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SUNGUARDING® ANGLESEY: A COMMUNITY-BASED PILOT TO IMPROVE PUBLIC AWARENESS OF UV RISK AND SKIN CANCER PREVENTION AT TREARDDUR BAY, NORTH WALES

Jean Ross, Teifi Jones, Keith Roberts and Michelle Baker

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SUNGUARDING® ANGLESEY: A COMMUNITY-BASED PILOT TO IMPROVE PUBLIC AWARENESS OF UV RISK AND SKIN CANCER PREVENTION AT TREARDDUR BAY, NORTH WALES

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INTRODUCTION

The Sunguarding Anglesey Pilot, situated in North Wales, United Kingdom (UK) was a community-based application of the Melanoma Fund's established Sunguarding prevention model. Delivered through a collaboration between the Melanoma Fund, Isle of Anglesey County Council, student nurses from Otago Polytechnic, Dunedin, New Zealand, local Beach Wardens, and community partners, the pilot applied elements of the prevention model within a coastal setting at Trearddur Bay, Wales. Its purpose was to improve public awareness (among the beachgoers) of ultraviolet (UV) radiation, encourage sun-protection practices, and explore the practical requirements for delivering a place-based skin cancer prevention initiative. Activities included educational resources, access to free sunscreen, public engagement, media communications, and an initial evaluation. The pilot generated substantial public and media engagement and provided implementation learning to inform potential future development across Anglesey. This case study describes how the student nurses' community assessment informed the design and delivery of the Sunguarding Anglesey Pilot. It examines what was implemented at Trearddur Bay, the public and stakeholder response, and the practical and evaluation lessons that should shape any future expansion.

Background and purpose

The Sunguarding Anglesey Pilot originated from a community development and clinical practice initiative undertaken by nursing students from Otago Polytechnic, Dunedin, New Zealand during 2025. Community development is a core component of the Bachelor of Nursing (BN) curriculum, preparing student nurses to address health inequities and fulfil nursing's social mandate. Students learn to engage collaboratively with communities to promote participation, sustainability, social justice, and health improvement. This approach, grounded in public health, aligns with systems thinking to reduce health inequity and improve social determinants of health (Ross & Mann, 2026). Public health nursing recognises the interconnectedness of human health, environmental wellbeing, and population outcomes. As communities often lack the resources required to comprehensively assess health needs (Ross, 2019) and implement solutions, nursing students provide valuable assistance to achieve this under the supervision of Registered Nurses (RNs) from the School of Nursing at Otago Polytechnic by completing a community development project.

The RN for this project was Professor Jean Ross who grew up in the local area before moving to work in New Zealand.

The development pathway was sequential: the student-led community assessment identified local UV-related needs and opportunities; these findings informed recommendations for Trearddur Bay; the recommendations were then integrated with relevant components of the Melanoma Fund's existing Sunguarding model; and the resulting pilot was implemented and evaluated to generate learning for future delivery.

Trearddur Bay

This community development project focused on the Trearddur Bay community situated on the Isle of Anglesey, North Wales, UK (Figure 1).

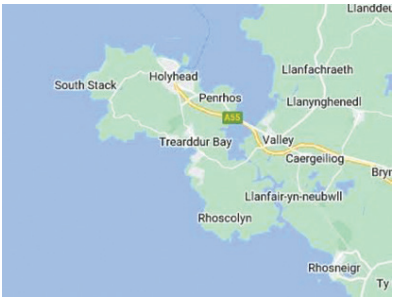


Figure 1. Trearddur Bay Map | Anglesey. Source: Google Maps.

Trearddur Bay is located on Holy Island about five kilometres south of Holyhead on the Irish ocean. The village developed as a seaside resort and takes its name from the medieval figure Iarddur. Today it combines a traditional Welsh coastal character with a strong tourism industry. It has hotels, holiday cottages, public bars, restaurants, a sailing club, golf courses, and local shops, making it a popular holiday destination throughout the year, centred on its beach and promenade (Figure 2). The community had a resident population of 1,686 in 2022 (Census Data, n.d.).



Figure 2. Trearddur Bay beach and promenade. Photograph: Jean Ross.

Trearddur Bay is known for its attractive sheltered sandy beach, with safe bathing areas, rock pools, clear waters, and relaxed coastal atmosphere, and is one of the most popular seaside villages in Anglesey, North Wales. The average annual water temperature in Trearddur Bay is 11.4°C, with the highest monthly average of 15.9°C occurring in August and the lowest monthly average of 7.1°C occurring in March (Climate Data, n.d.). The mild summer temperatures encourage beachgoers (both residents and tourists) to visit Trearddur Bay beach. As well as swimming or walking dogs, the beach is also well known for water sports including sailing, kayaking, paddleboarding, scuba diving, fishing, and boating. An additional new attraction is the Anglesey coastal path which passes through the area, offering scenic walks to several other local beaches and the South Stack Lighthouse and nature reserve (Figure 1). The nature reserve is famous for seabirds, including puffins during the breeding season, and offers spectacular sea-cliff views (Isle of Anglesey County Council, n.d.).

