

Royal Cornwall Hospital (RCH) Healing Garden

Truro, Cornwall

Cormac in Partnership with Royal Cornwall Hospitals NHS (Treliske) Trust

BIG Biodiversity Challenge Award Category: **Habitat Creation: Project of Year Award (Small scale up to 0.5ha)**

Project overview (50 words max)

The Royal Cornwall Hospital in Truro opened the Healing Garden for critically ill patients on 21 September 2023. Featuring sensory plants, outdoor bed spaces and sculptures, it was funded by charitable donations. This therapeutic garden, first in the UK to include piped medical gases, enhances recovery through nature's healing benefits.

50 words



Before: An unloved and unused concrete courtyard. Credit: Cormac Solutions Ltd

What were the biodiversity conditions on site prior to the enhancement? (100 words max)

The baseline was a 250m² unused concrete courtyard devoid of biodiversity into a valuable habitat enhancing patient rehabilitation and biodiversity. The project was not mandated but exceeds objectives, offering numerous ecosystem services such as temperature regulation, carbon sequestration, and air quality improvement. Community involvement was immense: with volunteers, local gardeners, artists, consultants and contractors all working over and above their obligations.

The garden promotes physical and emotional healing, supporting local and national biodiversity policy and strategies. It had created a lasting legacy through its connection to nature, aiding recovery and mental health resilience for patients in the critical care unit.

100 words

What were the reasons behind this project? (100 words max)

The project created a therapeutic healing garden at the Royal Cornwall Hospital to enhance recovery for patients, families, and staff through contact with nature. It prioritised biodiversity, achieving sustainability goals and a biodiversity net gain. The garden mitigated previous courtyard neglect and has improved patient recovery outcomes. It reflects the hospital's commitment to corporate social responsibility and aligns with environmental, social, and governance (ESG) principles. The project supports hospital KPIs, such as patient satisfaction and quality care, while using local resources and adhering to NHS Net Zero Carbon Design Standards. Community involvement and sustainable practices were integral to its success.

100 words



Concept design: virtual reality presented to stakeholders. Credit: Lavigne Lonsdale

What were the biodiversity measures taken? (300 words max)

The Critical Care Healing Garden at the Royal Cornwall Hospital integrates biodiversity with patient care, creating a replicable model for therapeutic gardens. The garden is one of the UK's first therapeutic spaces with medical gases piped outdoors, demonstrating an innovative model other hospitals can follow to improve patient care through nature. Piping medical gases outdoors allows critically ill patients to spend time outside, enhancing recovery. The garden supports research showing nature exposure to nature significantly reduces blood pressure, respiration rate, and stress hormone levels and boosts immune functions.

The garden includes long-term maintenance plans involving community volunteers and staff, ensuring sustainability without burdening NHS resources. The project converted a 250m² unused courtyard into a vibrant garden with diverse plant species, creating a new habitat for local wildlife. The planting scheme, created by expert head gardeners from The Lost Gardens of Heligan and the National Trust's Glendurgan Garden, includes sensory plants attracting pollinators and beneficial insects, enhancing ecological value.

The garden replaced a neglected space with a biodiverse habitat, supporting various plant and animal species, resulting in a net gain in biodiversity. The garden contributes to local biodiversity action plans, supporting local initiatives by adding green space and diverse plant life, aligning with urban biodiversity goals. The project involved extensive community and staff engagement, including fundraising, public donations, and contributions from local artists and gardeners. Staff and volunteers participated in the design and implementation process, ensuring a collaborative effort and continue to support the garden ensuring its continuing exemplary appearance.

The project specifically emphasised reuse and recycling. Cormac donated surplus granite, used to create planting areas and the Medigas pillars, enhancing the garden's aesthetic sustainably. Many contributors, including Ward Williams Associates and Southwest Surfacing, volunteered time and resources free of charge, highlighting the community's role in realising the project.

298 words



Construction: Reuse of granite materials enhancing visual quality. Credit: Cormac Solutions Ltd



The rehabilitation bridge. Credit: Royal Cornwall Hospital (Treliske).

Further information (250 words max)

Installation

The **design** by Lavigne Lonsdale, incorporated sensory plants, seating, and features a 'rehabilitation' bridge. Extensive community and stakeholder involvement included the use of virtual reality goggles providing immersive previews.

