

# Green ICU Sustainability

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# Sustainable critical care - improving the triple bottom line

**Critical care services in Wales are inefficient, use large amounts of energy and create huge amounts of waste**

**People - Improve care for patients and staff by 2025/26**

**Planet - 40,000 kg of decarbonisation by 2025/26**

**Profit - £200k - £500k by the end of 2025/26**

| Actions                                        | People                                                                              | Planet                                                                                                 | Profit (economics)                                                                                                                                |
|------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Non Sterile Gloves use reduction               | Education and culture change. Patients would benefit from better hand hygiene       | Big reduction in waste. We use around 60 pairs of gloves per day per patient in Multiple Organ Failure | Current spend/annum = £110,000<br>50% of gloves worn when not needed.<br>Potential saving = £55,000.<br>Realistically more like <b>£20-30,000</b> |
| Reducing equipment on charge                   | Education                                                                           | Energy savings                                                                                         | We won't see savings to the directorate                                                                                                           |
| Equipment checks and rationalising plastic use | Daily checks                                                                        | Reduce plastic waste                                                                                   | Uncosted                                                                                                                                          |
| Self inflating bag waste reduction             | Rationalise use of reinflating resuscitation bag                                    | 500Kg /plastic<br>700Kg Carbon                                                                         | <b>£5000/yr</b>                                                                                                                                   |
| Non sterile drinking water for patients        | Patients complain about the taste of sterile water                                  | Carbon reduced emissions of 603Kg/annum                                                                | <b>£11,761/yr</b>                                                                                                                                 |
| Recycling enteral feed bottles                 | Recycle - 21000 bottles/yr                                                          | Reduce plastic waste disposal by 1 tonne/yr                                                            | A resource not waste                                                                                                                              |
| Patient bed day energy cost assessment         | Understanding of our impact                                                         | Need green energy source and renewables                                                                | Uncosted                                                                                                                                          |
| LED lighting installation                      |                                                                                     | More energy efficient                                                                                  | We won't see savings to the directorate                                                                                                           |
| Wash cups rather than disposable paper cups    | Culture change                                                                      |                                                                                                        | <b>£5000/yr</b>                                                                                                                                   |
| Rationalising CVC insertion packs              | Consultation process                                                                | Better use of resources                                                                                | <b>£10 00/yr</b>                                                                                                                                  |
| Automated office computer turn off             | Automated                                                                           | Better use of resources                                                                                | We won't see savings to the directorate                                                                                                           |
| <b>Rationalising propofol lines</b>            | <b>Less work for staff</b>                                                          | <b>More efficient</b>                                                                                  | <b>£20,000/yr</b>                                                                                                                                 |
| Virtual Follow Up Clinics                      | Patients are seen using IT platform Attend Anywhere                                 | Saves just over 1 tonne of Carbon/Yr                                                                   | Financial savings to patients and staff of reduced travel                                                                                         |
| Arterial blood gas analysis                    | Excess blood analysis and anaemia. Education and a SOP for when ABG should be taken | 90,000 ABG done/yr in critical care UHW alone                                                          | 10-20% reduction would save around <b>£15-30,000/yr</b> and around 20-40 litres of blood                                                          |
|                                                | <b>Better Care</b>                                                                  | <b>Planet</b>                                                                                          | <b>Total savings<br/>£90,000/yr</b>                                                                                                               |

# What do we have in place?

Greener Critical Care Network working group – we have representation from every critical care directorate in Wales

Directory of initiatives - in place

Tracker for savings - in place

Newsletter from critical care network with a focus on sustainability

Put into action our initial 90 day plan

The aim - £200-300,000 savings and 40 tonnes of carbon by 2025/26

Understanding our current phase of expansion

## Barriers:

1. Engagement with staff on the ground but poor buy in from executive and directorate level meaning staff do not have autonomy, permission or a mandate to progress this
2. Time not given to work on these projects – we could improve uptake and spread if time was allocated to this in each Health Board
3. Education - overall poor understanding at multiple levels that sustainable changes = **better value based health care for patients, staff and the planet**

# What we need to progress

**Buy in at Health Board Executive level** – a pledge to the triple bottom line from Board through to directorates

A directive to **Support for staff trying to implement change**  
- time and managerial support

Directorates to **Sign up to action plans with clear deliverable timescales** - delivered commitments with accountability