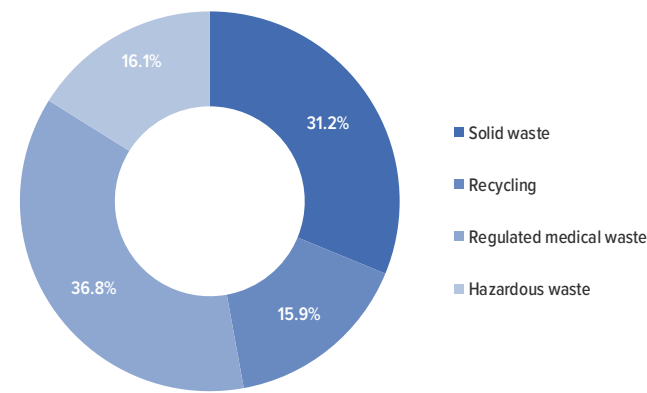
Median cost per ton	All	Small	Large	Academic	NonAcademic
Solid waste	$118	$119	$118	$120	$116
Recycling	$144	$144	$145	$170	$111
Regulated medical waste (onsite and offsite)	$1,299	$1,580	$1,105	$1,153	$1,613
Hazardous waste	$5370	$6644	$4172	$4937	$6005
Total waste	$281	$291	$279	$294	$248

Note: Total waste is the sum of solid waste, recycling, regulated medical waste, and hazardous waste. Pharmaceutical and food waste are counted as subsets of those four waste streams. Cost for recycling includes only those facilities that had a net cost (not a profit) for their recycling program.

Cost per ton of different waste types
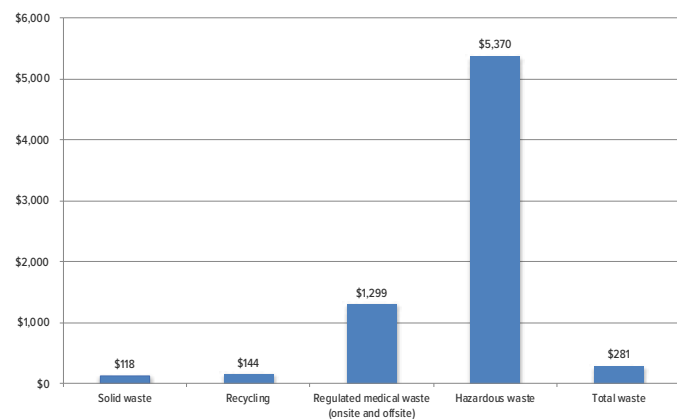
Solid waste medians	All	Small	Large	Academic	NonAcademic
Solid waste as a percent of total waste (tons)	66%	64%	67%	66%	67%
Solid waste as a percent of total waste (cost)	28%	32%	27%	30%	27%
Median cost of solid waste per ton	$118	$119	$118	$120	$116

Disposal mechanism for solid waste (non-pharmaceutical)	All	Small	Large	Academic	NonAcademic
Landfill	77%	78%	77%	80%	75%
Municipal waste incinerator	1%	2%	0%	2%	1%
Waste-to-energy incinerator	9%	8%	9%	14%	4%

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Waste

Solid waste reduction and prevention	All	Small	Large	Academic	NonAcademic
Tracked a metric for total waste diversion from landfill or incineration	37%	36%	40%	49%	27%
Developed an equipment and supplies donation program (domestic or abroad) for materials, equipment and furniture that can no longer be used internally	78%	78%	80%	89%	69%

Donation	All	Small	Large	Academic	NonAcademic
Of the 164 facilities that developed a donation program, this is the percent of facilities that routinely donate these materials:					
Unexpired/unopened consumable clinical supplies	68%	63%	73%	71%	65%
Expired/opened consumable clinical supplies	50%	47%	53%	54%	46%
Capital medical equipment	76%	77%	75%	75%	77%
Electronics	63%	70%	56%	66%	61%
Furniture	82%	80%	84%	84%	80%
Linens	35%	35%	36%	41%	29%
Other supplies	45%	42%	48%	59%	30%

Paper reduction	All	Small	Large	Academic	NonAcademic
Implemented a paper reduction program	79%	79%	80%	94%	66%
Of the 165 facilities that indicated they had a paper reduction program, these are the programmatic activities pursued:					
Reduced network printers	86%	93%	79%	80%	93%
Made double-sided printing the default on printers/copiers	73%	68%	79%	76%	71%
Reduced number of automatically printed reports	68%	68%	69%	74%	61%
Implemented EMR/EHR system	78%	73%	84%	72%	85%
Created digital signage	43%	35%	53%	48%	37%
Increased electronic meetings	59%	49%	70%	66%	51%
Engaged supply chain around paper reduction	39%	30%	49%	43%	33%
Other	25%	25%	26%	33%	16%

Recycling medians	All	Small	Large	Academic	NonAcademic
Recycling as a percent of total waste (tons)	26%	28%	24%	25%	26%
Recycling as a percent of total waste (cost)	14%	15%	13%	14%	13%
Median cost of recycling per ton, includes universal waste	$144	$144	$145	$170	$111
Median cost of recycling per ton, not including universal waste	$152	$156	$151	$170	$138

Note: Cost data above includes only those facilities that had a net cost (not a profit) for their recycling program. Median cost per ton for non-universal recycling when facilities that made a profit are included is $112.

Waste

Median normalized recycling metrics	All	Small	Large	Academic	NonAcademic
Total recycling pounds per adjusted patient day (APD)	4.7	4.7	4.7	4.9	4.5
Total recycling pounds per total full-time equivalent (FTE) per year	288	303	280	213	366
Total recycling tons per operating room per year	20	18	21	24	17
Total recycling pounds per square foot	0.69	0.66	0.76	0.67	0.72
Total recycling tons per staffed bed	1.3	1.5	1.2	1.4	1.2
Total recycling pounds per staffed bed per day	7.1	8.2	6.8	7.8	6.8
Total recycling pounds per patient day (PD)	11.3	15.1	9.2	11.1	11.4

Recycling of medical plastics	All	Small	Large	Academic	NonAcademic
Recycled clinical/medical plastics	62%	61%	63%	67%	57%
Of the 166 facilities recycling clinical/medical plastics, the items recycled include:					
Irrigation bottles	76%	81%	72%	77%	74%
Skin prep solution bottles	46%	48%	44%	45%	46%
Trays	58%	60%	56%	57%	59%
Overwraps	22%	24%	20%	25%	18%
Rigid inserts	34%	28%	41%	45%	22%
Blue wrap	35%	28%	43%	35%	35%
Tyvek	6%	7%	5%	5%	8%
Basins	52%	58%	48%	48%	58%
Urinals/bedpans	25%	29%	21%	28%	21%
Other	14%	14%	13%	17%	10%

Waste

Top 10 recycled materials (by weight in tons in 2020)	Sum of all
Paper-HIPAA	40,398
Cardboard	12,968
Paper-mixed (includes newspaper)	7,876
Food waste composting	5,514
Computers & electronic waste	2,137
Paper-white	2,097
Metals mixed (brass/copper/steel-not C&D)	2,061
Boxboard	1,612
Wood (do not include avoided waste through pallet reuse)	714
Oil-cooking	593

Food waste disposal	All
Percent of facilities composting food waste	37%
Total tons of food waste composted	5,514
Median cost per ton food waste composting	$216
Median cost per ton solid waste	$118

Aggregate recycling totals	All
Total solid waste recycling tonnage for all facilities	102,746
Total universal waste recycling tonnage for all facilities	3,403
Total recycling tonnage for all facilities	106,149
Total recycling costs for all facilities (reporting a net cost for their recycling program)	$9,040,418

Regulated medical waste minimization	All	Small	Large	Academic	NonAcademic
Eliminated the standard use of red bag waste (RMW) containers in regular patient rooms	68%	70%	67%	78%	59%
Implemented a reusable sharps container program	84%	76%	95%	81%	87%
Of the 63 facilities that provided data on reusable sharps container program savings:					
Median reusable sharps container program cost-savings per facility annually*	$2,486	$1,342	$5,984	$7,725	$1,362
Sum of all facilities: cost-savings through reusable sharps program	$4,322,428				
Sum of all facilities: tons of waste prevented through reusable sharps program	2,858				
Implemented a single-use device (SUD) reprocessing program with an FDA-approved third party reprocessor	84%	78%	91%	76%	92%

Regulated medical waste treatment technologies	All	Small	Large	Academic	NonAcademic
Incinerated a portion of its regulated medical waste (RMW)	69%	68%	71%	78%	61%
Of the 186 facilities that indicated they incinerate a portion of RMW, the following medical waste streams are incinerated:					
General RMW	28%	33%	23%	26%	31%
Path/chemo	86%	85%	87%	89%	82%
Sharps	30%	37%	23%	24%	37%
Non-RCRA pharmaceuticals	39%	33%	45%	42%	36%
Other	4%	4%	4%	5%	4%
Disinfects/treats RMW using onsite technology	12%	5%	19%	19%	6%
Of the 33 facilities that treat RMW onsite, these treatment technologies are employed:					
Autoclave	88%	100%	85%	83%	100%
Rotoclave	8%	0%	10%	11%	0%
Chemical disinfection	4%	0%	5%	6%	0%
Incineration	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%

Note: While only 69% of all facilities reported incinerating a portion of RMW, it is Practice Greenhealth's belief that 100% of facilities are actually incinerating their anatomical/pathological/trace chemotherapeutic waste per standard treatment practice in the United States--and that this discrepancy represents a lack of understanding of the application question or incomplete knowledge of the treatment options being utilized by haulers.

Regulated medical waste medians	All	Small	Large	Academic	NonAcademic
RMW as a percent of total waste (tons)	6.3%	5.0%	7.8%	7.4%	5.6%
RMW as a percent of total waste (cost)	34%	28%	36%	33%	35%
Median RMW cost per ton	$1,299	$1,580	$1,105	$1,153	$1,613

Comparison of median cost per ton of regulated medical waste (RMW) for facilities treating RMW onsite and offsite	All	Small	Large	Academic	NonAcademic
RMW cost per ton - onsite treatment	$1,299	$3,277	$1,241	$1,179	$3,277
RMW cost per ton - offsite treatment	$1,263	$1,579	$1,048	$1,148	$1,579

Waste

Median normalized regulated medical waste metrics	All	Small	Large	Academic	NonAcademic
Total RMW pounds per OR procedure	18.2	14.2	25.1	25.6	13.4
Total RMW tons per operating room (OR) per year	5.4	3.5	7.3	7.2	3.8
Total RMW pounds per total full-time equivalent (FTE) per year	69	52	85	62	77
Total RMW tons per staffed bed per year	0.33	0.31	0.38	0.45	0.28
Total RMW pounds per staffed bed per day	1.8	1.7	2.1	2.5	1.6
Total RMW pounds per patient day (PD)	3.0	2.9	3.1	3.4	2.6
Total RMW pounds per adjusted patient day (APD)	1.4	1.0	1.6	1.7	1.1
Total RMW pounds per square foot per year	0.18	0.12	0.27	0.21	0.15

Pharmaceutical waste and cost as percent of total waste	All	Small	Large	Academic	NonAcademic
Pharm waste as a percent of total waste (tons)	0.52%	0.46%	0.59%	0.54%	0.47%
Pharm waste as a percent of total waste (cost)	8%	7%	9%	7%	8%
Median pharmaceutical waste cost per ton (RCRA and non-RCRA)	$4,700	$6,115	$4,084	$4,346	$6,043

Note: Pharmaceutical waste is actually a subset of both RCRA-hazardous and either RMW or solid waste and thus is not shown in the breakdown by waste type above.

Pharmaceutical waste disposal	All	Small	Large	Academic	NonAcademic
Segregates non-RCRA pharmaceutical waste into a separate waste stream for hauling	51%	49%	54%	55%	47%
Method of handling waste pharmaceuticals that are not regulated as Hazardous Waste (such as antidepressants, statins, antibiotics, etc.) if no data was reported.					
Treat all pharm waste as RCRA-hazardous to better protect human health and the environment	33%	32%	35%	46%	22%
Pharm waste is being disposed of in red bags or sharps containers	17%	15%	18%	17%	18%
Pharm waste is going down the drain	5%	4%	6%	6%	4%
Pharm waste is going into clear trash bags (solid waste)	6%	6%	6%	8%	4%
Other	26%	27%	26%	26%	26%
Don't know	1%	0%	2%	0%	2%
Taken any measures to reduce the generation of pharmaceutical waste					
Staff education	50%	48%	54%	69%	34%
Inventory management	43%	42%	44%	58%	30%
Implemented a samples policy	10%	9%	12%	14%	8%
Monitored dating and utilized stock rotation for emergency syringes	26%	26%	27%	31%	22%
Prescription review	21%	21%	23%	29%	15%
Primed and flushed chemotherapy IV lines with saline solution	14%	10%	19%	21%	9%
Replaced prepackaged unit dose liquids with patient-specific oral syringes	15%	11%	20%	25%	7%
Other	12%	11%	13%	18%	7%
Utilizes a reverse distributor for potentially creditable (unused, surplus or expired) RCRA-hazardous prescription pharmaceuticals	43%	44%	42%	49%	37%
Of those utilizing a reverse distributor for RCRA pharm:					
Ensured that that potentially creditable RCRA-hazardous prescription pharmaceuticals sent for reverse distribution are included and accounted for in the hospital's pharmaceutical waste totals	57%	58%	56%	51%	65%
Did not know that pharmaceuticals sent for reverse distribution should be included in the hospital's pharmaceutical waste totals	20%	22%	16%	18%	22%

Mechanisms for controlled substance disposal	All	Small	Large	Academic	NonAcademic
Wasting to drain	10%	5%	16%	12%	9%
Render irretrievable with a commercial controlled substance wastage solution	49%	49%	48%	49%	48%
Solid waste landfill	0%	0%	1%	1%	0%
Solid waste incinerator	3%	4%	2%	4%	2%
Medical waste incinerator	4%	2%	6%	6%	2%
Hazardous waste incinerator	17%	23%	11%	19%	15%
Other	10%	7%	13%	16%	4%

Median hazardous waste and cost as percent of total waste	All	Small	Large	Academic	NonAcademic
Hazardous waste as a percent of total waste (tons)	0.4%	0.3%	0.5%	0.5%	0.3%
Hazardous waste as a percent of total waste (cost)	12%	12%	11%	13%	10%
Median hazardous waste cost per ton	$5,370	$6,644	$4,172	$4,937	$6,005

Universal/hazardous waste recycling	All	Small	Large	Academic	NonAcademic
Established a contract with a certified electronics waste/recycling vendor that is certified to e-Stewards (or subcontractors that use e-Stewards-certified vendors) for legal and environmentally responsible electronics (or e-waste) management and recycling.	66%	61%	73%	74%	60%
Handling of fluorescent lamps					
Ship to recycler	75%	75%	77%	88%	65%
Crush onsite	3%	3%	3%	3%	3%
Dispose in dumpster	0%	1%	0%	0%	1%
Other	7%	6%	8%	7%	6%
Recycled its batteries	85%	85%	87%	98%	75%

Waste

Battery Recycling (by type)	All
Of the 179 facilities that indicated they were recycling batteries, the following types of battery recycling were indicated:	
Ni-Cd	93%
Lead-acid	89%
Lithium ion	92%
Alkaline	74%
Mercuric oxide	40%
Ni-MH	73%
Other	11%

Hazardous waste reduction	All	Small	Large	Academic	NonAcademic
Has a laboratory on-site	85%	83%	88%	98%	75%
Of the 179 facilities that have onsite laboratories, percent of facilities that did work to green their laboratories:	54%	56%	53%	63%	45%

Solvent distillation	All	Small	Large	Academic	NonAcademic
Recycled, reprocessed or distilled solvents, alcohols, or other chemicals from the lab (such as xylene, alcohols or formalin)	25%	15%	36%	31%	19%
Median total cost savings per hospital (among facilities that reprocess solvents)	$11,104	$4,494	$11,699	$11,250	$1,479
Total cost savings per hospital for 90th percentile (among facilities that reprocess solvents)	$33,801				
Total gallons distilled annually	37,642	2,587	35,055	32,274	5,367
Total aggregate annual savings from avoided virgin solvent purchase	$217,027	$30,935	$186,092	$215,548	$1,479
Total aggregate annual savings from reduced disposal costs	$41,649	$10,917	$30,732	$41,451	$198
Total aggregate savings from solvent reprocessing	$217,027	$30,935	$186,092	$215,548	$1,479

Total waste tons and cost	All
Median tons of total waste generated per year per facility	940
Median total cost of waste disposal and treatment per facility	$336,063
Total waste tons generated by all hospitals	403,395
Total waste disposal and treatment cost for all hospitals	$77,838,562

Note: Not all hospitals included costs for all waste streams. These facilities were omitted from the medians because they did not submit full costs. However, they are included in the sums for all facilities.

