

**Results** Composition from different manufacturers varied widely. Most common materials were high global warming potential (GWP) waste (polyethylene, polypropylene and acrylonitrile) and low GWP waste (stainless steel). Significant differences were found for the forceps (0.31–0.47 kg of CO<sub>2</sub> equivalent (CO<sub>2</sub>-eq)) and haemoclips (0.41–0.57 kg CO<sub>2</sub>-eq) between the manufacturers. *Green mark* was established 131.26 cm for gastroscope and 195.32 cm for colonoscope. One-week activity produced 67.74 kg CO<sub>2</sub>-eq. Applying our sustainability intervention, we could reduce up to 27.44% (18.26 kg CO<sub>2</sub>-eq). This allows the recycling of 61.7% of the instrument total weight (4.69 kg).

**Conclusion** Knowledge of carbon footprint is crucial to select the most sustainable alternatives because there are large variations between brands. A mark to identify recyclable parts could reduce our environmental impact significantly.



Check for updates

© Author(s) (or their employer(s)) 2023. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** López-Muñoz P, Martín-Cabezuelo R, Lorenzo-Zúñiga V, et al. *Gut* Epub ahead of print.

## INTRODUCTION

Greenhouse gas (GHG) emissions derived from human activity play a crucial role in climate change.<sup>1</sup> Healthcare systems contribute significantly to the world's carbon footprint, representing 4.4%–5.4%

instrument between brands.

⇒ A sustainability intervention based on a mark on the instruments that identifies parts that can be recyclable could be able to reduce the amount of BMW and increase recyclable medical waste.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ It is important to assess the carbon footprint in kilogram of CO<sub>2</sub> equivalent of our consumables to raise awareness and change our clinical decision making.

⇒ Through innovative industrial solutions, we can move towards a more sustainable endoscopy.

GI endoscopy units represent the third largest producers of medical waste, divided into regular waste, recyclable waste and biomedical waste (BMW), the latter to be incinerated at high temperature resulting in harmful emissions.<sup>5,6</sup> Each single endoscopy procedure generates on average up to 2.1 kg of general waste, being regular waste (63%), BMW (28%) and recyclable (9%) waste.<sup>7</sup> Simple sustainability interventions such as team education