1. **Construction:** Granite sett borders and 'Medigas' pillars were installed, along with a resin-bound surface. The feature bridge, timber pergolas, curved benches, and a wheelchair-accessible table were all bespoke constructions.
2. **Planting and Landscaping:** Local head gardeners and landscape teams added sensory plants and artistic elements, including a bronze dove sculpture by Kurt Jackson.

Monitoring processes:

- Regular evaluations of plant and animal species measuring biodiversity increases.
- Surveys assessing therapeutic impacts on patients (and staff).
- Continued community and staff engagement for volunteer maintenance.
- Monitoring patient use for rehabilitation and recovery.
- Evaluating impact of local biodiversity action plan enhancing the hospital's ecological footprint.

The legacy is an innovative, replicable model blending biodiversity and patient rehabilitation. It has created valuable wildlife habitats, engaged the community, and reused materials sustainably. This innovative garden, one of the first in the UK with piped medical gases, allows patients longer outdoor experiences. The diverse plant species increased local biodiversity, supporting various plant and animal species. Key lessons include the need for efficient sub-contractor setup and digital cost tracking. Volunteer and pro-bono involvement required manual cost reviews, suggesting a digital format would be more efficient.

Incorporating the **BIG Biodiversity Challenge** met broader environmental goals, raised local biodiversity awareness, and enhanced the natural ecosystem. The garden significantly improves patient rehabilitation, reducing stress and improving recovery outcomes.

Opening Ceremony for media and ^{249 words} stakeholders
with Robin Hanbury-Tenison OBE
Credit: Royal Cornwall Hospital (Treliske).



Creation of a biodiverse environment. Credit: Royal Cornwall Hospital (Treliske).





Project Team

Client(s)/Funder(s)

The client is Steve Williamson, Chief Executive Officer, Royal Cornwall Hospitals NHS (Treliske) Trust. All the funding for this £135,000 project was raised by local donations.

Other design team members

- Kym Vigus, dedicated Critical Care Nurse
- The renowned Cornish explorer Robin Hanbury-Tenison OBE, Robin as former patient and his wife Louella as primary motivators and fundraisers
- The [Royal Cornwall Hospitals Charity](#) were responsible for the coordination of the fund raising and donations.
- Cormac
- South West Surfacing Specialists Ltd.
- Ward Williams Associates,
- Nick Fish, Landscape Architect, Lavigne Lonsdale
- Mark Holman of local landscape firm 'The Palace Gardener'

Volunteer organisations

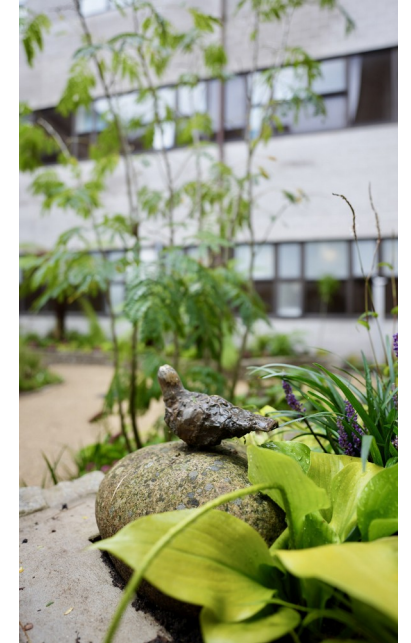
- Many individuals and groups volunteered their time, resources, and expertise, reflecting a collective desire to contribute positively to the hospital environment and support patient recovery.
- Head gardeners Charles Fox from the National Trust's Glendurgan Garden and Alasdair Moore from The Lost Gardens of Heligan.
- Local filmmaker Peter Champness created a documentary free of charge.
- Support to the project was also given by Lord Markham from the New Hospital Programme and the Lord Lieutenant of Cornwall.

What was the motivation for carrying out the enhancement? (100 words max)

The motivation behind the creation of the Critical Care Healing Garden at the Royal Cornwall Hospital was driven by a combination of organisational goals, individual passion, and community involvement. The Hospital project team had set the standard for all their projects to achieve a biodiversity net gain of at least 10%.

The project was driven by Kym Vigus, a dedicated Critical Care Nurse, and Robin Hanbury-Tenison OBE, inspired by his recovery from Covid in a similar garden. Their personal experiences highlight the healing power of nature, motivating them to champion biodiversity awareness into the creation of this beautiful garden.

99 words



Sculpture by Kurt Jackson.

Credit: Royal Cornwall Hospital (Treliske)