

Enhance CT workflow, minimize waste, and conserve natural resources by opting for a sustainable alternative¹

CT motion™

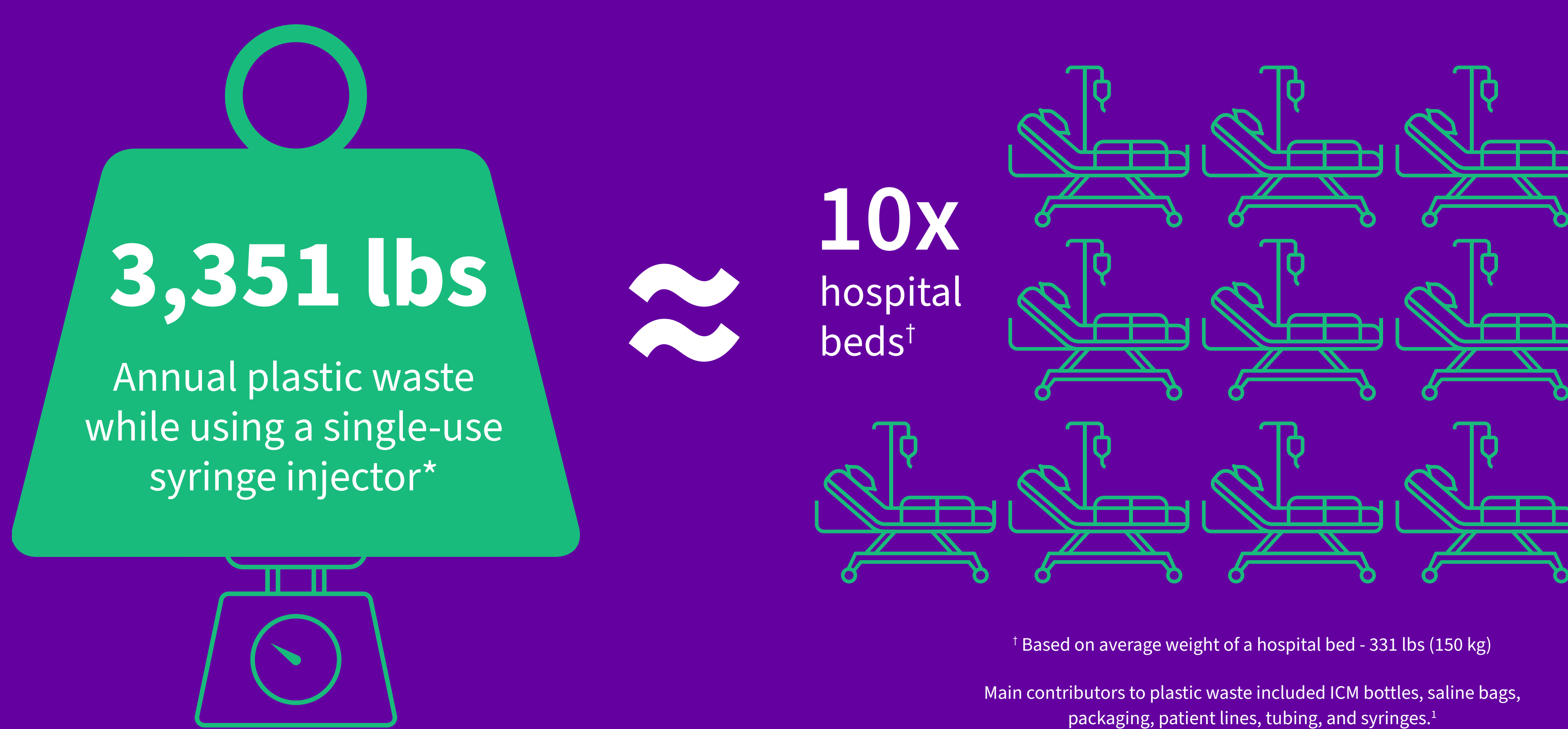
Toia G, et al. Consumable Material Waste and Workflow Efficiency Comparison Between Multi-use Syringeless and Single-use Syringe-Based Injectors in Computed Tomography, Acad Radiol. 2023 Oct;30(10):2340-2349. doi: 10.1016/j.acra.2023.05.038