Waste

Median normalized total waste metrics	All	Small	Large	Academic	NonAcademic
Total waste pounds per adjusted patient day (APD)	19.9	18.7	21.0	22.9	18.7
Total waste pounds per patient day (PD)	46.6	51.7	39.5	46.2	46.7
Total waste tons per operating room (OR)	84.2	71.0	94.1	98.3	73.0
Total waste pounds per total full-time equivalent (FTE)	1168	1137	1219	882	1374
Total waste tons per staffed bed	5.2	5.7	4.8	5.8	4.7
Total waste pounds per staffed bed per day	28.5	31.2	26.5	31.9	25.8
Total waste pounds per OR procedure	274	252	292	343	241
Total waste pounds per square foot	2.89	2.29	3.36	2.90	2.85

Chemicals

Chemical audits	All	Small	Large	Academic	NonAcademic
Contracted for, or performed internally, a hazardous chemical/material audit by hospital department and update at least annually	68%	70%	67%	83%	54%

Chemicals of concern	All	Small	Large	Academic	NonAcademic
Have chemical or purchasing policies that identify and avoid specific chemicals of concern contained in products that may be hazardous to human health and the environment	79%	83%	74%	82%	76%
Of the 166 facilities that have chemical or purchasing policies, the policies include these chemicals of concern:					
Mercury	78%	79%	76%	70%	85%
Polyvinyl chloride, or PVC	69%	69%	68%	63%	74%
Lead	67%	71%	61%	56%	77%
Flame retardants, including chlorinated, brominated, and phosphate-based flame retardants	64%	67%	58%	54%	72%
Phthalates (DEHP, BBP, DnHP, DIDP, DBP, DINP, and DiBP)	63%	66%	57%	53%	71%
Latex	61%	63%	58%	56%	67%
Bisphenol A and its structural analogues	60%	65%	51%	47%	71%
Persistent, Bioaccumulative, and Toxic substances (PBTs)	58%	66%	47%	46%	70%
Volatile organic compounds (VOCs)	57%	57%	54%	54%	59%
Formaldehyde	56%	62%	49%	54%	57%
Triclosan	43%	46%	41%	53%	34%
Triclocarban	40%	44%	35%	46%	34%
CA Proposition 65 listed chemicals (carcinogens and reproductive toxicants)	37%	39%	32%	30%	44%
Polystyrene	31%	35%	26%	28%	34%
Per and poly-fluorinated compounds (PFAS)	10%	11%	7%	14%	6%
Other	7%	10%	4%	6%	8%

Green cleaning	All	Small	Large	Academic	NonAcademic
Conducted an inventory in the last 18 months of all products used at the facility for cleaning and disinfection of surfaces	60%	58%	63%	80%	42%
Actively working on the transition to third-party certified green cleaning chemicals, in alignment with Practice Greenhealth's Green Cleaning Goal	40%	43%	38%	52%	30%
Utilized any Green Seal or UL ECOLOGO-certified cleaning products	86%	86%	86%	86%	85%

Other cleaning methods	All	Small	Large	Academic	NonAcademic
Utilized automatic scrubbing machines that use only water for floor cleaning	67%	60%	76%	84%	53%
Of those that utilized automatic scrubbing machines:					
Reduced or replaced other cleaning chemical use as a result of automatic scrubbing machines	94%	97%	91%	96%	90%
Utilized ultraviolet germicidal irradiation (UVGI) technology for surface disinfection in any area of the organization	52%	51%	55%	68%	39%
Of those that utilized ultraviolet germicidal irradiation (UGVI) technology for surface disinfection, these are the clinical areas where this technology was used:					
All patient rooms	46%	40%	53%	52%	38%
Isolation rooms	79%	85%	73%	75%	84%
OR	83%	89%	76%	80%	87%
Other	53%	49%	56%	57%	47%
Replaced any cleaning product types with a chemical-free method, such as ionized water or ozone	23%	17%	31%	36%	12%
Of those applicants that utilized a chemical-free cleaning method, the following methods were indicated:					
Ionized water	65%	67%	65%	57%	86%
Ozone	10%	17%	6%	9%	14%
Other	27%	22%	29%	31%	14%

Cleaning product use by category	All	Small	Large	Academic	NonAcademic
Percent of facilities using these cleaning products at the facility (including both conventional and green-certified products):					
General purpose (hard surface) cleaners	74%	74%	76%	82%	68%
Window/glass cleaners	61%	63%	61%	66%	57%
Carpet and upholstery cleaners	55%	58%	54%	60%	51%
Bathroom/restroom cleaners	74%	74%	74%	78%	69%
Floor cleaners	71%	73%	71%	73%	69%

Median green spend on cleaners by category	All	Small	Large	Academic	NonAcademic
General purpose (hard surface) cleaners	31%	31%	31%	67%	19%
Window/glass cleaners	100%	100%	100%	100%	100%
Carpet and upholstery cleaners	97%	100%	71%	81%	100%
Bathroom/restroom cleaners	72%	86%	57%	72%	74%
Floor cleaners	99%	100%	97%	98%	98%

Percent green spend for cleaning chemicals	All	Small	Large	Academic	NonAcademic
Of the facilities indicating they purchased products in the five target categories (general purpose, window/glass, bathroom, carpet/rug cleaner and floor cleaners) and provided green cleaning spend data:					
Median percent of green spend on 5 target cleaning chemical categories	33%	31%	37%	35%	31%
Total spend on 5 target cleaning chemical categories	$4,687,251	$2,292,060	$2,395,191	$3,955,071	$732,180
Of the 157 facilities that provided green cleaning spend data:					
Median total percent of green spend	27%	24%	28%	28%	24%
Total spend	$6,777,180	$2,843,597	$3,933,583	$5,872,865	$904,315

Savings from the use of third-party certified green cleaning chemicals or green cleaning practices	All	Small	Large	Academic	NonAcademic
Realized savings from use of third-party certified green cleaning chemicals or green cleaning practices	15%	12%	18%	18%	11%
Of the 27 facilities that have realized savings from use of third-party certified green cleaning chemicals or green cleaning practices:					
Median savings realized from green cleaning	$575				
Total savings all 5 facilities realized from green cleaning	$21,485				

Disinfectants	All	Small	Large	Academic	NonAcademic
Has the facility expanded its use of disinfectants/one-step disinfectant cleaners for environmental cleaning as a result of the COVID-19 pandemic?	67%	66%	69%	74%	60%
The 180 facilities that expanded use of disinfectants did it in these areas:					
All patient care areas	41%	42%	40%	39%	44%
Some patient care areas	20%	21%	19%	15%	26%
Food services	27%	29%	24%	23%	30%
Administrative areas	28%	32%	23%	27%	29%
Everywhere	73%	77%	69%	70%	76%
Other	10%	9%	11%	10%	10%
Consideration is given to the sustainability attributes of disinfectants/one-step disinfectant cleaners during the product selection process	42%	43%	42%	51%	33%

Sterilization and disinfection	All	Small	Large	Academic	NonAcademic
Eliminated the use of the high-level disinfectant glutaraldehyde and moved to safer alternatives (as defined by the ICRA process involving infection prevention and control and employee health)	80%	76%	85%	92%	70%
Of the 168 facilities that have eliminated the high-level disinfectant glutaraldehyde, these alternatives are used:					
OPA (ASP cidex OPA, metrex metricide OPA)	83%	83%	84%	80%	86%
Hydrogen peroxide	71%	69%	72%	80%	61%
Peracetic acid	22%	20%	24%	26%	18%
Other	19%	16%	21%	17%	21%
Eliminated the use of the sterilant ethylene oxide (EtO) onsite	75%	77%	74%	80%	71%
Of the 158 facilities that have eliminated the use of EtO, these alternatives are used:					
Steam sterilization	91%	89%	92%	87%	94%
Ozone plasma	7%	9%	4%	1%	12%
Low temperature hydrogen peroxide gas plasma	42%	41%	43%	36%	48%
Peracetic acid	23%	28%	18%	18%	28%
Other	4%	5%	3%	6%	1%

Integrated pest management (IPM)	All	Small	Large	Academic	NonAcademic
Reduced or eliminated the use of chemical pesticides by implementing an IPM program	75%	77%	72%	82%	68%
Developed a written IPM plan/policy for the facility that includes attention to both indoor and outdoor (buildings and grounds) pest habitats and issues, which focuses on prevention as the primary means of pest management	60%	63%	58%	69%	53%
Required EVS or other relevant staff to be trained in IPM (In particular, are staff trained to monitor and prevent pest problems by spotting conditions that are conducive to pest infestations)	68%	67%	69%	69%	68%

DEHP/PVC reduction	All	Small	Large	Academic	NonAcademic
Actively worked to reduce the purchase of medical products containing PVC and DEHP, in alignment with Practice Greenhealth's PVC and DEHP Reduction Goal	30%	28%	34%	41%	22%
Of those applicants that worked to reduce PVC and DEHP in medical products, the facility:					
Encoded this commitment in policy, program, guideline, or purchasing specifications	53%	57%	50%	51%	56%
Eliminated both PVC and DEHP from at least two product lines	69%	70%	68%	60%	77%

DEHP/PVC reduction for specific products	Completely eliminated in 2020	Completely eliminated in 2019 or before	In progress	Not addressed
Of those applicants that that have eliminated PVC and DEHP from at least two product lines, the product lines include:				
Breast pumps and accessories	16%	22%	5%	8%
Enteral nutrition products	2%	13%	8%	8%
Enteral tubes	2%	12%	8%	4%
General urological	1%	8%	6%	15%
Gloves	3%	27%	13%	10%
Parenteral infusion devices and sets (includes IV tubing and bags)	4%	7%	16%	10%
Respiratory therapy products	2%	6%	9%	13%
Vascular catheters	2%	18%	5%	5%
Other	0%	1%	0%	5%

Elimination of PVC and DEHP from 8 targeted product lines	All	Small	Large	Academic	NonAcademic
Median number of DEHP and PVC-free product lines eliminated in 2020	1.0	1.0	1.0	1.5	1.0
Median number of DEHP and PVC-free product lines eliminated in 2019 or earlier	2.0	2.0	2.0	2.0	2.0
Median number of product lines where some progress has been made towards DEHP and PVC-free	1.5	1.0	2.0	1.0	1.0
Median number of DEHP and PVC-free product lines eliminated out of 8 (in 2019, 2020, or earlier)	2.0	2.0	2.0	1.0	1.0

PVC and DEHP in the NICU	All	Small	Large	Academic	NonAcademic
Of those applicants that indicated their facility had a NICU:	108	19	89	73	35
Actively worked to achieve a DEHP-free NICU	17%	11%	18%	22%	6%
Actively worked to achieve a PVC-free NICU	22%	11%	25%	27%	11%

Healthy interiors	All	Small	Large	Academic	NonAcademic
Actively worked to purchase furnishings and furniture that eliminate the use of all of the following target chemicals of concern: flame retardants, formaldehyde, perfluorinated compounds, PVC (vinyl) and antimicrobials in alignment with Practice Greenhealth's Healthy Interiors Goal	46%	48%	45%	55%	37%

Chemicals

Healthy interiors	Using healthy interiors criteria	Using conventional criteria
Of the 123 facilities that actively worked to purchase furnishings that eliminated target chemicals of concern in 2020, they purchased items in the following categories:		
Beds, mattresses, and pads (table pads, stretcher pads, pediatric pads)	58%	20%
Work surfaces (tables, desks, overbed tables, etc.)	41%	62%
Built-in and modular casework	37%	55%
Seating (chairs, stools, sofas, benches, recliners, loungers, etc.)	37%	77%
Systems (multi-component furniture systems)	35%	62%
Cubicle/privacy curtains	33%	57%
Storage units and shelving (cabinets, filing cabinets, dressers, drawers, bookshelves, built-in shelves, etc.)	33%	65%
Panels and partitions	31%	62%
Window coverings	23%	49%
Wall coverings	17%	46%
Note: Some facilities purchased products using both healthy interiors criteria and conventional criteria, and some facilities did not purchase anything in certain categories, so percentages will not always add up to 100%.		