COMMUNITY DEVELOPMENT PROJECT

The Otago Polytechnic community development project was guided by the Community Health Assessment Sustainable Education (CHASE) Model (Ross et al., 2023) (see Table 1). CHASE is a community development framework that supports student nurses through stages of engagement, community assessment, health need identification, and implementation of health promotion initiatives.

Through community profiling and assessment, students examined the socio-political, demographic, cultural, economic, environmental, and sustainability contexts of the Trearddur Bay community. Primary and secondary data were collected and analysed using a strengths, weaknesses, opportunities and threats (SWOT) framework to determine health needs and population groups. The assessment identified a key health concern related to the potential risk of skin cancer for beachgoers.

CHASE Model	Relation to this project
Community	Trearddur Bay Beach, Isle of Anglesey, North Wales
Health	Skin protection of beachgoers became the identified health need.
Assessment	A collection of primary and secondary data was assessed and analysed related to the Trearddur Bay community.
Sustainable health	Protecting beachgoers against skin cancer.
Education	Active engagement with the Trearddur Bay beachgoers, leading to innovative systems-thinking to identify concerns and improve health by creating a health promotion message and resources.

Table 1. The CHASE Model as it relates to this project.

Ethical considerations

Several important ethical considerations underpinned this community development project and contributed to its credibility, integrity, and relevance. Formal ethics approval was obtained from the Otago Polytechnic School of Nursing Ethics Committee prior to commencement. Category B ethics approval ensured that student nurses were able to engage in discussions and email correspondence with community stakeholders in a manner that protected their anonymity and confidentiality in all correspondence. Rather than imposing predetermined solutions, students worked alongside stakeholders to identify community priorities and health concerns. This participatory approach aligns with community development principles of empowerment, autonomy, and shared decision-making (Ross et al., 2023).

Identified issue

The increasing risk of skin cancer among both residents and tourists (beachgoers) in Trearddur Bay was the focus of this pilot project. Trearddur Bay's popularity as a coastal recreation site, alongside UV exposure and a general lack of public education on sun safety, increases the risk of UV-related skin damage and disease. This led to the following project question: How can UV exposure education help reduce the risk of skin cancer among beachgoers of all ages at Trearddur Bay?

To address this question, a thorough review of evidence-based literature was conducted by the student nurses which identified a significant increase in the incidence of skin cancer, particularly

non-melanoma skin cancer. This review revealed that in 2020 skin cancer was the most diagnosed cancer in Wales (Public Health Wales, 2025). Furthermore, the literature reviewed revealed there was a lack of understanding of the risks associated with UV exposure and skin cancer by the public. This is concerning, as UV radiation remains the primary cause of all forms of skin cancer (Raymond-Lezman & Riskin, 2023). While brief sun exposure has recognised health benefits, such as Vitamin D synthesis and mood regulation, the risks of overexposure, particularly in a country with rising skin cancer rates like Wales, are significant and preventable (Abbott et al., 2024; Barnes et al., 2019). Robertson and Fitzgerald (2017) go as far as to suggest that approximately 86 percent of diagnosed skin cancers among UK youth could be prevented using education and promotion of improved sun safe behaviours.

A national survey of Welsh primary schools found that 39 percent of responding schools had a formal sun safety policy, although only 82 percent of those schools with such a policy reported enforcing it (Abbott et al., 2024). The study also identified gaps in curriculum provision and the availability of protective infrastructure. However, the survey did not establish why schools assigned differing levels of priority to sun safety. It would therefore be inappropriate to infer causation from these findings. The results instead indicate a need for further research into the organisational, educational and practical barriers affecting the adoption of sun safety measures in schools.

EVIDENCE: SKIN CANCER AND MELANOMA IN WALES

Skin cancer remains one of the most significant and preventable public health challenges in Wales. Public Health Wales reported that the age-standardised incidence rate increased by 7.1 percent between 2016 and 2019, reaching 469.8 cases per 100,000 population (Public Health Wales, 2023; Welsh Cancer Intelligence and Surveillance Unit, 2023). This continuing increase highlights the growing burden of skin cancer on individuals, healthcare services, and the wider health system.

The latest Welsh Cancer Intelligence and Surveillance Unit (WCISU) report, covering cancers diagnosed between 2002 and 2022, shows that, excluding non-melanoma skin cancer, the annual number of cancers diagnosed in Wales increased by 31 percent over this period (Public Health Wales, 2023; Welsh Cancer Intelligence and Surveillance Unit, 2025).