Syringeless power injectors eliminate the process of reloading single dose iodinated contrast media (ICM) and plastic syringes before every exam. This study evaluates the potential time and material waste (ICM, plastic, saline, and total) using a multi-use syringeless injector compared to a single-use syringe-based injector. The potential time saved through workflow benefits and administering contrast using MUSI may improve CT technologist workflow efficiency. 1,444 contrast-enhanced CT exams were performed using each injector over a 16-week period in this observational study.¹

Plastic waste reduction

CT motion™, a multi-use syringeless injector (MUSI), offered an **84.6% reduction in plastic waste** when compared to a single-use syringe injector (SUSI)¹

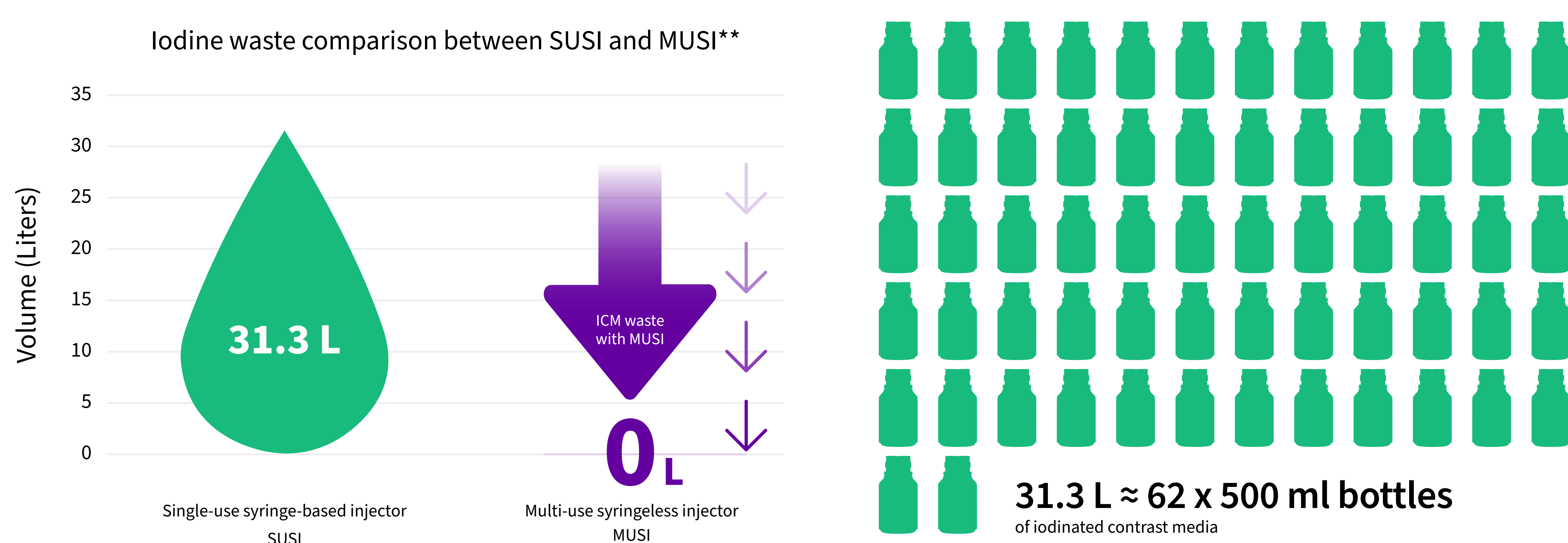


The estimated potential cost savings of plastic waste reduction over a **16-week period amounted to \$7,200 or approximately \$23,400 annually.**¹

Results are unique to UW Madison's analysis and may not be extrapolated or generalized to other settings