Healthy interiors spend	All	Small	Large	Academic	NonAcademic
Median percent total spend on furnishings and furniture that eliminate 5 target chemical categories of concern (of those that reported green spend)	90%	92%	86%	85%	96%
Total dollars spent on furnishings that avoid target chemicals of concern	$185,501,261				
Median dollars per square foot spent on furnishings that avoid target chemicals of concern	$0.35	$0.28	$0.39	$0.45	$0.25

Healthy interiors: Cubicle curtains	All	Small	Large	Academic	NonAcademic
Purchases reusable cubicle/privacy curtains	53%	51%	57%	69%	40%
Of those buying reusable curtains, percentage buying those that meet healthy interiors criteria	58%	62%	54%	59%	57%
Purchases disposable cubicle/privacy curtains	12%	7%	17%	20%	5%
Of those buying disposable curtains, percentage buying those that meet healthy interiors criteria	44%	75%	29%	37%	67%

Chemicals

Healthy interiors: Mattresses	All
Facilities indicating spend on mattresses that meet healthy interiors criteria in 2020	58%
Median % green spend on mattresses	100%
Median green spend on mattresses	$16,000
Total dollars spend on mattresses that meet healthy interiors criteria	$268,942

Note: A median of 100% for green mattresses means that of those facilities that chose to purchase green mattresses, more than half purchased ALL green mattresses rather than splitting spend between green and conventional

Healthy interiors: Flooring	All	Small	Large	Academic	NonAcademic
Actively working to select and purchase healthier flooring in alignment with Practice Greenhealth's Healthy Flooring Goal	35%	31%	40%	51%	21%
Actively working to select and purchase healthier carpet in alignment with Practice Greenhealth's Healthy Carpet Goal	28%	25%	32%	44%	15%
Installed new flooring in the past year	44%	43%	45%	55%	34%
Median green percent spend on flooring (flooring materials only) that meet Healthy Flooring criteria	90.6%	85.5%	92.2%	85.5%	100.0%
Median green percent spend on flooring (materials and installation costs) that meet Healthy Flooring criteria	90.5%	97.3%	90.0%	88.8%	100.0%
Total sum of dollars spent on flooring materials that meet Healthy Flooring criteria	$2,374,105	$729,440	$1,644,664	$2,201,542	$172,562
Total sum of dollars spent on flooring materials with installation costs that meet Healthy Flooring criteria (where materials could not be split out separately)	$2,494,363	$997,982	$1,496,381	$2,298,506	$195,857

Mercury elimination	All	Small	Large	Academic	NonAcademic
Percent of facilities that have won the Making Medicine Mercury Free Award (MMMF) at some point	47%	40%	55%	56%	39%
For those facilities that have already won the Making Medicine Mercury-Free award:					
Periodically inventory purchasing practices to make certain that mercury-containing devices are not purchased and re-entering the facility	83%	86%	80%	85%	80%
Conducted an inventory of mercury-containing products within the institution in last five years	40%	49%	35%	44%	36%
For those facilities that have not yet won the Making Medicine Mercury-Free award:					
Established a mercury-free purchasing policy (a stand-alone policy or included in a broader policy with other constituents of concern)	26%	28%	26%	41%	16%
Established protocols and written procedures for safe handling of any mercury remaining onsite	30%	28%	36%	49%	18%
Included proper mercury disposal language in demolition contract templates	21%	21%	21%	29%	15%
Included mercury-free language in building and renovation contract templates	19%	21%	17%	27%	13%
Inventoried (and labeled where possible) all mercury devices/sources within the organization and have a plan in place to substitute non-mercury devices	28%	28%	31%	51%	13%
Replaced all clinical thermometers with mercury-free patient thermometers	41%	34%	52%	68%	23%
Eliminated the use of mercury-containing blood pressure devices (sphygmomanometers)	40%	34%	50%	68%	21%
Eliminated the use of mercury-containing clinical devices (e.g., bougies, miller-abbott tubes, cantor tubes, dilators)	39%	34%	48%	68%	20%
Specified and purchased, where possible, these laboratory items free of mercury:					
Thermometers	43%	38%	52%	73%	23%
Solutions	36%	33%	43%	63%	18%
Equipment	37%	31%	48%	63%	20%
Spoke with the lab manager to inventory mercury-containing laboratory chemicals	32%	29%	38%	51%	20%
Eliminated the use of B5 fixative in the laboratory	37%	33%	45%	61%	21%
Eliminated the use of Zenkers solution in the laboratory	35%	31%	43%	59%	20%
Identified other product substitutions in the lab that eliminate mercury	23%	24%	21%	29%	18%

Food services in response to to COVID-19	All	Small	Large	Academic	NonAcademic
Percentage of all hospitals that shut down any food service areas for any period of time due to the COVID-19 pandemic.	48%	47%	49%	56%	39%
The 128 facilities that shut down food service areas did it for these lengths of time:					
0-2 weeks	4%	3%	5%	1%	7%
2-4 weeks	2%	2%	2%	1%	2%
4-6 weeks	10%	14%	6%	11%	9%
Longer than 6 weeks total	83%	80%	86%	85%	80%
Changed its food and nutrition services protocols as a result of the COVID-19 pandemic.	74%	74%	76%	80%	68%
Worked with the community to address increased food insecurity as a result of the pandemic.	34%	25%	44%	46%	22%

Sustainable food policy and practices	All	Small	Large	Academic	NonAcademic
Had a clinical champion outside of the food service department that supports increased access to healthy, local, and sustainable foods for patients, staff, and the community	36%	34%	39%	50%	24%
Developed and implemented a sustainable food service policy	50%	48%	53%	60%	42%
Developed and implemented contract and/or request for proposal (RFP) language that includes local and sustainable food purchasing and other environmental stewardship goals with food vendors	48%	46%	50%	56%	41%
Outsourced its food services department or management	40%	31%	49%	35%	44%

Less meat: Meat reduction strategies and outcomes	All	Small	Large	Academic	NonAcademic
Actively worked to reduce the amount of meat and poultry purchased for cafeteria/retail and patient food service, in alignment with Practice Greenhealth's Less Meat Goal	81%	78%	84%	83%	79%
Of the 217 facilities actively working to reduce meat, the following strategies were implemented:					
Committed to the World Resource Institute (WRI) Cool Food Pledge in an effort to reduce GHG emissions from food production	11%	7%	15%	15%	6%
Decreased portion size	31%	25%	38%	42%	21%
Meat-free day(s)	23%	20%	26%	29%	18%
Substituted with seafood	45%	40%	51%	58%	33%
Substituted with whole plant-based proteins (beans, nuts, seeds, soy, etc.)	49%	43%	56%	67%	33%
Meat blending strategies	18%	17%	20%	25%	12%
Station layout to highlight salad bar or plant-based options	31%	26%	38%	43%	21%
Increased offering of vegetarian and vegan dishes	48%	40%	57%	68%	31%
A la carte menu	31%	28%	36%	40%	23%
Other	5%	6%	5%	5%	5%

Normalized meat and MTCO2e	Median	90th percentile	Count providing data
Pounds of meat per food dollar spend (for those submitting data on meat by category)	0.055	0.036	142
Pounds CO2e from meat per food budget dollar	4.15	2.66	142
MTCO2e per pound of meat	0.035	0.027	150

Reduction in meat from baseline year metrics	All	Small	Large	Academic	NonAcademic
Of the 114 facilities reporting valid meat data for current and baseline year:					
Total pounds of all meat bought by those facilities in current year	10,919,696	2,165,662	8,754,034	8,717,626	2,202,070
Total pounds of all meat bought by those facilities in baseline year	14,629,306	3,084,597	11,544,709	11,835,586	2,793,720
Reduction in total pounds of all meat bought by those facilities since baseline year	3,709,609	918,935	2,790,675	3,117,959	591,650
Change percentage in total pounds of all meat bought by those facilities since baseline year	25%	30%	24%	26%	21%
Percentage of facilities reporting a decrease in total pounds of meat	89%	96%	82%	87%	91%
Of the 101 facilities reporting valid decrease in meat from baseline year:					
Median percent meat reduction from baseline year	26%	29%	26%	27%	26%
Of the 13 facilities reporting valid increase in meat from baseline year:					
Median percent meat increase from baseline year	10%	8%	10%	15%	6%

Note: Practice Greenhealth eliminated the use of the "per meal" normalizer, because it was being tracked inconsistently from facility to facility. The organization instead is looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. For facilities reporting an increase in meat/poultry, increased patient census or FTE count may be a possible culprit rather than failure of sustainability programming.

Less meat from previous year metrics	All	Small	Large	Academic	NonAcademic
Of the 157 facilities reporting valid meat data for current and previous year:					
Total pounds of all meat bought by those facilities in current year	13,612,689	2,965,313	10,647,376	9,606,461	4,006,228
Total pounds of all meat bought by those facilities in previous year	16,506,326	3,646,879	12,859,447	11,602,089	4,904,237
Change in total pounds of all meat bought by those facilities since previous year	2,893,637	681,566	2,212,071	1,995,628	898,009
Change percentage in total pounds of all meat bought by those facilities since previous year	18%	19%	17%	17%	18%
Percentage of facilities reporting a decrease in total pounds of meat	88%	89%	87%	86%	90%
Of the 138 facilities reporting valid decrease in meat from previous year:					
Median percent meat reduction from previous year	19%	19%	20%	17%	20%
Of the 19 facilities reporting valid increase in meat from previous year:					
Median percent meat increase from previous year	6%	6%	6%	8%	6%

Note:Practice Greenhealth eliminated the use of the "per meal" normalizer, because it was being tracked inconsistently from facility to facility. The organization instead is looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. For facilities reporting an increase in meat/poultry, increased patient census or FTE count may be a possible culprit rather than failure of sustainability programming.

Reduction in greenhouse gas emissions	All	Small	Large	Academic	NonAcademic
Of the 217 facilities actively working to reduce the amount of meat and poultry purchased for cafeteria/retail and patient food service, in alignment with Practice Greenhealth's Less Meat Goal:					
Tracked their meat/poultry purchases by category	83%	81%	86%	79%	88%
Of the 132 facilities providing valid meat-by-category data for current and previous year:					
Percent of facilities reporting a decrease in GHG emissions from meat from previous year	86%	88%	84%	86%	86%
Median percent reduction in GHG emissions from meat from previous year (for the 113 facilities achieving a reduction)	18%	19%	18%	17%	19%
Median percent increase in GHG emissions from meat from previous year (for the 19 facilities that increased)	11%	8%	22%	9%	14%
Of the 54 facilities providing valid meat-by-category data for current and baseline year:					
Percent of facilities reporting a decrease in GHG emissions from meat from baseline year	91%	100%	86%	95%	79%
Median percent reduction in GHG emissions from meat from baseline year (for the 49 facilities achieving a reduction)	20%	22%	19%	21%	19%
Median percent increase in GHG emissions from meat from baseline year (for the 5 facilities that increased)	30%	-	30%	49%	23%

Note: Practice Greenhealth eliminated the use of the "per meal" normalizer, because it was being tracked inconsistently from facility to facility. The organization instead is looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. For facilities reporting an increase in meat/poultry, increased patient census or FTE count may be a possible culprit rather than failure of sustainability programming.

Better meat: Sustainably-produced meat and poultry	All	Small	Large	Academic	NonAcademic
Preferentially purchase sustainably-produced (better) meat and poultry.	61%	57%	66%	63%	59%
Of the 164 facilities that preferentially purchase sustainably-produced meat, the following certifications or label claims were used to verify that meat and/or poultry items purchased were raised without routine, non-therapeutic antibiotics					
Regenerative Organic	1%	0%	1%	2%	0%
Certified Humane (Raised and Handled)	28%	22%	32%	41%	16%
Certified Organic	27%	25%	28%	39%	16%
Global Animal Partnership	7%	5%	8%	14%	0%
American Grassfed Certified	7%	5%	8%	8%	6%
Certified Grassfed by A Greener World	0%	0%	0%	0%	0%
Certified Grassfed by Food Alliance	4%	5%	3%	3%	4%
100% Grassfed Certified by PCO	5%	3%	7%	11%	0%
Certified Responsible Antibiotic Use (CRAU) chicken and turkey standard	12%	8%	15%	20%	4%
USDA Process Verified Program (PVP) Label Claims such as Raised Without Antibiotics or No Antibiotics Ever	36%	29%	42%	59%	14%
Other	11%	8%	14%	17%	6%

Food

Better meat metric	All	Small	Large	Academic	NonAcademic
Of the 135 facilities that provided volume numbers for sustainably-produced meat/poultry:					
Median percent pounds of sustainably-produced meat/poultry (out of total pounds)	17%	16%	21%	21%	14%
Total pounds of sustainably-produced meat and poultry (out of total pounds)	4,035,029				

Local food purchasing	All	Small	Large	Academic	NonAcademic
Encouraged their food suppliers (including distributors and GPOs) to improve tracking and traceability of local and sustainable foods and beverages in their ordering, invoicing, and reporting systems	77%	72%	82%	89%	67%
Purchased locally grown and produced foods and beverages	78%	74%	85%	80%	77%
Of the 211 facilities indicating they purchased local food and beverages, these are the methods used:					
On contract with GPO	37%	32%	41%	49%	25%
On contract with food service management company	27%	27%	28%	32%	23%
Greenhealth Exchange (GX)	2%	1%	2%	4%	0%
Food hub or aggregator	5%	4%	7%	7%	3%
Farm-direct purchasing	10%	10%	9%	12%	7%
Farmer cooperative	4%	4%	3%	4%	3%
Local produce vendors	33%	23%	43%	44%	23%
Other	10%	6%	13%	14%	6%

Local food metric	All	Small	Large	Academic	NonAcademic
Of the 87 facilities providing valid data for local food purchasing:					
Median percent spend on local food purchases	7%	5%	8%	10%	4%
Total dollars spent on local food and beverage purchasing (by all facilities reporting valid, separate spend data*)	$26,652,288	$2,743,499	$23,908,789	$25,042,404	$1,609,884

Note: Only facilities that indicated they were successfully able to separate spend numbers for local and sustainable food and beverage purchases were used in the percent and total spend analysis.

Sustainable food purchasing	All	Small	Large	Academic	NonAcademic
Encouraged their food suppliers (including distributors and GPOs) to improve tracking and traceability of local and sustainable foods and beverages in their ordering, invoicing, and reporting systems	77%	72%	82%	89%	67%
Purchased sustainably grown and produced foods and beverages	72%	65%	82%	73%	71%
Of the 194 facilities indicating they purchased sustainably grown and produced food and beverages, these are the categories prioritized:					
Produce (All forms: fresh, whole or minimally-processed; frozen; canned)	41%	31%	49%	59%	25%
Meat and poultry	36%	27%	44%	59%	17%
Seafood	27%	20%	33%	38%	17%
Dairy (including fluid milk)	30%	25%	34%	44%	18%
Eggs (shelled, fluid and hard boiled)	23%	15%	29%	37%	11%
Grocery/dry goods	22%	20%	23%	32%	13%
Beverages	24%	21%	27%	34%	15%

Sustainable food metrics	All	Small	Large	Academic	NonAcademic
Of the 113 facilities providing data for sustainable food purchasing:					
Median percent spend on sustainable food purchases	8%	7%	10%	10%	6%
Total dollars spent on sustainable food and beverage purchasing (by all facilities reporting spend data*)	$34,223,789	$2,497,836	$31,725,953	$30,694,881	$3,528,908
Note: Only facilities that indicated they were successfully able to separate spend numbers for local and sustainable food and beverage purchases were used in the percent and total spend analysis.					