Melanoma, although less common than non-melanoma skin cancer, remains the most serious form of skin cancer because of its ability to spread to other parts of the body. Across the UK, an average of 19,392 people are diagnosed with melanoma each year, making it the fifth most common cancer. Incidence rates have increased by 164 percent since the early 1990s and by 26 percent over the most recent decade for which comparable statistics are available (Cancer Research UK, 2023).

According to Cancer Research UK (2023), around 2,600 people die from melanoma each year in the UK. Cancer Research UK estimates that approximately 86 percent of melanoma cases are preventable and attributable to exposure to UV radiation from sunlight and sunbeds. This reinforces the importance of effective primary prevention and creating environments that make sun-protective behaviours easier to adopt.

For Wales specifically, Cancer Research UK (2023) reports that 88 percent of melanomas with a known stage were diagnosed at Stage I or Stage II between 2017 and 2019. Early diagnosis is associated with significantly better outcomes, highlighting the importance of helping people

recognise suspicious skin changes and seek medical advice promptly. Collectively, these data demonstrate that skin cancer remains a substantial and largely preventable public health challenge. Whilst public awareness of the dangers of UV radiation has increased considerably over recent decades, incidence continues to rise. This raises an important implementation question: How do we translate awareness into consistent everyday behaviour? The Sunguarding Anglesey Pilot was developed in response to this challenge. Rather than focusing solely on awareness, it seeks to support the consistent adoption of sun-protective behaviours by combining education with practical infrastructure, visible behavioural prompts, and organisational leadership. The Sunguarding Anglesey Pilot provided an opportunity to explore how this implementation model could be applied within a real community setting and, importantly, what lessons could be learned to strengthen future place-based prevention initiatives.

SUNGUARDING EDUCATIONAL RESOURCES AND IMPLEMENTATION TOOLS

Sunguarding is an established prevention programme developed by the Melanoma Fund to support the adoption of sun- and heat-protective practices across schools, sport, outdoor recreation sites and facilities, and workplaces. Its model combines education with behavioural prompts, practical infrastructure, and organisational support. Existing resources include age-appropriate educational materials for primary schools, guidance for teachers and organisations, and the free online Sunguarding Course for people responsible for others outdoors. The Anglesey Pilot did not create Sunguarding; rather, it applied selected elements of this existing model at Trearddur Bay beach in a coastal community setting and incorporated recommendations arising from the student-led community assessment and evidence-based literature review. This led the student nurses to review their findings alongside the Melanoma Fund's existing Sunguarding resources. This process identified where established resources could be used and where locally relevant additions were required. Aligned with the overarching goals of increasing sun safety awareness and access, the student nurses' health promotion initiatives (see the recommendations below) featured bilingual educational posters and a free sunscreen dispenser which had the potential to make a meaningful impact.

The student nurses' recommendations aimed to benefit beachgoers at Trearddur Bay, including local residents and visitors. They proposed reaching this audience through bilingual sun-safety information, access to free sunscreen and educational materials displayed at the beach and in local businesses. The resulting recommendations combined the existing Sunguarding approach with bilingual communication and public access to sunscreen. Together, these elements were intended to make sun protection more visible, accessible, and relevant to beachgoers including residents and visitors. In a nation where skin cancer is one of the most diagnosed cancers, education and awareness remain fragmented, largely left to individuals and organisations, with no standardised or widespread public messaging. Despite past public health campaigns, limited success has been achieved, highlighting the need for a more comprehensive and culturally relevant approach. In a community as connected as Trearddur Bay, the health and wellbeing of its members are vital to overall cohesion and the maintenance of a healthy, sustainable environment.

RECOMMENDATIONS

Recommendation 1: Place educational posters in both Welsh and English at Trearddur Bay beach and at local businesses (Figure 3).

Evidence: The posters highlight the risks associated with activities such as sunbathing which can be harmful due to elevated levels of UV exposure (Ziaj et al., 2020). Displayed in prominent local businesses and public establishments, the posters were highly visible to the community, serving as an engaging and accessible source of awareness and education through visually appealing design.

Rationale: Aesthetic posters placed in local businesses aimed to catch the attention of patrons and visitors, while also sharing key information about UV exposure, common myths, and recommended sun-safe behaviours. During the Anglesey Pilot, QR codes on the UV Safety Station (Figure 4) provided access to Sunguarding information and educational resources, extending engagement beyond the immediate provision of sunscreen. This form of health promotion has contributed to the overall wellbeing of the community by providing accessible, foundational information that not only introduces the topic of skin protection but also empowers individuals to make informed choices about their health.

The posters were intended as a place-based educational prompt, using bilingual information at the beach and in local businesses to explain UV risk and practical ways to protect the skin. These posters presented valuable, easy-to-digest information about UV exposure, skin cancer, common misconceptions, and recommended strategies for effective protection against UV damage. This represents an educational approach that has been identified as playing a key role in the prevention of skin cancers (Robertson & Fitzgerald, 2017). When implemented alongside the following recommendations, the posters can contribute to a comprehensive strategy for promoting sun-safe behavioural change.