Contrast media waste reduction

CT motion demonstrated a **complete elimination of iodinated contrast media waste** when compared to a single-use syringe injector¹

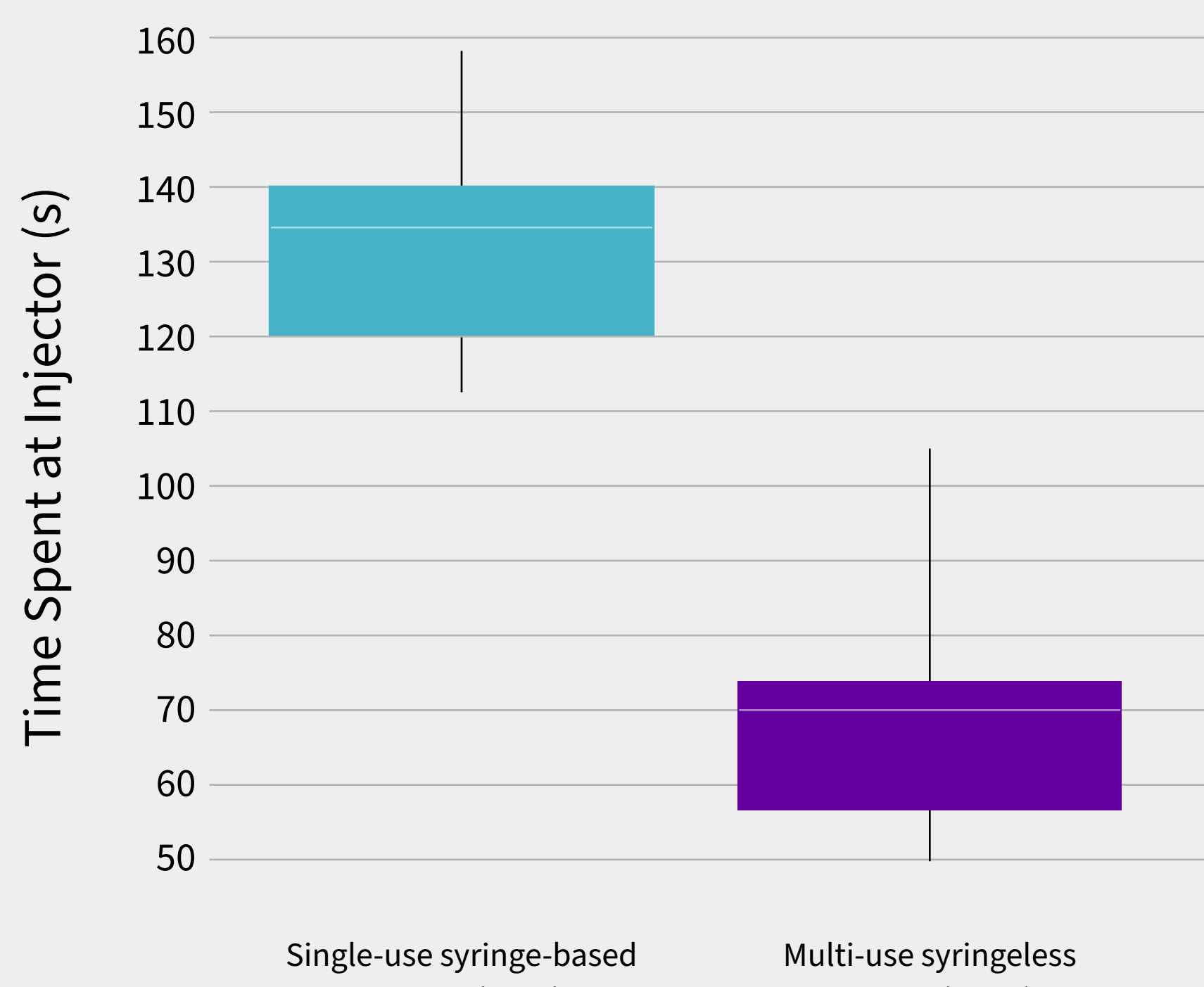
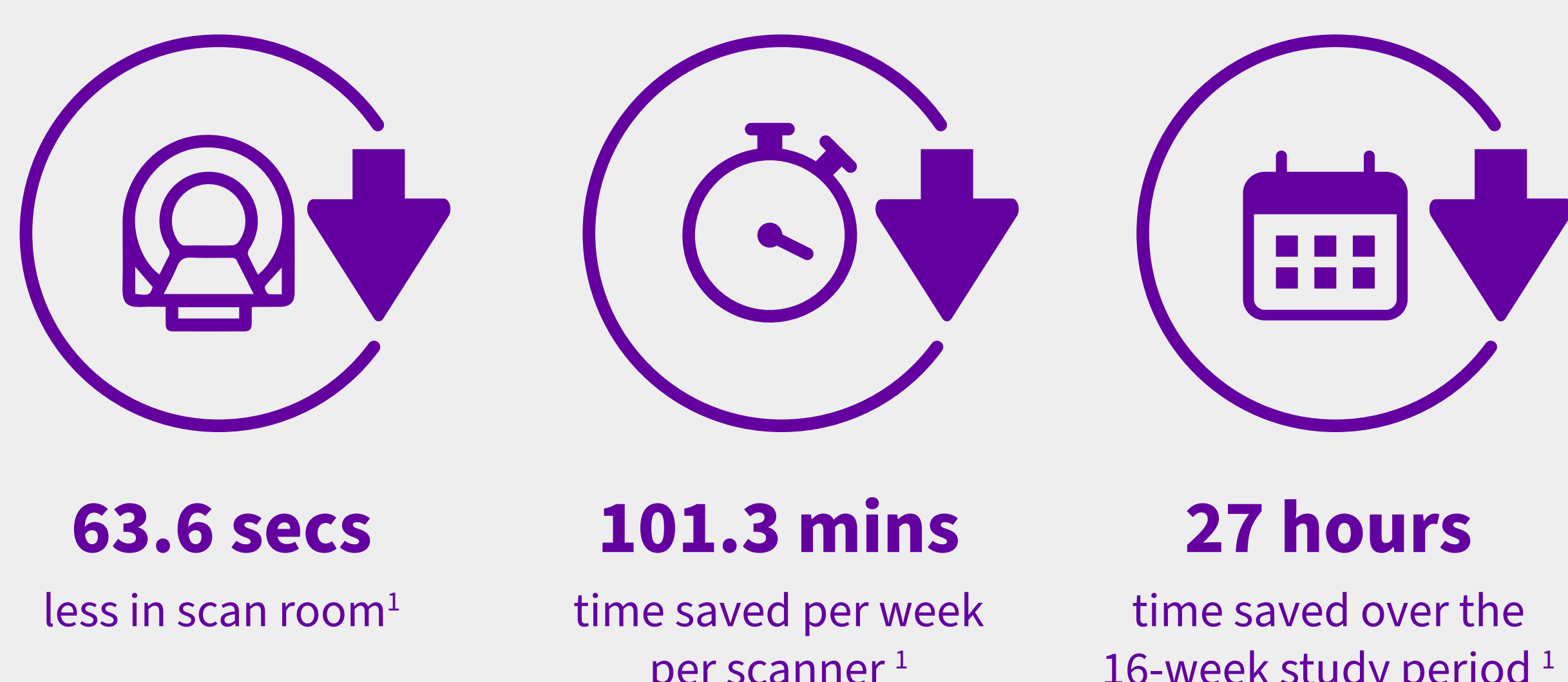