Food and beverage environments: Education & promotion	All	Small	Large	Academic	NonAcademic
Strategies utilized to market healthy local and sustainable food options:					
Communication of healthy local and sustainably produced foods through menu labeling	55%	47%	63%	57%	53%
Pricing incentives on healthy local and sustainable food options	33%	31%	35%	28%	37%
Placement of healthy local and sustainable food options	67%	63%	72%	69%	66%
Sampling of healthy local and sustainable food options	48%	36%	60%	49%	46%
Other promotions	32%	27%	38%	42%	25%
We do not yet promote local and sustainable foods	12%	14%	10%	14%	11%
Conducted a facility-wide education campaign that improves the visibility of healthier, sustainable food	77%	77%	77%	75%	78%
Methods used to educate on healthier/sustainable food:					
Cafeteria signage	86%	84%	88%	89%	83%
Internal newsletters	53%	53%	53%	59%	47%
Featured events	69%	63%	76%	75%	64%
Catering	20%	15%	25%	21%	20%
Patient trays	31%	31%	31%	36%	26%
Other	25%	22%	29%	30%	21%

Tap water access and healthy beverages	All	Small	Large	Academic	NonAcademic
The following activities have been implemented to increase access to tap water and to promote the purchasing of healthier beverages:					
Provided and promoted reusable beverage containers	50%	47%	55%	58%	44%
Eliminated bottled water from patient menus and cafeterias	16%	19%	14%	19%	14%
Installed filtered water stations and/or installed water bottle filling stations throughout the facility or in cafeterias	27%	24%	30%	38%	18%
Provided free 'spa water' at functions and meetings instead of bottled water	16%	15%	17%	16%	16%
Increase the availablity of healthy beverages by fountains and dispensers	14%	13%	16%	18%	11%
Changed the relative price of healthy vs. unhealthy beverages to make healthy choices more affordable and desirable	34%	33%	36%	34%	33%
Prioritized the placement of healthier beverages in coolers and at fountain stations	65%	61%	70%	63%	67%
Actively worked to increase healthy beverage options in alignment with Practice Greenhealth's Healthier Beverages Goal	49%	42%	58%	68%	33%
Other	20%	18%	22%	24%	16%

Food

Healthy food access	All	Small	Large	Academic	NonAcademic
Strategies to increase access to healthy food:					
Hosted local farmers market	42%	32%	54%	46%	39%
Hosted on-site community supported agriculture (CSA) food box program for patients, employees, and/or community residents	11%	7%	15%	17%	5%
Supported on-site hospital farm and/or food-producing garden	22%	24%	21%	20%	23%
Supported off-site community garden or farm	20%	21%	20%	23%	18%
Developed and offered a fruit and vegetable prescription program	15%	15%	15%	15%	15%
Conducted food insecurity screenings	32%	27%	37%	52%	13%
Offer medically tailored meal programs	9%	7%	12%	12%	7%
Other	38%	40%	38%	45%	32%

Strategies to promote healthy food access and systems in the community	For-profit	Non-profit	Federal
Strategies the facility promotes healthy food access/healthy food systems in the community:			
Count of facilities responding	3	96	34
Financial investments	33%	32%	9%
Grants	0%	31%	9%
Staff time	33%	51%	47%
In-kind support	0%	38%	15%
Engaged in any of the above activities	67%	67%	50%
We do not engage in these activities	33%	4%	21%
Do not know	0%	20%	29%

Food serviceware: Purchasing and disposal	All	Small	Large	Academic	NonAcademic
Areas where reusable food serviceware was used:					
Cafeteria dine-in	26%	27%	25%	23%	28%
Cafeteria to-go	12%	14%	10%	13%	11%
Patient tray	56%	52%	62%	74%	41%
Catering	28%	25%	32%	29%	27%
Other retail outlets	3%	2%	4%	4%	2%
Areas where plastic straws have been removed:					
Retail	31%	22%	42%	47%	18%
Catering	30%	21%	39%	44%	18%
Patient meals	20%	23%	18%	25%	17%
Other	5%	4%	7%	8%	3%
Of the 98 facilities that purchased compostable food serviceware, the following are methods being used for disposal:					
On-site digestion	3%	2%	4%	5%	0%
On-site compost	4%	5%	4%	7%	0%
Off-site digestion	5%	2%	7%	2%	10%
Off-site compost	28%	14%	38%	30%	24%
Landfill	71%	79%	66%	70%	73%

Less food to landfill	All	Small	Large	Academic	NonAcademic
Working on prevention/source reduction of food waste	78%	78%	79%	87%	69%
Has a plan or strategy to maximize food as a resource--including reducing wasted food	67%	68%	68%	80%	55%
Working on food recovery and donation	28%	21%	35%	39%	17%
Of the 74 facilities that are working on food recovery and donation:					
Had a food waste donation policy/plan that is implemented and tracked	40%	29%	48%	55%	16%
Undertaken any other efforts to divert food waste from the landfill or incinerator	42%	34%	52%	55%	30%
Of the 114 facilities that have undertaken other efforts to divert food waste from the landfill and incinerator, the following activities were utilized:					
Composting	69%	61%	75%	64%	78%
Digestion	16%	9%	21%	22%	5%
Animal feed	12%	15%	10%	8%	20%
Other	17%	20%	15%	16%	17%

Food waste diversion metrics	All	Small	Large	Academic	NonAcademic
Of the 96 facilities providing any data for food waste diversion:					
Median food waste diverted from landfill (tons)	21.0	7.8	36.7	31.2	11.2
Total food waste diverted from landfill (tons)	12,249				
Of the 71 facilities providing data for composting:					
Median food waste compost (tons)	23.7	10.6	40.4	40	11.6
Of the 12 facilities providing data for digestion:					
Median food waste digested (tons)	34.2	12.4	82.8	34.2	No Data
Of the 34 facilities providing data for food donation tons:					
Median food donated (tons)	2.6	1.2	2.7	2.6	2.1
Total all food donated all facilities (tons)	4,435				
Of the 31 facilities providing tons data for food donation value:					
Median dollar ($) value of food donated	$10,000	$3,771	$15,517	$19,421	$4,534
Total dollar ($) value of all food donated, all facilities	$765,941				
Of the 8 facilities providing data for food animal feed:					
Median food diverted for animal feed (tons)	4.7	1.3	84.1	80	1.3

Greening the OR

COVID Response	All	Small	Large	Academic	NonAcademic
Cancelled or postponed elective surgeries for any period of time (either by organizational decision or mandate) during 2020 due to COVID-19	75%	76%	77%	82%	69%
Of the 203 that cancelled or postponed elective surgeries:					
0-2 weeks	1%	1%	1%	2%	0%
2-4 weeks	2%	3%	2%	3%	2%
4-6 weeks	24%	25%	22%	23%	24%
Longer than 6 weeks total	69%	69%	70%	68%	72%
Changes were made to operating room protocol as a result of the COVID-19 pandemic	71%	76%	68%	77%	66%

Sustainability champion in the OR	All	Small	Large	Academic	NonAcademic
Has a sustainability champion in the OR	54%	52%	58%	68%	41%

Waste segregation, management and recycling in the OR	All	Small	Large	Academic	NonAcademic
Processes in place to reduce and divert waste in the operating room:					
Diverted pre-incision (prior to case) waste from regulated medical waste stream into solid waste or recycling stream	48%	42%	55%	61%	36%
Segregated non-infectious solid waste from the regulated medical waste stream during the procedure	50%	48%	54%	67%	36%
Segregated non-infectious solid waste from the regulated medical waste stream after the procedure	42%	40%	45%	54%	32%
Recycled clinical/medical plastics in the OR	36%	33%	40%	50%	24%

Fluid management	All	Small	Large	Academic	NonAcademic
Utilized a fluid management system that does not use disposable suction canisters as a means of collecting and disposing fluid medical waste (i.e., mobile cart, reusable canister systems, or direct-to-drain system)	59%	56%	63%	74%	46%
Of the 123 facilities that utilized a reusable canister fluid management system:					
Being utilized for fluid management in more than 75% of ORs	76%	82%	70%	79%	71%

Avoided annual waste and cost savings from reusable canister fluid management systems	Sum of all	Per facility (median)	Per OR (median)	Per facility (average)	Per OR (average)
Avoided waste (tonnage)	1,209	17.00	1.45	34.55	1.97
Avoided waste disposal fees from disposable canisters	$1,899,143	$23,215	$1,658	$46,321	$2,522
Avoided purchase cost of disposable canisters	$1,697,358	$21,438	$1,974	$39,473	$2,110
Avoided purchase cost of chemical solidifiers (if applicable)	$1,096,284	$34,564	$2,214	$47,665	$2,849
Total cost savings from fluid management system	$4,558,240	$65,204	$4,342	$101,294	$5,556

Clinical plastics recycling	All	Small	Large	Academic	NonAcademic
Recycled clinical/medical plastics in the OR	36%	33%	40%	50%	24%
Of the 75 facilities that recycled clinical plastics in the OR:					
Tracked the weight of clinical/medical plastics recycled in the OR	20%	26%	15%	21%	19%
Of the facilities that recycled clinical plastics in the OR, the following types of plastics are recycled:					
Basins, pitchers, bowls and medicine cups	72%	86%	60%	69%	78%
Blister packs/shrink wrap	25%	31%	20%	23%	30%
Blue wrap	43%	40%	45%	44%	41%
Corrugated respiratory tubing	1%	3%	0%	2%	0%
Disposable clean suction canisters	12%	11%	13%	10%	15%
Irrigation bottles (Sterile saline and water bottles)	87%	89%	85%	90%	81%
IV bags, tubing and outer plastic wrap	19%	29%	10%	21%	15%
Light handle covers	13%	9%	18%	13%	15%
Medication vials and caps	19%	20%	18%	21%	15%
Overwraps	28%	29%	28%	27%	30%
Oxygen tubing	4%	6%	3%	6%	0%
Peel pouches	21%	31%	13%	17%	30%
Perfusion tubing	0%	0%	0%	0%	0%
Respiratory face masks	1%	0%	3%	2%	0%
Rigid inserts	57%	51%	63%	58%	56%
Skin prep solution bottles	43%	51%	35%	42%	44%
Syringe casings	16%	17%	15%	17%	15%
Trays	55%	60%	50%	56%	52%
Tyvek	9%	9%	10%	6%	15%
Urinals/bedpans	27%	37%	18%	19%	41%
Other	19%	20%	18%	19%	19%

Medical device reprocessing	All	Small	Large	Academic	NonAcademic
Implemented a medical device reprocessing program with an FDA-approved third party reprocessor	84%	78%	91%	76%	92%

Medical device reprocessing aggregate data	Total
Total weight of devices collected (lbs.)	1,263,508
Total weight of devices collected (tons)	632
Total avoided waste disposal costs	$835,207
Total dollars spent on purchase of reprocessed devices	$34,570,287
Total dollars saved annually through medical device reprocessing purchasing program	$28,523,658
Total dollars saved through SUD reprocessing including both avoided waste disposal costs and reduced purchasing cost	$29,358,865

Medical device reprocessing medians	All
Pounds of reprocessed devices collected per OR procedure (lbs.)	0.525
Pounds of reprocessed devices collected per OR (lbs.)	294

Annual cost-savings from medical device reprocessing	Per facility	Per OR
Median cost-savings from medical device reprocessing program	$113,058	$6,745
Median cost-savings from avoided waste disposal costs from devices collected for reprocessing	$1,041	$91
Median cost-savings on reprocessed devices from both purchasing reprocessed devices and avoided waste disposal	$39,399	$3,000

Reprocessed devices: rate of collecting and purchasing	Collect only	Purchase only	Collect and purchase
Of the 226 facilities that have implemented a medical device reprocessing program with an FDA-approved third party reprocessor:			
EP catheters	3%	1%	44%
Pneumatic tourniquet cuffs	14%	1%	44%
DVT sleeves/Sequential compression	16%	0%	36%
EP cables	3%	1%	33%
EP diagnostic catheters	3%	1%	31%
Pulse oximetry probes and sensors	23%	0%	26%
Lateral transfer device (Hovermatt)	10%	2%	24%
Ligasure sealers/dividers	28%	1%	24%
Ultrasonic scalpels	30%	1%	24%
Bits/burs/blades	29%	3%	22%
Ultrasound catheters	6%	1%	22%
ICE catheter	4%	1%	21%
Arthroscopic wands and shavers	31%	0%	18%
ECG leads and cables	7%	2%	18%
Trocars	34%	1%	17%
EKG cables and lead wires	7%	2%	16%
Catheter introducer sheaths	14%	2%	15%
Laparoscopic scissors/scissor tips	30%	2%	12%
External fixation devices	20%	1%	11%
Laparoscopic dissectors	26%	1%	10%
Laparoscopic graspers	24%	1%	10%
Laparoscopic needle drivers/suture passers	33%	2%	10%
Fall alarms	15%	1%	5%
Multiclip appliers	21%	3%	5%
Hot biopsy forceps	7%	2%	2%
Reamers	18%	2%	2%
Chisels	12%	1%	1%
Cold biopsy forceps	8%	1%	1%
Note: This table is sorted by the percent of facilities that both collected and purchased different devices for reprocessing.			

Types of reprocessed devices	All	Small	Large	Academic	NonAcademic
Median types of devices collected only (out of 28)	8	6	9	10	6
Median types of devices purchased only (out of 28)	1	1	1	0	1
Median types of devices collected and purchased (out of 28)	7	7	7	7	8

OR kit reformulation	All	Small	Large	Academic	NonAcademic
Reformulated custom procedure packs--removing supplies not typically used--to reduce purchase and disposal fees for excess supplies, and decrease the environmental impact of manufacture and disposal of those supplies	88%	90%	88%	91%	85%
Had a process in place to regularly compare, review and update surgeon preference cards for the same type of procedure	92%	94%	90%	90%	94%
Of the facilities that indicated they reformulated OR kits and provided data:					
Median percent of kits reformulated*	100%	100%	100%	100%	100%

Note: A median of 100% for OR kit reformulation is an indication that hospitals that chose to reformulate kits tended to reformulate all of them.

Annual cost-savings from OR kit reformulation	Per facility	Per OR
Median avoided purchase costs	$23,109	$1,676
Median avoided waste disposal costs	$5,354	$111
Aggregate annual cost-savings from OR kit reformulation (for all facilities providing data)	$42,659	$3,107

Reusable items	All	Small	Large	Academic	NonAcademic
Purchased and used reusable surgical items where environmentally and clinically preferable	90%	89%	92%	89%	91%
Of the 242 facilities that use reusable surgical items, the following items are indicated as being used more that 75% of the time:					
Anesthesia circuits	2%	3%	2%	3%	2%
Back table covers	5%	3%	6%	8%	2%
Blood pressure cuffs	30%	32%	28%	32%	27%
Cautery handles and cords	15%	17%	14%	16%	14%
Corner protectors	18%	12%	24%	21%	15%
Cubicle curtains	17%	15%	19%	24%	10%
Isolation gowns	16%	13%	18%	20%	12%
Endotracheal Tubes (ETT)	1%	1%	1%	2%	0%
Grounding pads	12%	13%	10%	12%	11%
Laryngeal Mask Airways (LMA)	11%	12%	10%	9%	13%
Laryngoscope blades/handles	34%	33%	35%	37%	31%
Light handles	21%	26%	16%	21%	22%
Mayo stand covers	2%	2%	2%	3%	2%
Patient belonging bags	2%	2%	3%	2%	2%
Patient linens (gowns, sheets, bath blankets, pillow cases)	67%	75%	61%	73%	62%
Patient positioning devices	66%	71%	62%	75%	58%
Patient transfer devices	36%	35%	37%	41%	30%
Patient warming devices	17%	19%	15%	21%	13%
Pneumatic compression tourniquets	26%	27%	26%	25%	28%
Pulse oximetry sensors	31%	32%	29%	29%	32%
Sterilization wrap	10%	10%	9%	14%	6%
Surgical staplers	5%	3%	8%	6%	5%
Suction canisters	7%	7%	6%	9%	5%
Surgical drapes	4%	4%	3%	7%	1%
Surgical gowns	12%	13%	12%	13%	12%
Surgical towels	21%	25%	17%	21%	20%
Safety belts	43%	50%	38%	49%	38%

Reusable items	All	Small	Large	Academic	NonAcademic
Surgical basins, pitchers and medicine cups	31%	36%	26%	37%	26%
Trocars	17%	19%	16%	22%	13%
Velcro straps	20%	22%	18%	21%	18%
Visitor jump suits	3%	4%	3%	4%	2%
Other	10%	7%	12%	12%	7%

Reusable item count	All	Small	Large	Academic	NonAcademic
Median number of reusable product categories (out of 32)	6	6	6	7	5

Reusable Linens	Aggregate sum	Median per facility	Median per OR procedure
Tons of reusable linens	2,655	45	0.0056
Cost savings from reusable linens	$563,768	$7,961	$1.47

Rigid sterilization containers	All	Small	Large	Academic	NonAcademic
Utilized reusable sterilization containers for surgical instrumentation and reduction of disposable sterile wrap	87%	85%	88%	93%	80%
Of the facilities using reusable rigid sterilization containers who provided data:					
Median percent of kits utilizing reusable sterilization containers	60%	58%	60%	60%	53%
Median spent on blue wrap per OR procedure	$3.59	$3.82	$3.19	$3.71	$2.83
Total avoided waste disposal tons from using rigid sterilization containers all facilities	171				