Recommendation 2: Install free sunscreen dispensers at Trearddur Bay beach to improve access to protection and normalise its daily use (Figure 3).

Evidence: UV exposure is the primary cause of all forms of skin cancer, and a substantial number of diagnosed cases are preventable through the promotion of sun-safe behaviours (Raymond-Lezman & Riskin, 2023; Robertson & Fitzgerald, 2017). A highly effective and widely endorsed protective measure against UV damage is the regular application of sunscreen with a sun protection factor (SPF) of 30 or higher (Cancer Research UK, 2023).

Rationale: Complimentary sunscreen dispensers enhance the public visibility of this preventive measure, functioning as a tangible reminder to apply sunscreen. This recommendation aims at improving public access to sunscreen, which is anticipated to increase its usage and foster more consistent adoption of sun-safe practices. In addition, the sunscreen dispenser aims to improve access to essential sun protection in highly visible areas, such as beach entrances. This increased accessibility encourages greater use of sun protection measures by beachgoers.

Recommendation 3: The student nurses also recommended providing UV-detecting stickers to alert individuals to real-time sun intensity and encourage protective behaviours.

Evidence: It is common for individuals to apply sunscreen only once and neglect reapplication; however, as noted by the Wales UV Index (2025), sun-related skin damage can occur after as little

as 45 minutes of unprotected exposure, even in low UV conditions. Therefore, a clear reminder to reapply sunscreen would be highly beneficial in preventing sunburn and encouraging consistent sunscreen use.

Rationale: Sun stickers are designed to be applied before sunscreen use and then covered with sunscreen. During this process, the sticker changes from visible to transparent. When it becomes visible again, it signals that it is time to reapply sunscreen. Ideally, the individual will then repeat the process by reapplying sunscreen.

Note: Recommendation 3 was not implemented due to financial constraints.

Overall aim

The overall aim of the community development project was to promote lifelong learning and support sun-safe behaviours across all ages of beachgoers through embedding health education in public spaces and ensuring sun protection was accessible, visible, and appropriately inclusive. Education alone is not enough; practical, visible resources are also needed to support a behavioural shift. This initiative sought to improve community wellbeing, reduce preventable skin cancer rates, and encourage a long-term shift in attitudes toward preventative skin cancer rates in Trearddur Bay (Centres for Disease Control and Prevention, 2026). The Community Strategies to Lower Skin Cancer Risk (Centres for Disease Control and Prevention, 2026) supports pairing sun-safety information with practical access to protection such as shade and sunscreen. The educational messages in English and Welsh were therefore paired with visible, practical support, including access to free sunscreen, an approach consistent with community-level skin cancer prevention guidance (Centres for Disease Control and Prevention, 2026). In addition, the information was made available in Braille.



Figure 3. Sunguarding stand at Trearddur Bay beach. Photograph: Jean Ross.

SUNGUARDING ANGLESEY PILOT

The Sunguarding Anglesey Pilot built directly on the community development project facilitated by Jean Ross (Otago Polytechnic, Dunedin, New Zealand) and the student nurses who conducted the Trearddur Bay community development project. The pilot included two of the three recommendations mentioned above whilst supporting the evidence-based literature which identified a clear gap in public education around UV exposure, particularly at popular beach areas on Anglesey. This work provided the foundation for this initiative, moving from insight to action by translating evidence into a live, community-led prevention model under the Sunguarding movement, which is endorsed by the Welsh Sports Association (WSA) and supported by Sport Wales.

Community partnerships

The success of this Sunguarding Anglesey Pilot has relied heavily upon local knowledge, community participation, and strong partnerships between stakeholders including:

Professor Jean Ross: academic advisor and co-designer of the Trearddur Bay community development project, and her student nurses who created the health-promotion framework, providing oversight of pilot alignment with evidence and evaluation design.

Isle of Anglesey County Council: Coordination, permissions, and communications.

Keith Roberts: engagement with Beach Wardens, Royal National Lifeboat Institute (RNLI) relationships, local community engagement, and activities associated with community events.

Teifi Jones: contribution through tourism leadership, communications management, media engagement, evaluation, and stakeholder development.

RNLI Lifesavers: operation, maintenance, and integration with beach-safety programmes

Public Health Wales: integration with national prevention messaging.

Michelle Baker: CEO, Melanoma Fund and strategic lead for Sunguarding, providing the behaviour-change framework, educational resources, implementation tools and strategic direction for the pilot.

Purpose

The purpose of the Sunguarding Anglesey Pilot was to explore the feasibility of applying selected elements of an established sun-safety model within a coastal community setting. It sought to increase awareness of UV risk, make sun protection more visible and accessible, and identify the operational requirements and evaluation measures needed for future delivery. As an initial pilot, it was not designed to establish sustained behaviour change or the effectiveness of the complete Sunguarding model.