**1,444 contrast-enhanced CT exams were performed using each injector over a 16-week period in this observational study. Patients weights for 25th/50th/75th percentiles were 152/183/224 kg, contrast volumes for 25th/50th/75th percentiles were 85/100/116 mL. The study did not include (or provide) age or gender information.¹

Time savings for an increased workflow

CT technologists spent **63.6 seconds less per patient in the scan room** with a multi-use syringeless injector (MUSI) when compared to a single-use syringe injector (SUSI)¹

Based on a typical scanner in our fleet examining approximately 30 patients per day over a 5-day work week³



¹CT technologists spent on average 63.6s less in the scan room and 23.1s more with the injector interface, totaling an average time saved per exam of 40.5s using MUSI.

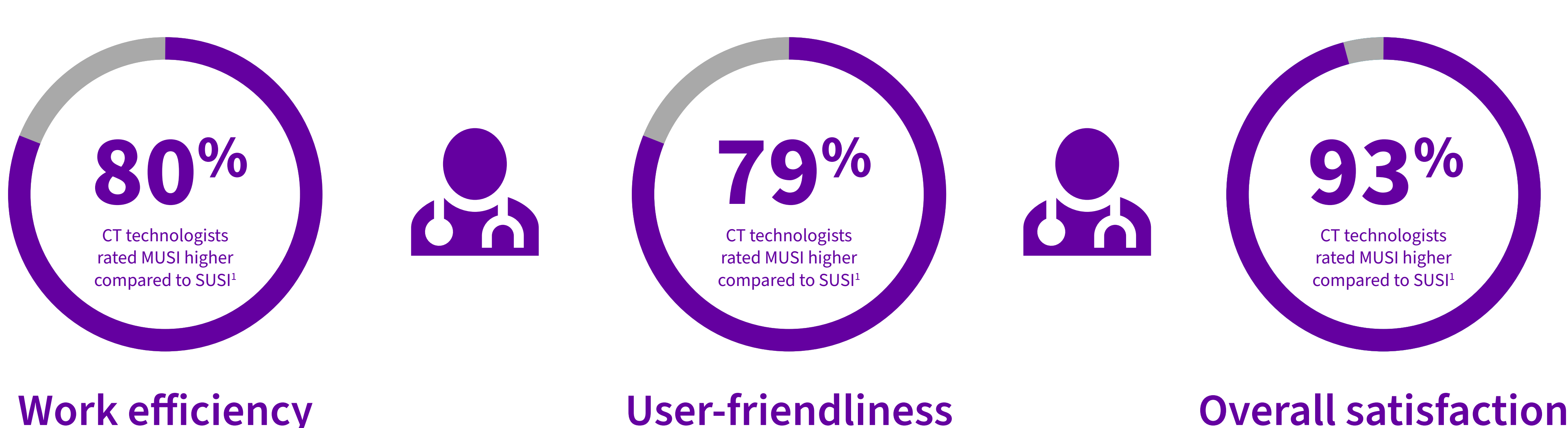
Time savings data are reported as mean [95% confidence intervals]. On average CT technologists spent 63.6 (51.1, 76.01) seconds less in the scan room with MUSI compared to the SUSI (p < .001).¹ N=15