Annual cost information from rigid sterilization containers	All
Median cost-savings for avoided disposable bluewrap purchase per facility	$16,723
Median cost-savings for avoided waste disposal fees per facility	$1,155
Median cost-savings from rigid sterilization containers per facility	$17,496
Median cost-savings from rigid sterilization containers per OR	$1,266
Aggregate cost-savings from rigid sterilization containers (for all facilities reporting savings)	$1,583,290

Energy management in the OR	All	Small	Large	Academic	NonAcademic
Programmed the HVAC system to reduce air changes per hour (HVAC setback) when the ORs are unoccupied to reduce energy consumption	46%	44%	49%	50%	43%
Of the 125 facilities that utilized HVAC setback, these mechanisms were used:					
Building automation system	79%	82%	76%	76%	83%
Occupancy sensors	46%	38%	55%	56%	37%
Scheduling system	30%	28%	33%	38%	23%
Mushroom button	8%	8%	8%	12%	4%
Other	7%	4%	10%	8%	6%
Utilized LED surgical lighting	80%	76%	85%	94%	68%
Set back or turned down ambient lighting to reduce energy consumption when the OR is unoccupied and not in use	77%	83%	70%	80%	74%
Of the 161 facilities setting back ambient lighting:					
Staff behavior	88%	93%	81%	87%	89%
Occupancy sensors	50%	48%	51%	51%	49%
Scheduling system	14%	16%	13%	17%	12%
Building Automation System	16%	16%	16%	17%	14%
Other	12%	12%	11%	8%	17%

Energy metrics in the OR	All	Small	Large	Academic	NonAcademic
Median percent of ORs with HVAC setback for those facilities that use HVAC setback	100%	100%	82%	86%	100%
Percentage of ORs in the dataset that have HVAC setback in place	17%	8%	29%	23%	10%
Median rate of air exchanges per hour (ACH) during normal hours/when the OR is occupied	20	20	21	20	20
Median rate of air exchanges per hour (ACH) during unoccupied/setback mode	10	12	10	10	8
Median percent reduction in air exchange rate (occupied to unoccupied)	59%	50%	62%	50%	68%
Median percent of ORs with LED surgical lighting for those facilities that use LED surgical lighting	100%	100%	96%	100%	100%
Percentage of ORs in the dataset with LED surgical lighting	19%	7%	31%	25%	10%

Note: A median of 100% for HVAC setback and LED surgical lighting means that if facilities utilized these technologies they tended to use them for 100% of their ORs. That said, Practice Greenhealth suspects the HVAC setback numbers may be over reported--as many hospitals tend to keep 1-2 emergency ORs online and ventilated at full air changes for emergency cases at night.

Greening the OR

Annual cost-savings for energy reduction in OR	All
Median energy cost-savings from HVAC setback per OR	$1,326
Median energy cost-savings from HVAC setback per facility	$27,625
Median energy cost-savings from LED surgical lighting per OR	$162
Median energy cost-savings from LED surgical lighting per facility	$4,816
Aggregate cost-savings for energy reduction in OR (HVAC+LED) (for all facilities reporting cost-savings)	$931,150

Chemicals of concern	All	Small	Large	Academic	NonAcademic
Facility has implemented a surgical smoke evacuation system	38%	41%	36%	47%	31%
Facility has implemented strategies to reduce exposure to chemicals of concern in the OR	23%	26%	20%	28%	18%

Pharmaceutical waste reduction	All	Small	Large	Academic	NonAcademic
Purchased or had in-house pharmacy prepare pre-filled syringes (not including boxed bristojets) to minimize waste of unneeded pharmaceuticals	88%	82%	94%	96%	81%
Of the 184 facilities that utilize pre-filled syringes, the following types are purchased:					
Atropine	70%	72%	68%	66%	73%
Calcium chloride	67%	72%	64%	60%	75%
Ephedrine	67%	67%	67%	63%	71%
Epinephrine	71%	72%	70%	68%	73%
Ketamine	47%	49%	46%	58%	36%
Lidocaine	69%	70%	68%	64%	74%
Phenylephrine	57%	49%	66%	71%	43%
Succinylcholine	46%	43%	49%	52%	39%
Propofol	13%	8%	17%	20%	5%
Other	65%	66%	64%	55%	75%
Purchased the smallest pharmaceutical vials possible to minimize pharmaceutical wastage	80%	76%	84%	92%	69%

Reduction strategies for anesthetic gases	All	Small	Large	Academic	NonAcademic
Provided or held anesthesia staff education on environmental impacts of inhaled anesthetics and reduction strategies for clinicians	74%	74%	75%	76%	72%
Removed desflurane from its formulary	21%	21%	21%	23%	19%
Of the 150 facilities that did not remove desflurane from the formulary:					
Removed desflurane vaporizers from the operating room to minimize use	31%	26%	36%	33%	30%

Volume and greenhouse gas emissions (GHGs) from inhaled anesthetics	Total	Median Per OR PROCEDURE	Median per general anesthesia case	Median per general anesthesia hour
Volume of inhaled anesthetic agents purchased (mL)				
Sevoflurane (mL)	29,465,200	16.4	19.3	9.5
Isoflurane (mL)	3,170,650	0.48	0.95	0.38
Desflurane (mL)	5,125,520	1.34	0.91	0.50
Nitrous oxide (pounds)	283,934	0.184	0.281	0.130
Total GHG emissions from inhaled anesthetics in metric tons of carbon dioxide equivalent (MTCO2e)				
MTCO2e from sevoflurane	5,830	0.0032	0.0038	0.0019
MTCO2e from isoflurane	2,419	0.0004	0.0007	0.0003
MTCO2e from desflurane	19,073	0.0050	0.0034	0.0019
MTCO2e from nitrous oxide	33,797	0.0252	0.0345	0.0170
Total MTCO2e emissions from all inhaled anesthetics	75,947	0.0413	0.0592	0.0230

Reduced emissions from inhaled anesthetics from baseline	MTCO2e emissions
Of the 48 facilities that tracked volume of anesthetics in both baseline and current year, 36 reduced emissions. For the 75% (36) that reduced emissions per case from anesthetics:	
Count in this category	36
Median % reduction in emissions per case	52%
Median amount of MTCO2e emissions prevented per case	0.0694
Median MTCO2e emissions prevented per facility	545
Sum MTCO2e emissions or spend prevented for these facilities tracking spends	16,202

Note: Emissions prevented was determined by calculating the difference in emissions per case each year and subtracting to determine the difference. It is then assumed that this is the amount per case that would be added to current emissions if the facility had not changed their practices. This amount is multiplied by the number of current-year cases to determine the emissions avoided.

Reduced spend from inhaled anesthetics from baseline	Dollars spent	MTCO2e emissions if also tracking costs
Of the 16 facilities that tracked cost (and volume) of anesthetics in both baseline and current year, 16 reduced GHG emissions. For those that reduced GHG emissions per case from anesthetics:		
Count in this category	16	16
Median % reduction in emissions or spend per case	57%	62%
Median amount of MTCO2e emissions or spend prevented per case	$9.71	0.0762
Median MTCO2e emissions or spend prevented per facility	$114,382	802
Sum MTCO2e emissions or spend prevented for these facilities tracking spends	$1,764,367.44	15,038
Emissions and spend prevented was determined by calculating the difference in spend or emissions per case each year and subtracting to determine the difference. It is then assumed that this is the amount per case that would be added to current emissions or spend if the facility had not changed their practices. This amount is multiplied by the number of current-year cases to determine the spend or emissions avoided. Spend per case for each year was calculated separately for each year. Some facilities experienced price changes that may affect amount money saved.		

Median cost-savings for key Greening the OR programs	Per OR	Per Facility
Collection and purchase of reprocessed medical devices (SUDs)	$3,000	$39,399
Reusable canister fluid management systems	$4,342	$65,204
OR kit reformulation	$3,107	$42,659
Reusable sterilization containers	$1,266	$17,496
HVAC setback	$1,326	$27,625
Reusable linens	$932	$7,961
LED surgical lighting	$162	$4,816
All greening the OR cost-savings programs	$6,060	$56,262

Total annual cost-savings from Greening the OR initiatives (for all facilities reporting cost-savings)	Total
Collection and purchase of reprocessed medical devices (SUDs)	$29,358,865
Reusable canister fluid management systems	$4,558,240
OR kit reformulation	$3,083,768
Reusable sterilization containers	$1,583,290
HVAC setback	$898,470
Reusable linens	$563,768
LED surgical lighting	$32,679
All greening the OR cost-savings programs	$40,079,080

Purchasing

Supply Chain Impacts of COVID-19	All	Small	Large	Academic	NonAcademic
Percent of facilities that reached less than 4 days on hand for these categories of PPE:					
Ventilator supplies	4%	5%	4%	2%	7%
N95 respirators	9%	8%	9%	9%	8%
Surgical and procedure masks	6%	7%	5%	3%	9%
Other respirators such as powered air purifying respirators (PAPRs) or elastomerics	2%	1%	3%	2%	1%
Eye protection (including face shields and goggles)	3%	1%	4%	2%	3%
Single-use gowns	6%	5%	6%	6%	5%
Exam gloves	16%	20%	13%	9%	23%
The facility created procedures to re-use or extend the use of PPE in response to COVID-19	72%	70%	76%	78%	66%
Percent of facilities that re-used or extended the use of PPE with these products:					
Reusable/launderable isolation gowns	59%	59%	59%	51%	67%
PAPRs or elastomerics	60%	63%	57%	50%	71%
N95 masks	92%	91%	93%	92%	91%
Other	30%	31%	29%	21%	40%
The facility leveraged its supply chain relationships to address the critical shortage of supplies and PPE over the past year	71%	71%	73%	74%	69%
The facility partnered with the local community to address supply gaps brought on by the COVID-19 pandemic	63%	59%	68%	63%	63%
The facility (or parent health system) made (or is planning to make) any changes to its long-term buying/supply chain strategy based on the COVID-19 pandemic	60%	58%	64%	61%	59%

Purchasing

Leadership and Infrastructure	All	Small	Large	Academic	NonAcademic
The facility engaged with supply chain leadership on sustainable procurement activities in the past year	64%	64%	65%	65%	62%
Facilities engaged supply chain leadership at these levels:					
Health system-level	91%	94%	88%	90%	93%
Facility-level	76%	83%	69%	72%	80%
Group purchasing organization (GPO)	66%	71%	61%	63%	69%
The facility assessed its organizational progress in meeting the ten best practice program elements in the Sustainable Procurement in Health Care Guide	12%	11%	13%	19%	6%
The facility made the evaluation of purchases based on environmental criteria a responsibility or deliverable within an existing job role	54%	57%	51%	60%	48%
The facility set sustainable procurement goals in the past year	20%	21%	20%	26%	16%
The facility has a sustainable procurement policy that is considered when making purchasing decisions	64%	70%	57%	65%	64%
There is a sustainability champion represented on contracts/procurement/value analysis review teams	41%	39%	44%	48%	35%

Sustainable procurement goal progress	Goal status
Set sustainable procurement goals	20%
Of those that reported number and status of goals:	
Reported only one goal	26%
Reported two goals	19%
Reported three goals	56%
Percent of goals identified that were:	
Incomplete	3%
In progress	42%
Complete	55%

Purchasing

Process	All	Small	Large	Academic	NonAcademic
The facility reviewed a calendar (a list of upcoming contracts) for sustainable procurement opportunities in the past year	19%	17%	22%	26%	13%
Of those that reviewed a calendar, these calendars were reviewed:					
GPO	28%	22%	32%	28%	27%
Organization	28%	39%	18%	24%	33%
Both GPO and organization	65%	72%	59%	72%	53%
The facility has a process or Standard Operating Procedures (SOP) that identifies how and when to consider sustainability in the various procurement processes	26%	28%	23%	32%	20%
Sustainability criteria is included in the evaluation, scoring and weighting when the facility makes purchasing decisions	24%	22%	27%	35%	15%
The facility assesses the total cost of ownership or used life-cycle costing when the facility makes purchasing decisions	22%	19%	27%	28%	18%
Of those assessing total cost of ownership:					
Percent using the Greenhealth Cost of Ownership (GCO) Calculator	9%	10%	7%	11%	5%
The facility prioritized high-impact procurement opportunities (HIPO) for specific goods and services for sustainable procurement in 2020	11%	7%	16%	20%	4%

High-impact procurement opportunities (HIPO)	All
Prioritized high-impact procurement opportunities (HIPO)	11%
Of those that reported number and status of goals:	
Reported only one goal	28%
Reported two goals	0%
Reported three goals	17%
Reported four goals	56%
Of the opportunities identified:	
Not started	0%
In progress	41%
Procured	59%

Purchasing

Training	All	Small	Large	Academic	NonAcademic
The facility train supply chain staff on sustainable procurement in the past year	31%	34%	29%	43%	21%
Procurement leadership and staff were introduced to the following resources:					
Practice Greenhealth Sustainable Procurement in Health Care Guide	22%	21%	23%	21%	23%
Sustainable Procurement in Health Care Guide's list of ecolabels	9%	7%	11%	8%	10%
Practice Greenhealth's Standardized Environmental Criteria v2.0	18%	15%	22%	15%	21%

Engaging suppliers and group purchasing organizations	All	Small	Large	Academic	NonAcademic
The facility engaged suppliers on sustainable procurement	74%	73%	75%	74%	74%
The facility asked the supplier about its commitment to corporate responsibility as part of RFP or business reviews	29%	26%	32%	38%	21%
Of those that ask the supplier about their corporate responsibility:					
The supplier's commitment to corporate responsibility impacts decision-making	97%	96%	97%	97%	96%
The facility requires suppliers to meet standards for fair and decent labor practices set by the International Labor Organization (ILO), Fair Labor Association, or a supplier code of conduct	30%	28%	33%	41%	21%
The facility has a representative on a GPO Advisory Board or committee that makes contracting decisions (with an external GPO or your own GPO)	76%	76%	77%	61%	89%
The facility engaged with its GPO on sustainable procurement in the past year	36%	36%	38%	41%	32%

Purchasing

Action	All	Small	Large	Academic	NonAcademic
The facility purchased any environmentally preferable products or services in the past year	45%	37%	54%	61%	31%
Of those that purchased sustainable products and services, this percentage purchased in these categories:					
Building furnishings	19%	18%	20%	29%	3%
Building, facilities, maintenance	15%	23%	9%	17%	11%
Cleaners	36%	40%	33%	34%	40%
Computers, telecom, IT equipment	33%	38%	30%	36%	29%
Dental	0%	0%	0%	0%	0%
Fleet	6%	8%	6%	8%	3%
Food	21%	23%	20%	22%	20%
Food service equipment and supplies	21%	30%	15%	15%	31%
Laboratory	0%	0%	0%	0%	0%
Landscape	1%	0%	2%	2%	0%
Medical supplies	60%	50%	67%	76%	31%
Office supplies and equipment	21%	20%	22%	25%	14%
Personal care	9%	13%	6%	8%	9%
Pharmaceuticals	9%	15%	4%	2%	20%
Sterile processing, sterilization, high-level disinfection	5%	3%	7%	7%	3%
Surgical/operating room	21%	25%	19%	20%	23%
Other	14%	15%	13%	10%	20%
The facility is purchasing goods or services that support a circular economy	16%	12%	20%	25%	8%
The facility avoided the purchase of any goods due to sustainability considerations in the last year	33%	34%	33%	30%	36%
The facility wrote internal or external articles or documentation describing sustainable procurement successes (such as Sustainable Procurement case studies)	17%	21%	13%	11%	22%
Some RFX (RFP, RFI, RFQ) were sent out in the last year that include sustainable procurement criteria	34%	36%	32%	30%	37%

Purchasing

Status of RFX with sustainable procurement criteria	Any RFX
Sent out any RFX (RFP, RFI, RFQ) sent out that include sustainable procurement criteria	34%
Of those that reported number and status of RFX:	
Sent out only 1 RFX	33%
Sent out 2 RFX	12%
Sent out 3 RFX	10%
Sent out 4 RFX	45%
Percent of RFX that were:	
Awarded to sustainable product (100% of contract)	56%
Partially awarded	27%
In progress	17%
Not awarded to sustainable product	0%
Cancelled	0%

Metrics	All	Small	Large	Academic	NonAcademic
The facility tracks and reports metrics regarding green spend (what is spent on sustainable products)	74%	79%	69%	70%	78%

Median percent green spend on sustainable products by category	Current Percent Spend	Increase in percent spend since previous year (2019)
5 target cleaning products	33%	-1%
Copy paper	100%	5%
EPEAT electronics	96%	-1%
Healthy interiors	90%	3%
Local food and beverage purchases	7%	5%
Sustainable food and beverage purchases	8%	-19%
Average % sustainable spend combining all categories above	19%	-1%

Note: 2020 was an extraordinary year for supply chains within health care, with much energy and attention focused on procuring adequate PPE. It is likely this contributed to lack of gains in % sustainable spend in 2020.