Rationale

Early detection of melanoma costs the National Health Service (NHS) around £9,000 per patient, while late-stage treatment can exceed £200,000 per person. In Wales, melanoma care costs over £8.8 million annually, with more than 11,000 new cases of non-melanoma skin cancer each year. Behavioural risk factors remain significant: 34 percent of Welsh adults rarely or never use sunscreen, while 27 percent use sunbeds (Melanoma Focus, 2023).

The total cost of this pilot was estimated to be £3,000 GBP or around $6,200 New Zealand dollars (as of October 2026 exchange rate), which represents only 1.5 percent of the cost of treating a single late-stage melanoma case. The relatively low cost of this pilot illustrates the potential value of investment in primary prevention when considered against the substantial costs associated with melanoma treatment.

Through collaboration with Isle of Anglesey County Council and local Beach Wardens, the pilot explored how UV awareness and access to sun protection could be incorporated into a coastal setting. The experience generated preliminary operational learning concerning equipment management, public visibility, staff engagement, and initial evaluation. Further implementation and evaluation across additional sites would be required before the approach could be described as transferable or replicable. This work aligns with the preventive and long-term principles of the Well-being of Future Generations (Wales) Act 2015, particularly its emphasis on prevention, collaboration and integrated action.

Launch

This pilot was launched at Treaddur Bay beach on 28 May 2026, by the local team, including Teifi Jones, Keith Roberts, and Jean Ross (Figure 4). Figure 3 shows the educational material and the Sunguarding information stand incorporating free sunscreen from a purposeful dispenser at the Beach Wardens' Hut.



Figure 4. Local members of the Sunguarding Anglesey Pilot team at the Trearddur Bay launch Photograph: Jean Ross.

Aims

The Sunguarding Anglesey Pilot aimed to:

- Drive awareness and change sun-protection behaviours among beachgoers
- Position Anglesey as a national exemplar for rural and coastal melanoma prevention.

Delivery model

The mechanics of the Pilot was to promote the health promotion resources including the Sunguarding Sunboard equipped with dispensers and SPF 50 sunscreen at Trearddur Bay beach, in collaboration with the Isle of Anglesey Council's Beach Wardens team, and community partners.

This delivery model centred on a standalone educational display (Sunboard) at Trearddur Bay (Figure 4), supported by two QR codes: one directing visitors to Melanoma Fund sun protection resources and one linking to the Otago Polytechnic evaluation survey on public knowledge, behaviours, and attitudes to sun protection.

The intention was that the Beach Wardens would install and remove Sunboards daily during the summer when the UV Index was 3+. The board would display clear safety and allergy guidance and link to Sunguarding Outdoors resources via QR code. Sunscreen refills would be stored securely in the Beach Warden's Hut ensuring consistent availability. The Beach Wardens were invited to complete the free, accredited Sunguarding course, earning Continuing Professional Development (CPD) points and embedding sun- and heat-protection practices into beach-safety culture.

Engagement and data collection

During the two weeks (2 June to 18 June 2026) following the launch, Jean Ross visited Trearddur Bay on multiple occasions and worked alongside the Beach Wardens to enhance the understanding of sun safety among beachgoers and visitors. During these visits it became evident that relatively few people were entering the Beach Wardens' Hut. Observations suggested that limited signage meant many visitors were unaware of the hut's purpose and the role of the Beach Wardens. This highlighted the need for a broader awareness campaign promoting both the Beach Wardens' service and sun safety messaging. To strengthen engagement, the educational poster displayed at the hut was redesigned into portable flyers. Forty English-language flyers and 10 Welsh-language

flyers were produced. During this time, Jean Ross and Teifi Jones regularly visited the beach, met with Beach Wardens, and spoke directly with visitors along the beach and promenade (Figures 1 and 2). Individuals were informed about the collaborative campaign involving the Isle of Anglesey County Council, the Melanoma Fund, and Otago Polytechnic. The pilot data were derived from two main sources, the evaluation tool (developed by Stuart Terry through Otago Polytechnic) and social media.

Beachgoers received flyers in either English or Welsh and were encouraged to access further information through the QR code and complete the evaluation survey. Beachgoers clicked on the QR code found on the Sunboard poster and or flyers, and answered the posed survey questions either in English or Welsh. The data were analysed through Qualtrics which includes built-in reporting tools, real-time data collection, and automated insights.

FINDINGS

Evaluation survey

Overall, the evaluation survey findings suggest that beachgoers had a high level of awareness of the health risks associated with UV exposure, with most respondents reporting that they were very aware of skin cancer risks. The educational posters were effective in increasing knowledge, with almost all respondents indicating that they had learned something new about sun safety. Although awareness was high, reported engagement in protective behaviours varied, with some respondents only occasionally adopting sun protection measures. The findings also demonstrated that awareness of the availability of free sunscreen was not universal, highlighting an important gap in health communication.

