

### 398 Theatre Waste Management and the Impact of COVID-19

C. Luney<sup>1</sup>, C. Little<sup>2</sup>

<sup>1</sup>Buckinghamshire Healthcare NHS Trust, Stoke Mandeville, United Kingdom,

<sup>2</sup>Oxford University Hospitals, Oxford, United Kingdom

**Introduction:** Audit of waste management in an elective orthopaedic complex was interrupted due Covid-19 pandemic. We investigated the impact of the enforced changes on theatre waste due to Covid-19.

**Method:** Over a 1week period data on waste bag availability and number of bags of each category of waste per surgical case in an elective theatre complex was collated; this was compared to waste generated during Covid-19 pandemic.

**Results:** Prior to Covid-19 only clinical waste bins were available in many non-dominant clinical areas providing evidence of inappropriate routine disposal of domestic/recyclable waste. Pre-Covid-19 a mean of 6 waste bags were used per surgical case (3.7 yellow clinical bags, 1.3 black domestic bags, 0.4 clear recycling bags), with Covid-19 changes to waste management practice the mean number of waste bags used per case increased to 11 (9 orange contaminated bags, 0.5 black, 0.3 clear bags).

**Conclusions:** Clinical waste management has a significant economic and environmental impact. Covid-19 has led to nearly all waste being deemed to be contaminated and so requiring incineration, with increased volumes of waste generated per case through widespread adoption of PPE. This has increased cost and reduced the ability to recycle non-contaminated waste.