Purchasing

Paper spend	All	Small	Large	Academic	NonAcademic
The organization purchases copy paper made with post-consumer recycled content	72%	74%	70%	77%	67%
The facility limited options within its purchasing system/catalog to ensure that all white copy paper purchased contains at least 30% post-consumer recycled content	35%	40%	31%	39%	32%
Of those purchasing recycled paper and providing spend numbers:					
Median percent green spend on office paper >=30% recycled*	100%	100%	85%	100%	100%
Median green spend on office paper for all facilities	$21,546				
Total green spend on office paper for all facilities	$10,341,000				

Note: Paper with less than 30% post-consumer recycled content is not considered a sustainable product.

EPEAT spend	All	Small	Large	Academic	NonAcademic
The facility purchased EPEAT-registered products in the past year in alignment with Practice Greenhealth's Greener Electronics Goal	81%	83%	80%	77%	85%
Of the 219 facilities purchasing EPEAT-registered products, the following types of products were purchased:					
EPEAT-registered computers, monitors, and laptops	94%	95%	93%	95%	93%
EPEAT-registered imaging equipment (copiers, printers, fax, MFD, scanners, digital duplicators, mailing machines)	87%	88%	86%	89%	85%
EPEAT-registered televisions	57%	58%	54%	57%	56%
EPEAT-registered mobile phones	32%	31%	34%	43%	23%
EPEAT-registered servers	5%	6%	4%	10%	1%

EPEAT spend metrics	All
Median percent green spend on EPEAT-registered computers, monitors and laptops	98.3%
Median percent green spend on EPEAT-registered imaging equipment (copiers, printers, fax, MFD, scanners, digital duplicators, mailing machines)	75.2%
Median percent green spend on EPEAT-registered televisions	100%
Median percent green spend on EPEAT-registered mobile phones	100%
Median percent green spend on all EPEAT-registered product categories	96.2%

Note: A median of 100% indicates that if the facility is purchasing EPEAT-registered electronics; they tend to be purchasing all EPEAT-registered products in a particular category.

Dollars spent on EPEAT-registered electronics	All
Dollars spent on EPEAT-registered computers, monitors and laptops	$113,129,777
Dollars spent on EPEAT-registered imaging equipment	$15,391,332
Dollars spent on EPEAT-registered televisions	$667,060
Dollars spent on EPEAT-registered cell phones	$1,856,850
Total EPEAT spend by all facilities	$131,045,018

Sustainable procurement activities in other areas	All	Small	Large	Academic	NonAcademic
The facility implemented a reusable sharps container program	84%	76%	95%	81%	87%
The facility established a contract with a certified electronics recycling vendor that is certified to e-Stewards (or subcontractors that use e-Stewards certified vendors) for legal and environmentally responsible electronics (or e-waste) management and recycling	66%	61%	73%	74%	60%
The facility has chemical or purchasing policies that identify and avoid specific chemicals of concern contained in products that may be hazardous to human health and the environment	79%	83%	74%	82%	76%
The facility utilizes any Green Seal or UL Ecologo certified cleaning products	86%	86%	86%	86%	85%
The facility completely eliminated both PVC and DEHP from at least two product lines	69%	70%	68%	60%	77%
The facility is actively working to purchase furnishings and furniture that eliminate the use of all of the following target chemicals: flame retardants, formaldehyde, per and poly-fluorinated compounds (PFAS), PVC (vinyl) and antimicrobials, in alignment with Practice Greenhealth's Healthy Interiors Goal	46%	48%	45%	55%	37%
The facility implemented a medical device reprocessing program with an FDA-approved third party reprocessor	84%	78%	91%	76%	92%
The facility purchased and used reusable surgical items where environmentally and clinically preferable	90%	89%	92%	89%	91%
The facility preferentially purchased sustainably-produced (better) meat and poultry	61%	57%	66%	63%	59%
The facility purchased locally grown and produced foods and beverages in 2020	78%	74%	85%	80%	77%
The facility purchased sustainably grown and produced foods and beverages in 2020	72%	65%	82%	73%	71%
The facility is purchasing certified commercially compostable single-use food service ware (such as certified by Biodegradable Products Institute (BPI))	47%	39%	56%	59%	36%
The facility generated or purchased renewable energy	29%	27%	31%	39%	18%
The facility purchased energy-efficient equipment in 2020 that is ENERGY STAR-labeled	33%	31%	35%	40%	27%
The facility has a policy that includes environmental criteria for vehicle purchases	17%	17%	17%	28%	7%
The organization has integrated green/sustainable aspects into master specifications for all new buildings/renovations	70%	75%	66%	75%	66%
Does the organization require its designers, builders and contractors to have experience with LEED or other green building rating systems	51%	53%	50%	65%	40%
The organization has added language to contract specifications that building contractors will follow LEED or GGHC requirements and provide documentation	55%	56%	54%	65%	46%
The facility consciously selects flooring, wall coverings, paints, materials, finishes, furniture or exterior materials that avoid chemicals of concern	42%	36%	50%	61%	25%

Energy

Energy demographics	All	Small	Large	Academic	NonAcademic
Generated or purchased renewable energy	29%	27%	31%	39%	18%
Put a combined heat and power/cogeneration project into place in the last five years	4%	2%	6%	6%	2%
Had an onsite laundry	13%	16%	10%	16%	11%
Had an onsite data center that requires a constant power load of 75 kW or more	38%	30%	46%	50%	27%

COVID response	All	Small	Large	Academic	NonAcademic
Made changes to its air handling protocols to adapt to the COVID-19 pandemic	65%	65%	67%	70%	61%
Of the 176 applicants that made changes to their air handling:					
Increase in outside air	66%	63%	71%	64%	69%
Increased number of air changes	57%	57%	57%	59%	55%
Discontinued use of HVAC setback	16%	16%	15%	11%	21%
Negative pressure rooms	76%	70%	83%	77%	75%
Negative pressure isolation rooms	70%	64%	77%	72%	69%
Other	14%	9%	18%	17%	10%
Of the 117 applicants that increased outside air, the air was utilized:					
100% outside air for entire facility	13%	9%	16%	10%	16%
By department or unit	79%	82%	76%	80%	78%
Other	4%	2%	6%	7%	2%

Energy efficiency and planning strategy	All	Small	Large	Academic	NonAcademic
Actively worked to reduce energy use, in alignment with Practice Greenhealth's Leaner Energy Goal	38%	38%	38%	48%	30%
Had a dedicated energy manager role	73%	74%	73%	71%	75%
Had a written plan to reduce energy use over time with timelines and goals	62%	64%	60%	69%	57%
Developed a strategic energy master plan	26%	24%	28%	32%	21%
Conducted a baseline energy audit for the institution in the past five years	54%	55%	53%	59%	50%
Engaged a retrocommissioning firm to optimize building performance	48%	45%	52%	63%	35%
Conducted continuous commissioning	50%	56%	44%	57%	45%
Purchased energy-efficient equipment that is ENERGY STAR-labeled	33%	31%	35%	40%	27%
Utilized submeters to better monitor energy efficiency opportunities	36%	27%	47%	57%	18%
When an ENERGY STAR label is not available for a given technology, considered energy performance as a part of cost of operation for the product	77%	78%	77%	73%	81%

ENERGY STAR-labeled product purchases	All	Small	Large	Academic	NonAcademic
Total spend on top 3 categories of ENERGY STAR-labeled products	$93,442,044	$7,994,579	$85,447,464	$92,930,539	$511,504
Median spend on top 3 categories of ENERGY STAR-labeled products	$110,511	$89,553	$182,719	$200,898	$31,059

Energy tracking and monitoring	All	Small	Large	Academic	NonAcademic
Used ENERGY STAR Portfolio Manager	82%	79%	85%	80%	84%
Of the 220 applicants that indicated they use ENERGY STAR Portfolio Manager:					
Benchmarked using ENERGY STAR Portfolio Manager	85%	86%	83%	80%	89%
Of those 47 applicants indicated they did NOT use ENERGY STAR Portfolio Manager:					
Used other software to benchmark the facility's energy performance	72%	75%	67%	88%	50%

Median energy metrics	All	Small	Large	Academic	NonAcademic
Energy use intensity (EUI) in kBtus per sq foot	225	213	238	230	215
ENERGY STAR Portfolio Manager EUI	232	228	238	241	229
Weather-normalized EUI (from ENERGY STAR Portfolio Manager)	233	229	236	241	231
ENERGY STAR score	64	59	67	66	59
Percent reduction in energy use intensity from baseline year (of those that reduced)	10%	9%	12%	9%	12%
Percent reduction in energy use intensity from previous year (of those that reduced)	4%	4%	4%	4%	4%

Practice Greenhealth compared to 2012 CBECS climate zones data	Very cold/Cold/Subarctic	Mixed-humid	Hot-dry/Mixed-dry/Hot-humid	Marine
CBECs number of hospitals reporting	118	110	100	15
Practice Greenhealth number of hospitals reporting	60	25	18	18
CBECs median energy use intensity (in kBtus/sq ft)	240	236	215	209
Practice Greenhealth median energy use intensity (in kBtus/sq ft)	231	219	211	232

Energy

Normalized energy use	All	Small	Large	Academic	NonAcademic
Total kBtus per square foot (EUI)	225	213	238	230	215
Total kBtus per adjusted patient day (APD)	1,550	1,550	1,560	1,760	1,410
Total kBtus per onsite FTE*	79,200	89,700	70,400	67,900	94,800
Total kBtus per operating room (OR)	14,500,000	14,200,000	14,900,000	15,100,000	10,700,000
Total kBtus per patient day	4,250	5,520	3,000	4,060	5,310
Total kBtus per licensed bed	801,000	928,000	703,000	822,000	720,000
Total kBtus per OR procedure	25,800	30,000	21,700	26,500	20,200
Total kBtus per staffed bed	952,000	1,201,000	798,000	991,000	898,000

Note: Total on-site full-time equivalents (FTEs) is the sum of FTEs, FTE physicians, FTE medical students, and contracted FTEs.

Energy reduction projects	All	Small	Large	Academic	NonAcademic
Percent of facilities reporting any energy efficiency projects	17%	13%	22%	23%	11%
Median energy savings per facility (in kBtus)	563,555				
Median energy cost savings per facility (in $)	$40,074				
Total energy efficiency savings in kbtus	78,189,199				
Total energy savings in dollars	$4,749,571				

Savings from cogen (combined heat and power/cogeneration project)	All	Small	Large	Academic	NonAcademic
Put a combined heat and power/cogeneration project into place in the last five years	4%	2%	6%	6%	2%
Total dollars saved last year from cogen projects	$12,267,835				

Energy project category	Median energy savings per project in kBtus	Median cost-savings per project	Number of projects reported with $ savings
Heating	500,000	$15,000	15
Cooling	3,183,690	$24,705	25
Lighting	282,048	$6,494	25
Medical technology	--	$45,788	1
Other	1,026,040	$4,805	9

Energy

Renewable energy	All	Small	Large	Academic	NonAcademic
Percent of facilities reporting any generation or purchase of renewable energy	29%	27%	31%	39%	18%
Median percent of energy portfolio from renewable sources (51 facilities with sufficient data)	2.3%	3.2%	2.2%	3.3%	1.3%
Median percent of onsite renewable energy (31 facilities with sufficient data)	0.4%	1.7%	0.1%	0.2%	0.7%
Median percent of offsite renewable energy (27 facilities with sufficient data)	6.3%	6.4%	5.5%	6.3%	5.7%
Total avoided greenhouse gas emissions from use of renewable energy sources (in MTCO2e)	76,840				
Total spend on renewable energy	$6,512,306				
Total KBTUs of renewable energy	752,267,036				

Type of renewable energy	Number of reporting facilities with onsite renewable energy	Number of reporting facilities with offsite renewable energy or RECs
Solar or photo-voltaic	30	5
Geothermal heating and electric	1	2
Biomass	0	1
Wind	0	20
Bio-gas	1	2

Median energy-related greenhouse gas emissions by fuel type (in metric tons of carbon dioxide equivalent--MTCO2e)	Baseline year GHG emissions by energy type	Previous year GHG emissions by energy type	Current Year GHG Emissions by Energy Type
Electricity (location-based)	8,664	8,878	8,502
Natural gas	3,453	3,993	4,009
Fuel oil (#2)	59	72	49
District steam	8,491	7,649	8,625
District hot water	2,579	339	1,528
District chilled water-electric driven chiller	7,444	7,507	6,340
District chilled water-absorption chiller using natural gas	19,867	15,193	16,033
District chilled water-engine-driven chiller natural gas	0	0	0
Diesel	20	31	27
Propane	75	62	69
Scope 1 (direct) energy-related GHG emissions total	3,352	3,755	3,464
Scope 2 (indirect) energy-related GHG emissions total	9,959	10,031	10,021

Energy

Total energy-related greenhouse gas emissions from fuel type (aggregate for all facilities reporting in MTCO2e)	Baseline year GHG emissions by energy type	Previous year GHG emissions by energy type	Current year GHG emissions by energy type
Electricity (location-based)	1,839,055	1,747,500	1,727,903
Natural gas	1,032,811	1,087,118	943,638
Fuel oil (#2)	37,492	16,925	18,127
District steam	418,116	356,982	373,229
District hot water	19,209	14,103	14,726
District chilled water-electric driven chiller	131,434	136,300	129,806
District chilled water-absorption chiller using natural gas	19,867	15,193	16,033
District chilled water-engine-driven chiller natural gas	0	0	0
Diesel	2,728	4,893	3,992
Propane	1,665	2,493	2,268
Scope 1 (direct) energy-related GHG emissions total	1,074,695	1,111,429	968,025
Scope 2 (indirect) energy-related GHG emissions total	2,427,680	2,270,078	2,261,697

Laundry	All	Small	Large	Academic	NonAcademic
Of the 27 that have onsite laundry:					
Have laundry machines that are ENERGY STAR-certified	33%	47%	10%	40%	25%
Median pounds per patient day of laundry processed on site	41	41	36	43	28