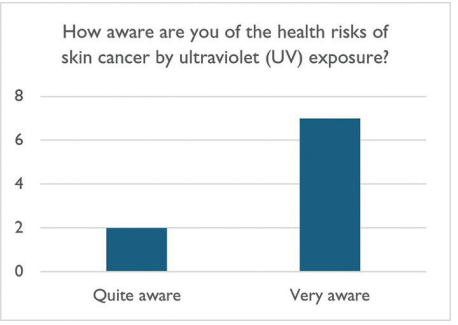


Figure 5. Risk awareness.

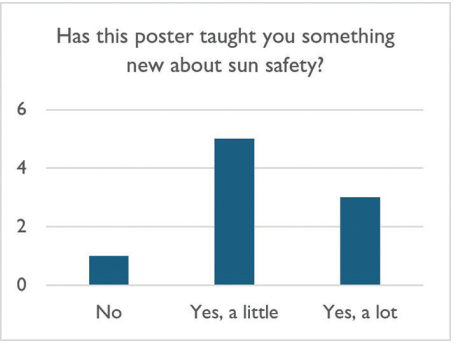


Figure 6. Educational posters.

Figures 5–10 provide the data analysed from the evaluation survey questions including the number of responses.

Encouragingly, respondents expressed a strong willingness to use free sunscreen when made aware of its availability. Given the small sample size (n = 9) and the exploratory nature of the pilot, findings should be interpreted cautiously but provide preliminary evidence that the initiative was both relevant and well received by respondents. The evaluation did not reliably distinguish between Anglesey residents and visitors or record participants' place of residence consistently. It was therefore not possible to assess differential reach or impact between these groups. We recognise that for future evaluation

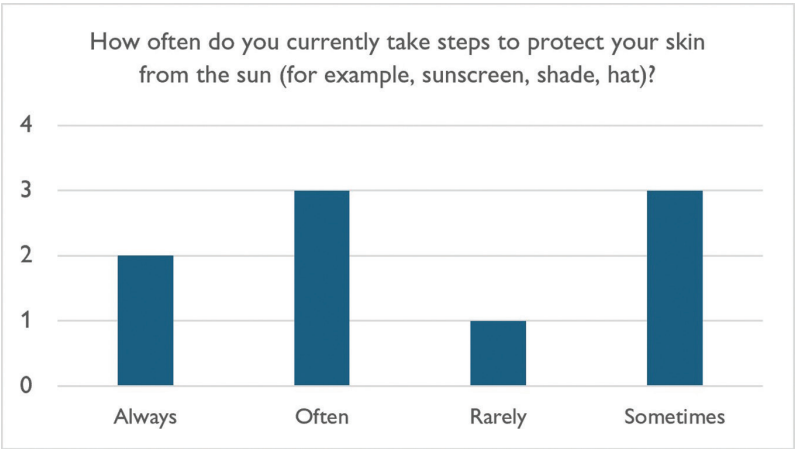


Figure 7. Sun protection measures.

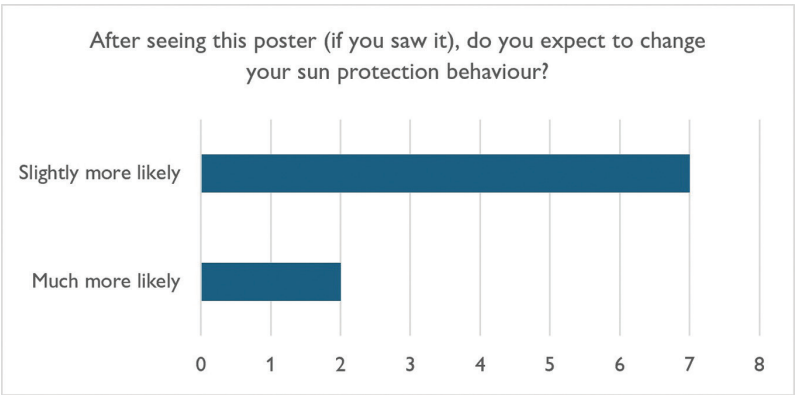


Figure 8. Poster impacts on behaviour.

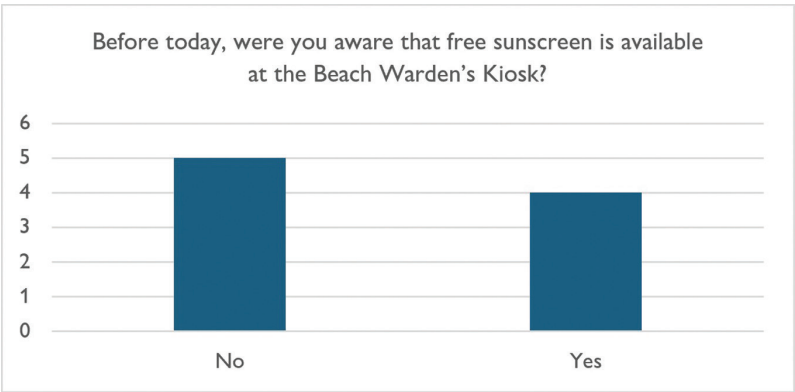


Figure 9. Awareness of free sunscreen.

