

Transforming lives of those impacted by Rare Diseases: Developing a digital Holistic Centre to reduce reliance on health and social care services and the climate impact of traditional NHS Services.

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Problem Statement

People affected by rare and undiagnosed diseases endure medical, emotional, psychological and social distress. Impacting on poor life experience and increased use of primary care, unplanned and emergency care to manage their conditions.

Aim Statement

By September 2025, we will have proven our concept of a one point of access digital Rare Care Centre for Wales, by achieving improved well-being with 70 individuals impacted by rare and undiagnosed diseases (and the potential of reducing healthcare utilisation). Resulting in a saving of 143,000 metric tonne of carbon in NHS Wales, and implementation of the Healthier Wales policy.

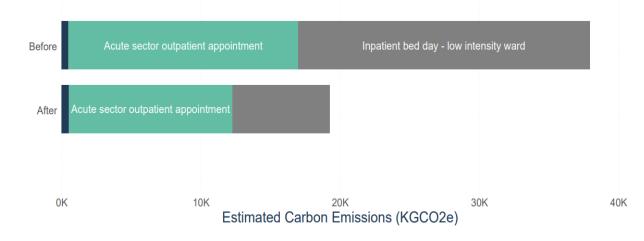




Data from Syndrome Without A Name (SWAN) Clinic

Total Estimated Carbon Emissions (KGCO2e) by Contact Type

Healthcare Unit ●A&E visit ●Acute sector outpatient appointment ●Inpatient bed day - low intensity ward



Number of contact days before and after clinic

Paediatrics before

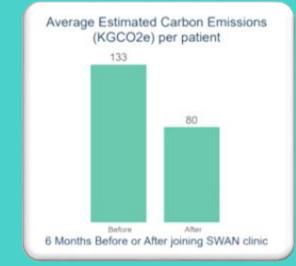
Adults before

Adults after

Adults after

Number of contact days were similar both before & efter clinic in edults and paediatrics, & decreased similarly in both groups after clinic centract (p=0.5).

Seneralized linear model model--simer/Number of contacts ~ Before va After * Sex * Adult vs Paediatric (1)PersonKey), family * Gamma(1)



As shown in the breakdown of contact types, this decrease in carbon emissions was likely driven by the decrease in inpatient stays among the SWAN Clinic patients. When looking at total carbon emissions for the cohort, there was an estimated **49**% decrease between the 6 months before and after attending the SWAN clinic.





In six months, the impact offering support online via the Wales Digital Rare Care Centre could have on reducing the carbon footprint of NHS services.

53 KGCO2e

One SWAN patient

19,000 KGCO2e 70 SWAN patients

371,000 KGCO2e 7000 Rare Disease Patients on CARIS

9 and half million KGCO2e

 180,000 estimated Rare Disease Patients in Wales





Barriers

Enablers

Risk Adverse organisation

Lack of resource allocation

Lack of strategic priority

Service user/clinical led

Free Digital Platform

Alternative lens of impact

Transformation Champion

Achievements

- Collaboration
- A joint vision
- Philanthropic support from Carecircle
- Different lens of impact
- The Wales Rare Care centre has been recently discussed as an exemplar at the **DAVOS** and **HIMMS** conferences.
- Transformation of Rare
 Disease service provision
 that can be scaled up to a
 once for Wales, and global
 answer to clinical and
 service user needs.

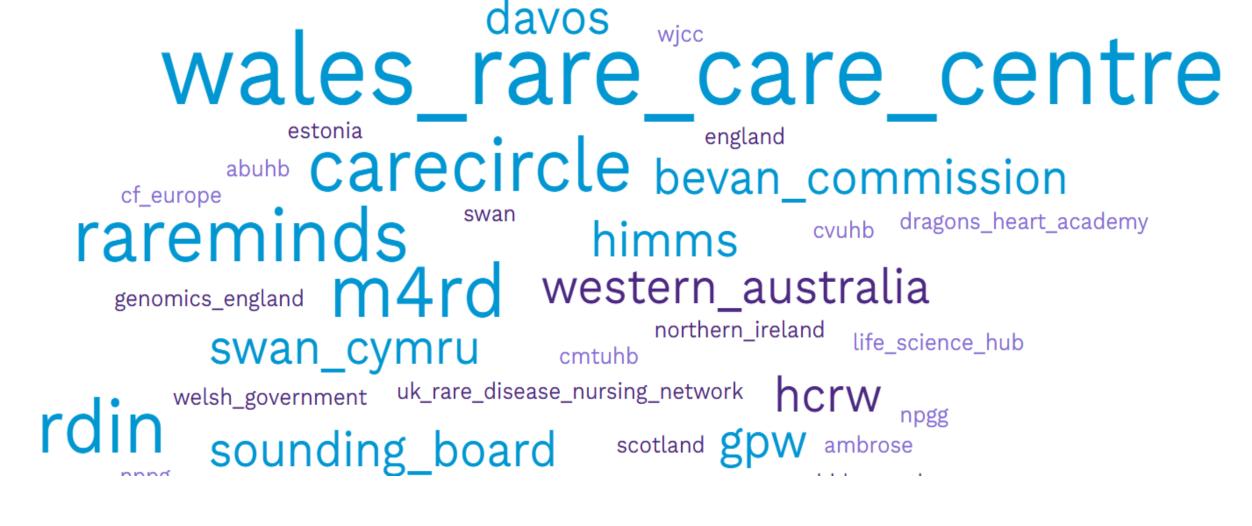


What we need to progress









Collaborations