Water

Water planning and reduction strategy	All	Small	Large	Academic	NonAcademic
Submetered any departments and/or individual pieces of equipment	38%	40%	36%	44%	33%
Actively worked to reduce water use, in alignment with Practice Greenhealth's Less Water Goal	37%	41%	34%	49%	27%
Set measurable goals for the reduction of water use	39%	41%	35%	43%	35%
Had a written plan to reduce water use over time	40%	40%	38%	46%	34%
Conducted a water audit	37%	36%	37%	45%	30%
Benchmarked water usage	62%	64%	61%	64%	61%
Implemented any of the following strategies or technologies for the reuse of non-potable water					
Boiler blow-down collection for reuse	5%	5%	6%	8%	3%
Condensate collection for reuse	22%	18%	27%	29%	16%
Gray water reuse system	1%	1%	2%	3%	0%
Rainwater harvesting system	2%	3%	2%	4%	1%
Use of non-potable water for laundry	2%	3%	2%	4%	1%
Other	4%	2%	6%	6%	2%
Purchased any of the following US EPA WaterSense-labeled devices and equipment					
Bathroom sink faucets/accessories	30%	23%	37%	43%	18%
Flushing urinals	21%	18%	25%	33%	11%
Flushometer valve toilets	22%	20%	25%	31%	14%
Irrigation controllers	12%	8%	17%	15%	11%
Pre-rinse spray valves	3%	2%	5%	5%	2%
Showerheads	23%	19%	28%	31%	16%
Spray sprinkler bodies	4%	2%	6%	5%	3%
Toilets	20%	17%	25%	32%	11%

Median water use and savings	All	Small	Large	Academic	NonAcademic
Median water use intensity (gallons per square foot)	39.4	37.6	41.1	39.7	39.2
Cost of water per 1,000 gallons (kgal)	$6.75	$5.93	$8.17	$8.11	$5.82

Water

Normalized water consumption	All	Small	Large	Academic	NonAcademic
Gallons per cleanable square foot	50.5	48.4	54.1	51.4	48.8
Gallons per gross square foot	39.4	37.6	41.1	39.7	39.2
Gallons per total onsite FTEs	14,708	16,103	13,006	12,501	18,938
Million gallons per operating room (OR)	2.2	2.2	2.3	2.6	1.9
Gallons per adjusted patient day (APD)	277	301	265	297	239
Gallons per patient day	618	818	468	625	593
Gallons per staffed bed	140,785	167,164	118,366	158,855	126,638
Gallons per OR procedure	3,984	4,119	3,714	4,720	3,304

Indoor water consumption	All	Small	Large	Academic	NonAcademic
Median indoor gallons per square foot	37.1	36.8	38.4	36.8	38.5
Median indoor gallons per cleanable square foot	48.3	46.0	50.1	46.6	50.1
Median indoor gallons per FTE	12,435	13,446	11,600	12,448	12,435

Note: Indoor water use could only be calculated accurately for those who either had no irrigation or for those facilities that irrigated and also provided irrigation data (actual or estimated).

Irrigated landscapes	All	Small	Large	Academic	NonAcademic
Irrigated some landscaped areas	67%	58%	76%	70%	64%
Used any alternative landscaping methods that reduce the need for irrigation	40%	36%	47%	50%	32%
Of the 18 facilities that provided data on water savings from alternative landscaping methods:					
Median water savings (gallons) from alternative irrigation	50,000	21,346	400,000	71,256	50,000
Total gallons of water saved through alternative landscaping (all facilities)	6,424,265	3,076,102	3,348,163	3,520,845	2,903,420

Water use compared to other industry cohorts	All
Median water use intensity (gal/sq ft) for Practice Greenhealth hospitals (2020)	39.36 gal/sq ft
Median water use intensity (gal/sq ft) for CBECS inpatient health care facilities (2012)	46.3 gal/sq ft
Median water use intensity (gal/sq ft) for Grumman/Butkus health care facilities (2020)	40.7 gal/sq ft

Note: CBECS is the Commercial Building Energy Consumption Survey which is administered by the federal government every five years. Grumman/Butkus Associates is an engineering consultancy that has administered an annual energy benchmarking survey in the Midwest since 1995. Water costs and usage were added in 2006.

Water

Water reduction metrics	All	Small	Large	Academic	NonAcademic
Percent reduction in water use intensity from baseline year:	21%	20%	21%	19%	23%
Percent reduction in water use intensity from previous year:	12%	11%	13%	16%	10%
Note: Percent reduction calculated using current year gallons per gross square foot compared to baseline or previous year gallons per gross square foot. This includes only facilities that reduced their water use intensity.					

Water reduction projects	All	Small	Large	Academic	NonAcademic
Percent of facilities reporting any water reduction projects with gallons saved	7%	7%	8%	8%	6%
Median water cost-savings per facility from water reduction projects	$6,650	$2,481	$10,250	$10,000	$4,611
Median gallons of water saved per facility through water reduction projects	473,796	95,000	1,254,500	889,318	386,835
Total gallons saved through water reduction projects (19 facilities)	31,205,518	2,614,070	28,591,448	21,619,008	9,586,510
Total cost-savings through water reduction projects (20 facilities)	$394,828				

Green building

COVID-19	All	Small	Large	Academic	Academic
Did the facility have pre-determined flexible space it could utilize for surge capacity for the COVID-19 pandemic?	44%	37%	52%	53%	35%
Did the facility adapt other usable space to accommodate surge capacity for COVID patients during the pandemic?	57%	47%	68%	69%	45%

Green design and construction	All	Small	Large	Academic	NonAcademic
Designed and built any projects (>1000 sq ft) in the last five (5) years	52%	48%	57%	63%	42%
Integrated any green/sustainable aspects into Master Specifications for all new buildings/renovations	70%	75%	66%	75%	66%
Implemented a facility policy or commitment to design and construct all new buildings and/or major renovations to LEED (or another green building) design standard	65%	68%	63%	69%	61%
Required to build to a certain minimum LEED standard (certifiable) due to municipal, state, region or federal legislative requirements	21%	23%	19%	34%	10%
Required its designers, builders and contractors to have experience with LEED or other green building rating systems	51%	53%	50%	65%	40%
Used an integrated design process for all new building and major renovation projects	66%	65%	66%	79%	54%
Added language to contract specifications that building contractors will follow LEED or GGHC requirements and provide documentation	55%	56%	54%	65%	46%
Tracked loss days/productivity within green buildings	8%	10%	5%	10%	5%

Number of Leadership in Energy and Environmental Design (LEED)-certified projects completed	2020	Completed in past 5 years
LEED Platinum	0	6
LEED Gold	3	11
LEED Silver	2	17
LEED Certified	0	2
Total LEED projects	**5**	**36**
Total square footage of LEED projects providing square footage		**5,415,604**

Count of green building projects using these rating systems	2020	Completed in past 5 years
Designed to LEED but not certified	20	69
Followed GGHC	0	5
Green Globes	0	2
WELL Certified	0	0
Followed other rating system	8	40
Total square footage of green building projects not using LEED certification		**4,672,684**

Green building

Innovative green building elements	All	Small	Large	Academic	NonAcademic
Educated occupants on the benefits of its green building elements	43%	36%	50%	60%	28%
Installed any garden and green spaces for patients, visitors and staff	48%	39%	58%	69%	30%
Of the facilities that indicated yes, these areas were created:					
Green or living roof	27%	19%	33%	33%	15%
Green or living wall	12%	7%	16%	14%	9%
Healing garden	75%	71%	78%	73%	79%
Food-producing garden	31%	50%	17%	24%	44%
Other	41%	50%	34%	44%	35%

Avoiding chemicals of concern	All	Small	Large	Academic	NonAcademic
Consciously selected flooring, wall coverings, paints, materials, finishes, furniture, or exterior materials that avoid target chemicals of concern	42%	36%	50%	61%	25%

Of the 88 facilities that indicated which product categories were addressed to avoid chemicals of concern:	Avoided chemicals of concern	Included in specs
Wall coverings	13%	11%
Paints	33%	29%
Materials	26%	25%
Finishes	22%	21%
Furniture	20%	17%
Exterior materials	2%	2%

Energy and water-saving elements	All	Small	Large	Academic	NonAcademic
Implemented a building and renovation strategy that maximizes daylighting for patients, employees, visitors	61%	56%	68%	76%	49%
Installed water saving measures that will substantially reduce potable water use or reuse non-potable water	53%	50%	59%	63%	46%
Integrated design elements that will reduce or reuse process water	35%	30%	41%	46%	25%
Instituted other innovative green design and construction elements	36%	31%	41%	50%	24%
Installed energy systems that exceed ANSI/ASHRAE/IESNA Standard 90.1-2013	35%	32%	40%	48%	25%
Of the 74 facilities indicating yes to installing systems that exceed ANSI/ASHRAE/IESNA standard 90.1-2013:					
<10%	23%	26%	20%	30%	11%
10-25%	39%	38%	40%	41%	36%
>25%	28%	24%	33%	22%	39%

Green building

Construction & demolition debris	All	Small	Large	Academic	NonAcademic
Recycled construction & demolition debris (C&D)	59%	53%	66%	73%	45%
Of the 61 facilities that provided valid recycling numbers:					
Median percent recycling rate for construction and demolition debris	73%	69%	75%	72%	76%
Achieved a minimum 80% construction and demolition debris recycling rate	38%	13%	58%	51%	11%
Total tons of construction and demolition debris recycled	49,768				

Demonstrating climate leadership	All	Small	Large	Academic	NonAcademic
Facilities tracking GHG emissions as a key metric and reporting progress at regular intervals	44%	45%	44%	45%	43%
Tracking market-based Scope 2 emissions	13%	10%	17%	14%	12%
Made a formal external commitment to climate change or a signed a commitment	58%	59%	57%	57%	58%
Of the 121 facilities indicating a formal external commitment to climate change, the commitments were:					
Cool Food Pledge	7%	0%	14%	15%	0%
Divestment from or frozen future investments in fossil fuels	30%	29%	32%	24%	35%
Health Care Climate Challenge	62%	62%	63%	42%	79%
Health Care Climate Council	69%	68%	72%	55%	82%
Federal/state/regional/local commitment	13%	6%	21%	27%	2%
University Presidents' Climate Leadership Commitment (higher education institutions only)	3%	0%	7%	7%	0%
We Are Still In	42%	37%	49%	35%	48%
Other	48%	48%	47%	53%	44%
Advocated for or promoted policies or regulations that protect public health from the causes of climate change (e.g. testifying or submitting comments at public hearings, Op Eds, sign-on letters/statements, meeting with public officials to educate or lobby)	38%	38%	39%	35%	41%
Of the 102 facilities that have promoted policies or regulations that protect public health from the causes of climate change, the following levels of policies were indicated:					
At the local level	45%	39%	51%	67%	27%
At the state level	79%	84%	75%	76%	82%
At the federal level	76%	86%	67%	72%	80%
Provided education on the connection between climate and health to its staff, patients, clinicians and/or the community	51%	50%	52%	58%	44%
Of the 136 facilities that provide education on the connection between climate and health to its staff, patients, clinicians and the community, the following groups were engaged:					
Staff	90%	91%	88%	93%	85%
Patients	51%	59%	44%	49%	55%
Community	56%	59%	53%	53%	60%
Physicians	83%	84%	82%	86%	80%
Nurses	82%	84%	79%	83%	80%
Other health professionals	71%	75%	66%	68%	73%
None	0%	0%	0%	0%	0%

Demonstrating climate leadership	All	Small	Large	Academic	NonAcademic
Facilities providing green employee benefits to support climate change solutions for their employees at home indicated the following strategies:					
Employee home solar discounts	21%	24%	18%	20%	22%
Electric bicycle discounts	6%	7%	5%	6%	5%
CSAs	16%	12%	21%	22%	11%
Fossil fuel-free retirement options	10%	9%	12%	6%	14%
Alternative transportation discounts/stipends	51%	45%	60%	68%	38%
Other	27%	22%	33%	33%	22%
Incorporated climate change language or a connection to climate change in activities of the Community Health Needs Assessment (CHNA) process for community benefit	30%	31%	30%	24%	36%
Monitors air quality and notifies vulnerable patient populations	19%	18%	19%	19%	18%
CEO or Board of Directors identified climate change as a business risk by requiring regular reporting on climate change mitigation and preparedness	14%	12%	17%	24%	6%

Climate mitigation	All	Small	Large	Academic	NonAcademic
Generated or purchased renewable energy	29%	27%	31%	39%	18%
Median percent of energy from renewable sources	2.3%	3.2%	2.2%	3.3%	1.3%
Set either a GHG reduction or renewable energy goal	43%	44%	44%	43%	44%
Purchasing carbon offsets	2%	1%	4%	4%	1%

Climate goals	All
Of the 98 facilities reporting any goal, the following have set this goal type:	
Carbon net positive	28%
Carbon neutral	13%
Greenhouse gas reduction	34%
Renewable energy	43%
Aggressive energy reduction	10%
Other	4%

Current year emission reduction projects	Sum of all facilities	Median per facility	Median per square foot	Count of facilities contributing
Of the 31 facilities reporting any carbonemissions reduction project:				
MTCO2e savings from GHG emission reduction projects for all hospitals	78,586	1,046	1.60	21
Cost-savings from GHG emission reduction projects for all hospitals (for projects with cost-savings)	$3,044,515	$90,060	$83	14
Expenditures for GHG emission reduction projects for all hospitals (for projects costing money)	$172,741	$51,330	$73	3

Scopes 1 & 2 energy-related emissions per facility	All
Median MTCO2e from scope 1 & 2 energy-related emissions per facility	15,057
Of the 63 facilities that decreased total energy-related MTCO2e:	
Median percent decrease from baseline in MTCO2e from baseline for scope 1 & 2 energy-related emissions per facility	10%
Of the 43 facilities that increased total energy-related MTCO2e:	
Median percent increase from baseline in MTCO2e from baseline for scope 1 & 2 energy-related emissions per facility	7%

Scopes 1 & 2 energy-related emissions per square foot	All
Median MTCO2e per thousand square feet from scope 1 & 2 energy-related emissions	18
Of the 82 facilities that decreased energy-related MTCO2e per square feet:	
Median percent decrease in MTCO2e per thousand square feet from scope 1 & 2 energy-related emissions	12%
Of the 24 facilities that increased energy-related MTCO2e per square feet:	
Median percent increase in MTCO2e per thousand square feet from scope 1 & 2 energy-related emissions	4%

Distribution of scopes 1 & 2 energy-related emissions per square feet	10th percentile	25th percentile	Median	75th percentile	90th percentile
Due to the difference in greenhouse gas emissions per KBTU based on energy source, MTCO2e per square foot for energy-related emissions has a wide range.					
MTCO2e (energy-related) per thousand square feet	12	15	18	21	26
Note: In this analysis, 90th percentile is a reflection of the highest rate of carbon emissions (worst)--not the "best" performance point, as is typical.					

Change in total MTCO2e per facility	All
Of the 72 facilities that decreased total MTCO2e	
Median percent decrease from baseline in MTCO2e from baseline per facility	12%
Of the 33 facilities that increased total MTCO2e	
Median percent increase from baseline in MTCO2e from baseline per facility	7%
Note: We are not providing total MTCO2e per facility because most facilities did not provide all categories, and the number and type of categories of MTCO2e emissions provided varied too widely for a total, per facility, or per square foot number to be valid.	