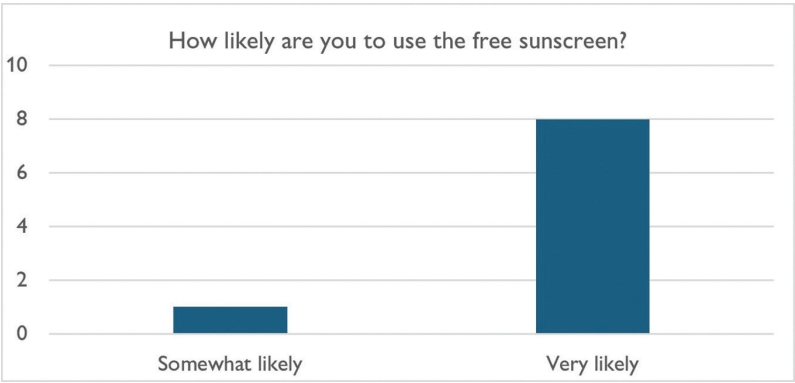


Figure 10. Sunscreen use.

should collect basic demographic and residency information, subject to appropriate consent and data-protection arrangements. However, our focus for this pilot was to understand and gauge whether there was a need for this information amongst locals and visitors and, if there was, what was their response to this information and how effective was using social media.

Social media

Social media sentiment showed a stronger engagement reaching far beyond Treaddur Bay analysed through Isle of Anglesey Tourism Page (Figure 11) with a national reach including social media engagement and public commentary. The audience included a substantial proportion of individuals new to the initiative from across Wales as demonstrated from the social media engagement (Table 2). This reach was enhanced through tourism networks and promotional activities associated with Anglesey. Evaluation of participation and outcomes will form part of future project analysis.

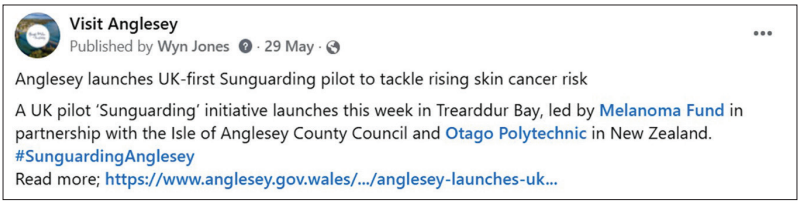


Figure 11. Visit Anglesey Facebook page example.

As of 22 June 2026, social media engagement had reached approximately:

Views	144,880
Interactions	1,297
Comments	90
Shares	139
Website link clicks	130

Table 2. Visit Anglesey Facebook page engagement statistics.

EVALUATION

Overall sentiment about the project was taken mostly from social media interactions or informal conversation at the beachside highlighting:

- **Positive media and social media impact:** The pilot achieved substantial coverage across radio, press, and television (Table 3), alongside approximately 140,000 Facebook reach, with more than 1,000 interactions, around 90 comments and approximately 95 percent positive feedback as of 22 June 2026 (Table 2).
- **Strong public support:** Beachgoers responded positively to the campaign, particularly to the availability of free sunscreen and practical sun-safety advice.
- **High awareness among engaged visitors:** Many people who interacted with the campaign already used SPF 50 sunscreen and understood the importance of UV protection.
- **Need to reach higher-risk groups:** Observations suggested that future activity should focus more deliberately on outdoor workers, tradespeople, and other groups exposed to prolonged UV radiation.
- **Signage and visibility matter:** Limited awareness of the Beach Wardens' Hut reduced initial footfall, demonstrating the importance of clear signage and proactive outreach.
- **Accessibility strengthened impact:** The translation of materials into Welsh and transcription into Braille improved inclusivity and demonstrated how public health campaigns can better serve diverse community needs.

Stakeholder and community impact

The pilot demonstrated the value of combining local knowledge, academic input, council support, voluntary effort, and health promotion expertise. Jean Ross led direct community engagement and implementation support, Teifi Jones contributed through tourism leadership, evaluation, communications and stakeholder development, and Keith Roberts's contribution enhanced the relationships between the Beach Wardens, RNLI, and Maritime personnel, harnessing local knowledge and community events. The initiative also built relationships with local businesses. Beyond distribution at the Beach Wardens' Hut, information was also shared through flyers in Welsh and English with local businesses and community venues within the Trearddur Bay Village. Five establishments agreed to display project materials on their noticeboards. Educational materials were also transcribed into Braille, an innovative step in improving accessibility and inclusivity within public health promotion activities on Anglesey.