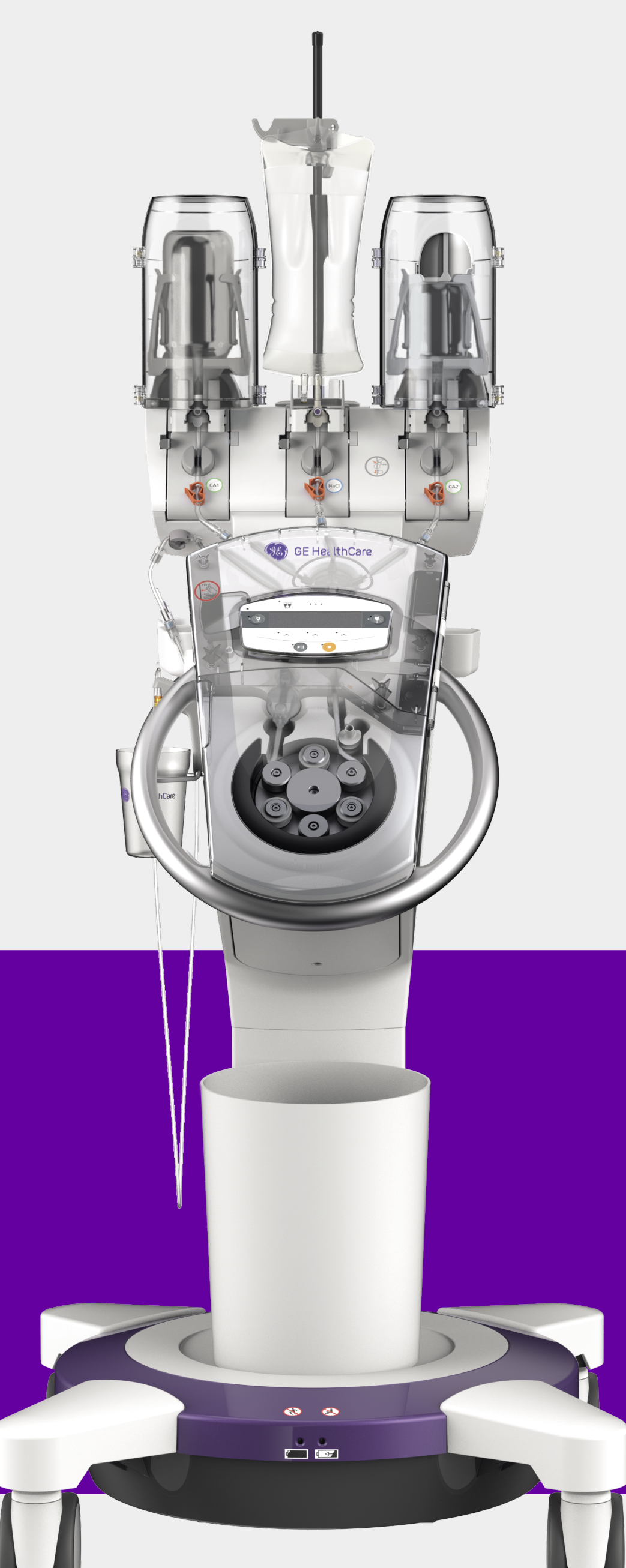
The forecasted time savings over a full clinical day, amplified across an entire CT fleet could be substantial and allow CT technologists to focus on other patient-centered tasks¹

Technologist satisfaction

CT motion, a multi-use syringeless injector, outperformed the single-use injector in terms of workflow efficiency, ease of use and overall performance[‡]



[‡]Overall, technologists rated MUSI work efficiency, user-friendliness, and overall satisfaction (strongly or somewhat improved) higher than SUSI (p < .05).¹ CT Technologist Satisfaction Scores comparing the multi-use syringeless injector to single-use syringe-based injectors - Technologists subjectively rated work efficiency, user-friendliness, and overall satisfaction after a 1-month period using newly installed multi-use syringeless injectors.¹ N=15



Compared with the single-use based injector (SUSI) the CT motion, a multi-use syringeless injector (MUSI), offers:

- **84.6% reduction** in plastic waste¹
- **100% reduction** in wasted iodinated contrast media¹
- **101.3 minutes of time saved** per scanner per week¹
- **Lower costs** due to reducing or eliminating contrast media and plastic waste per exam
- **Technologist satisfaction** in work efficiency, user-friendliness and overall satisfaction¹

CT motion™

The potential time saved through the workflow benefits and administering contrast using MUSI may improve CT technologist efficiency.

Study Limitations: Results are unique to UW Madison's analysis and may not be extrapolated or generalized to other settings. The saline waste volume for a multi-use syringeless injector was 52.5 l, compared to the single-use injector, which recorded a lower volume of 43.3 l. The waste savings are reflective of a mathematical model which extrapolated waste on known ICM volumes per patient and nominal measurements of saline and plastic waste which are not expected to change on a per patient basis.

References:

1. Toia G, et al. Consumable Material Waste and Workflow Efficiency Comparison Between Multi-use Syringeless and Single-use Syringe-Based Injectors in Computed Tomography, Acad Radiol. 2023 Oct;30(10):2340-2349. doi: 10.1016/j.acra.2023.05.038