Climate

Change in total MTCO2e per square feet	All
Of the 88 facilities that decreased total MTCO2e per square feet:	
Median percent decrease in MTCO2e per thousand square feet from total GHG emissions	14%
Of the 18 facilities that increased total MTCO2e per square feet:	
Median percent increase in MTCO2e per thousand square feet from total GHG emissions	4%

Percent reduction in emissions from anesthetic gases from baseline year	All
Percent change in MTCO2e per anesthesia case from baseline year	52%

Climate resilience activities for all applicants	Yes	Started but not completed	Percent of facilities reporting any progress
Analyzed local disaster risks due to climate change and its role in addressing them	38%	28%	66%
Reviewed the evidence of health risks from climate change (from local public health epidemiology/vulnerability assessments: e.g. migration of vector borne diseases, extreme heat, etc.) that may impact its community	55%	21%	76%
Participated in city, regional, or state climate resilience planning efforts	27%	34%	61%
Acted on one or more of top vulnerabilities to improve the resilience of building infrastructure, energy, water, and food systems	29%	32%	61%
Engaged in long term activities that restore and improve functioning ecosystem services	20%	40%	60%
Engaged in long term activities that restore and improve functioning ecosystem services in order to foster more resilient communities (e.g. working to preserve or restore ecosystem services - forests, coastal zones, wetlands, river basins, fisheries)	20%	40%	60%
Developed a plan and included climate risks in both facility and regional emergency preparedness planning and implementation for addressing key health care service delivery needs during or following extreme weather events such as cold or heat waves, hurricanes, droughts, wildfires	49%	26%	75%
Completed an assessment tool (such as the Building Health Care Sector Resilience Toolkit), and developed an action plan to address climate change-related building and infrastructure vulnerabilities	12%	49%	61%

Extreme weather	All	Small	Large	Academic	NonAcademic
Facility was impacted in the past year by an extreme weather event	17%	12%	23%	17%	18%
Of those impacted by an extreme weather event:					
Facility's response to the extreme weather event was complicated by the COVID-19 pandemic	59%	63%	57%	50%	67%

Transportation

Transportation leadership	All	Small	Large	Academic	NonAcademic
Is the facility actively working to reduce the impact of transportation on the environment and the local community in alignment with Practice Greenhealth's Transportation Goals?	50%	50%	52%	65%	39%
Has the facility designated someone to manage Transportation functions for the facility (including parking management, fleet management, commuter programs and incentives, etc.)?	30%	27%	34%	42%	20%
Does the facility participate in regional transportation planning?	30%	21%	42%	45%	18%

Fleet vehicle strategies	All	Small	Large	Academic	NonAcademic
Does the facility have a policy that includes environmental criteria for vehicle purchases?	17%	17%	17%	28%	7%
Additional fleet vehicle strategies used to reduce mobile fuel emissions and toxins					
Route/vehicle informatics and optimization	18%	15%	22%	30%	8%
Nitrogen to inflate tires to increase fuel efficiency	2%	3%	1%	4%	0%
Lead-free wheel weights	3%	4%	3%	6%	1%
Re-refined motor oil	5%	5%	5%	9%	1%
Other	10%	9%	11%	10%	10%

Transportation

Fleet vehicles fuel and emissions	All	Federal facilities	Non-federal facilities	Academic	NonAcademic
Percent of facilities indicating a particular fuel type is used for fleet vehicles:					
Gasoline	89%	73%	96%	86%	94%
Gasoline-electric hybrid	28%	70%	11%	39%	14%
Biodiesel (B20)	7%	14%	4%	10%	2%
Biodiesel (B100)	0%	0%	0%	0%	0%
Diesel	52%	84%	39%	56%	47%
Diesel-electric hybrid	2%	5%	1%	2%	2%
Electricity	13%	9%	14%	17%	6%
E85 ethanol	24%	70%	5%	32%	13%
Fuel cell electric-hydrogen	0%	0%	0%	0%	0%
Natural gas (CNG)	3%	5%	2%	3%	2%
CNG-electric hybrid	1%	2%	1%	2%	0%
Propane	1%	2%	0%	0%	2%
Median percent of all vehicles using alternative fuel	54%	73%	29%	56%	51%
Median percent of new vehicles using alternative fuel (purchased/leased in 2020)	88%	82%	100%	66%	66%

Note: Federal facilities are notably advanced in the area of fleet management. Federal requirements for greener fleet vehicles have existed for a number of years and the difference in progress is clear when comparing 73% versus 29% for federal vs non-federal facilities using alternative fuels.

Change in GHG emissions from fleet vehicles fuel	All
Median change from baseline of GHG emissions from purchased fleet vehicles in MTCO2e (Scope 1)	31%
Median change from baseline of GHG emissions from leased fleet vehicles in MTCO2e (Scope 3)	34%
Median change from baseline of GHG emissions from all fleet vehicles	29%

Transportation

Electric vehicle infrastructure	All	Small	Large	Academic	NonAcademic
Has the facility installed EV charging stations?	35%	23%	49%	42%	28%
Of the 84 facilities that installed EV charging stations, this percentage installed these types of stations:					
Type 1 EV chargers (120-volt)	33%	31%	35%	43%	27%
Type 2 EV chargers (240-volt)	76%	69%	79%	89%	74%
Direct current (DC) "fast" chargers (480-volt)	4%	0%	5%	7%	0%
Median number of charging stations per facility	5	3	6	6	4
Median number of charging stations per 1000 FTE	1.9	3.7	1.5	1.2	2.8
Total number of charging stations all facilities	1,071	125	946	891	180
Access to EV charging stations:					
Available to employees, free of charge	18%	6%	31%	26%	11%
Available to employees, self-pay	10%	9%	12%	8%	12%
Available to public, free of charge	10%	5%	17%	14%	8%
Available to public, self-pay	14%	13%	16%	13%	16%
Available for fleet vehicles	6%	4%	8%	10%	2%

Idle reduction	All	Small	Large	Academic	NonAcademic
Does the facility have a policy, guidance or protocols that address idle reduction?	20%	11%	29%	30%	11%
Has the facility worked to reduce idling from ambulances?	26%	19%	34%	40%	14%

Telehealth	All	Small	Large	Academic	NonAcademic
Does the facility provide telehealth services?	72%	71%	75%	82%	64%
Did the facility (or outside authority) require eligible outpatient visits be delivered via telehealth for any period of time in the past year due to the COVID-19 pandemic?	44%	40%	48%	58%	31%
Facilities or outside authorities required eligible outpatient visits be delivered via telehealth for the following lengths of time:					
0-2 weeks	5%	6%	5%	1%	12%
2-4 weeks	3%	4%	3%	5%	0%
4-6 weeks	8%	2%	13%	11%	2%
Longer than 6 weeks total	64%	72%	57%	64%	64%
Other	3%	2%	3%	1%	5%
The following types of outpatient visits have been transitioned to telehealth:					
Home health care	17%	16%	19%	23%	12%
Mental health	44%	38%	51%	60%	31%
Occupational therapy	27%	22%	32%	38%	18%
Physical therapy	28%	24%	33%	41%	18%
Primary care	45%	41%	49%	61%	31%
Pre-surgery testing	20%	19%	22%	26%	15%
Rehabilitation	26%	23%	30%	33%	20%
Specialty care	37%	33%	43%	50%	26%
Urgent care (screening, triage)	21%	17%	26%	29%	14%
Wellness	35%	33%	39%	46%	26%
Other	11%	7%	15%	16%	7%
Does the facility calculate the environmental benefits, particulate matter or greenhouse gas emissions reduction associated with its telehealth visits?	14%	15%	14%	14%	15%
Median percent of telehealth visits out of total outpatient visits in 2019	2%	2%	1%	2%	1%
Median percent of telehealth visits out of total outpatient visits in 2020	10%	6%	13%	14%	5%
Median percent increase in telehealth visits: 2019 to 2020	909%	216%	2338%	1015%	279%

Transportation

Telework	All	Small	Large	Academic	NonAcademic
Did the facility direct any non-clinical, administrative or ancillary staff to telework for any period of time during the COVID-19 pandemic?	48%	43%	54%	55%	42%
Facilities that directed staff to telework did so for the following lengths of time:					
0-2 weeks	2%	2%	1%	1%	2%
2-4 weeks	1%	2%	0%	0%	2%
4-6 weeks	2%	0%	3%	1%	2%
Longer than 6 weeks total	85%	86%	83%	86%	82%
Other	5%	2%	9%	5%	5%
Median percent of FTEs who teleworked in baseline year (2019)	2.6%	2.0%	3.0%	3.0%	2.0%
Median percent of FTEs who teleworked in current year (2020)	9.8%	9.0%	10.0%	15.0%	5.0%
Median percent increase in telework: 2019 to 2020	253%	137%	261%	346%	101%
Does the facility calculate the environmental benefits, particulate matter or greenhouse gas emissions reduction associated with employees who telework?	10%	9%	11%	15%	6%

Supply chain and transportation	All	Small	Large	Academic	NonAcademic
Does the facility include EPA SmartWay partnership in its vendor selection criteria for distributors/suppliers/carriers?	26%	31%	22%	14%	37%
Of those that include SmartWay partnership in vendor selection criteria:					
Median percent of top 10 distributors/suppliers/carriers that are EPA SmartWay partners	10%	10%	10%	25%	10%
Has the facility reduced days/frequency of delivery for any suppliers?	26%	25%	27%	22%	29%

Transportation

Employee commute	All	Small	Large	Academic	NonAcademic
Does the facility conduct an annual survey to collect mode of transportation by employees commuting to work?	18%	11%	26%	25%	12%
Of 49 facilities that conducted a survey:					
Median percent single-occupant vehicle (SOV) rate (number of single occupancy (drive alone) commute trips divided by total number of commute trips)	56%	0%	56%	44%	78%
Median percent reduction in SOV commute trips from baseline year	13%	0%	13%	9%	24%
Percentage of facilities that have implemented the following strategies to support alternative commuters:					
Cash bonus for employees who do not drive alone to work	5%	2%	8%	8%	2%
Provide emergency ride home for alternative commuters	17%	10%	25%	26%	10%
Participate in employee alternative commute recognition and award programs	12%	7%	19%	17%	9%
Percentage of facilities that have implemented the following strategies to support employees who walk and bike to work:					
Bikeshare stations and/or loaner bicycles	11%	4%	20%	18%	6%
Free or discounted bicycles or bicycle service	10%	8%	11%	7%	11%
Participate in Bike to Work Day, Ecochallenge, National Bike Challenge	20%	12%	29%	27%	14%
Provide bike racks, bike paths, walkways, and shower facilities for alternative commuters	40%	30%	51%	54%	27%
Free or discounted membership with bikeshare services	10%	7%	14%	10%	11%
Other	12%	8%	16%	15%	10%

Employee commute	All	Small	Large	Academic	NonAcademic
Percentage of facilities that have implemented the following strategies to support employees who use public transit and carpool/vanpool/shuttle rideshare services:					
Free or subsidized public transit pass	26%	17%	37%	38%	17%
Incentives for vanpool drivers	16%	11%	21%	23%	10%
Shuttle services	22%	9%	36%	39%	8%
Free or discounted membership with rideshare services	18%	13%	23%	22%	14%
Carpool matching services	20%	13%	28%	25%	16%
Other	7%	1%	13%	11%	3%
Percentage of facilities that have implemented the following strategies to encourage visitors and staff to use alternative transportation modes:					
Charge visitors	15%	1%	31%	27%	5%
Charge employees	15%	1%	30%	27%	4%
Provide preferred parking for carpool vehicles	20%	12%	30%	28%	14%
Provide preferred parking for electric vehicles	21%	15%	28%	25%	18%
Other	6%	6%	6%	9%	3%

Long term care

A long term care facility is defined by Practice Greenhealth as a facility with overnight beds but no operating rooms, including skilled nursing facilities, assisted living and memory care facilities, behavioral health facilities, long-term acute-care hospitals, and rehabilitation hospitals.

Category	Metric	Median value	90th Percentile
	Recycling as a percent of total waste	26%	53%
	RMW as a percent of total waste	0.8%	0.2%
	RMW pounds per staffed bed/day	62.8 lbs.	22.5 lbs.
	Total pounds of waste per staffed bed	3.9 lbs.	1.8 lbs.
	% spend on 5 target green cleaners	56%	100%
	% spend on healthy interiors	36%	63%
	Pounds meat per total food budget	0.055 lbs.	0.043 lbs.
	% change in MTCO2e from meat	Insufficient data	Insufficient data
	% sustainable meat (by weight)	Insufficient data	Insufficient data
	% spend on sustainable food and beverages	8%	15%
	% spend on local food and beverages	13%	59%
	Avg % spend on targeted sustainable procurement	22%	54%
	% EPEAT spend	100%	100%
	Energy use intensity (EUI) in kBtus per square foot	174	58
	% change in EUI from baseline year	14%	57%
	ENERGY STAR score	94 out of 100	99 out of 100
	Total gallons per square foot	33	17
	% change in water use	39%	58%
	Indoor gallons per square foot	31	16
	Gallons per FTE	25777	10362
	% renewable energy	Insufficient data	Insufficient data
	% change in energy-related scope 1 & 2 MTCO2e	10%	37%
	% alternative fuel vehicles	48%	78%
	% construction and demolition waste recycled	84%	96%

Academic medical centers

An academic medical center is defined by Practice Greenhealth as a hospital attached to a university medical school and/or a teaching hospital affiliated with a medical school. These hospitals are training grounds for residents, medical and nursing students, Ph.D. candidates, and post-doctoral researchers. Some academic medical centers (126 of the 193) include on-site research facilities, which host laboratories and other research amenities that can contribute to their environmental footprint.

	Metric	Non-academic medical centers median	Academic medical centers with no on-site research median	Academic medical centers with on-site research median	All hospital applicants
	Recycling as a percent of total waste	28%	28%	27%	28%
	RMW as a percent of total waste	6.9%	7.6%	8.5%	8.0%
	RMW tons per OR	3.8	5.9	8.4	5.4
	Total pounds waste per patient day	46.7	39.5	48.3	46.6
	Total tons waste per OR	73.0	85.3	105.2	84.2
	% spend on 5 target green cleaners	30.7%	63.7%	33.5%	33.4%
	% spend healthy interiors	95.5%	89.6%	83.5%	89.6%
	% of OR kits reviewed	100%	100%	100%	100%
	Pounds SUDs collected per OR procedure	0.49	0.54	0.54	0.53
	# reusable product types (out of 32)	5	7	7	6
	% ORs with HVAC setback	10%	29%	13%	17%
	MTCO2e from inhaled anesthetics per OR procedure	0.0331	0.0466	0.0567	0.0413
	Pounds meat per total food budget	0.057	0.056	0.049	0.055
	% change in MTCO2e from meat	19%	17%	22%	20%
	% sustainable meat (by weight)	14%	20%	22%	17%
	% spend on sustainable food and beverages	6%	11%	10%	8%
	% spend on local food and beverages	4%	10%	10%	7%
	Avg % spend on targeted sustainable procurement	18%	20%	22%	19%
	% EPEAT spend	66%	92%	99%	96%
	% green spend on copy paper	100%	49.8%	98.6%	100%

	Metric	Non-academic medical centers median	Academic medical centers with no on-site research median	Academic medical centers with on-site research median	All hospital applicants
	Energy use intensity (EUI) in kBtus per square foot	215	213	233	225
	% change in EUI from baseline year	12%	9%	10%	10%
	ENERGY STAR score (out of 100)	59	68	66	64
	Total gallons per square foot	39.2	41.4	39.4	39.4
	% change in water use	21%	23%	21%	16%
	Indoor gallons per square foot	38.49	36.91	36.63	37.14
	Gallons per FTE	18,938	15,733	11,792	14,708
	% renewable energy	0.3%	2.2%	7.4%	2.3%
	% change in energy-related scope 1 & 2 MTCO2e	10%	8%	10%	10%
	% alternative vehicles	51.4%	64.2%	55.6%	54.3%
	% construction and demolition waste recycled	76%	79%	71%	73%

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