Community feedback

The pilot generated considerable interest and positive feedback. Many beachgoers reported that they routinely used SPF 50 sunscreen and understood the importance of protection from UV exposure. Numerous individuals shared personal stories of family members, friends, or acquaintances who had experienced melanoma, including some who had died from the disease.

Visitors expressed appreciation for the availability of free sunscreen at the Beach Wardens' Hut and were supportive of plans to expand the Sunguarding Anglesey initiative in future years. Many indicated they would complete the evaluation survey using the QR code, contributing valuable data regarding public awareness and behaviour. The Beach Wardens commented that the Sunguarding Station was well received, and they noticed that beachgoers and passers-by often made use of the sunscreen dispenser and stopped to read the signage.

The pilot generated substantial communications reach and demonstrated public and stakeholder interest in the Sunguarding approach. However, communications reach should not be treated as evidence of implementation or behaviour change. Operational delivery centred primarily on the UV Safety Station at Trearddur Bay, supported by educational signage, QR-linked information, sunscreen provision, and media activity.

The Sunguarding Course was offered to Beach Wardens, but course participation was not systematically recorded, and the proposed school-based component was not progressed during the pilot period. The evaluation also did not establish whether engagement translated into changes in protective behaviour or whether the initiative reached higher-risk groups. The pilot should therefore be understood as an initial feasibility and engagement exercise. It identified interest in visible, accessible sun-protection infrastructure and identified practical lessons for future delivery, but it did not evaluate the complete Sunguarding model or demonstrate sustained behaviour change.

These findings suggest that the combination of educational messaging, social media promotion, and practical interventions such as free sunscreen provision has the potential to improve sun safety knowledge and support positive behavioural change among beach users.

COMMUNICATIONS, DISSEMINATION AND IMPLEMENTATION LEARNING

Communications successfully introduced the pilot to regional, national and international audiences and demonstrated the strength of collaboration between the Melanoma Fund, Isle of Anglesey County Council and Otago Polytechnic.

The communications programme:

- Launched the first coordinated coastal Sunguarding Pilot on Isle of Anglesey.
- Positioned Sunguarding as an innovative, community-based behaviour change model for skin cancer prevention.
- Communicated consistently through English and Welsh media.
- Demonstrated effective collaboration between local government, academia and the third sector (a third sector organisation is a non-governmental, values-driven group that reinvests its financial surpluses to achieve social, environmental, or cultural goals rather than generating group profit).
- Secured regional, national and international media coverage across television, radio, print, online, and social media.
- Encouraged partner organisations to amplify prevention messages through their own communication channels.

Table 3 highlights the variety and successful communication and media coverage during May and June 2026.

Date	Organisation	Coverage	Contribution
22 April	Local Dunedin (New Zealand)	Development of collaborative international partnership between the core team	*Blowing Bubbles, Otago Access Radio* (Mann, 2026)
14 May	Otago Polytechnic (New Zealand)	Otago nursing students collaborate on Welsh skin cancer project	News feature (Otago Polytechnic, n.d.) describing how research undertaken by nine Otago Polytechnic nursing students informed the development of the Sunguarding Anglesey pilot, demonstrating collaboration between New Zealand and Wales.
14 May	Scoop Independent News – Health (2026) (New Zealand)	National publication of the Otago Polytechnic story	Extended dissemination throughout New Zealand, highlighting the translation of academic research into practical public health action.
28 May	Isle of Anglesey County Council (2026)	Official bilingual press release	Formal announcement of the UK's first coordinated coastal Sunguarding pilot, published in both English and Welsh.
28 May	Nation. Cymru	National news coverage	Reported the launch of the pilot and the partnership between the Melanoma Fund, Isle of Anglesey County Council and Otago Polytechnic (Mansfield, 2026).
May	BBC Radio Wales	Radio interview	Broadcast coverage during launch week promoted the pilot and introduced the Sunguarding behaviour-change approach to skin cancer prevention.
29 May	BBC Cymru	Welsh-language interview	Interview with Teifi Jones extended dissemination through Welsh-language broadcast media. BBC Radio Cymru, Wales – Post Prynhawn (Afternoon Post), Aled Thomas
23 June	ITV Wales	Television news feature	Television coverage of the pilot highlighted the installation of the UV Safety Station and introduced the Sunguarding initiative to audiences across Wales.
June	Partner social media	Coordinated communications	The Melanoma Fund, Isle of Anglesey County Council and Otago Polytechnic published coordinated English and Welsh social media content, with partner organisations amplifying campaign messages. Project correspondence records positive public engagement, including responses from individuals personally affected by skin cancer.
June	North Wales partner communications	Heat-health messaging	Sunguarding messages were reinforced through wider public health communications during periods of elevated UV and hot weather, maintaining visibility beyond the initial launch. Welsh Local Government Association (WLGA) – Video interview to highlight the project and what additional work the Local Authority does.

Table 3. Communications and media coverage.

TAKE AWAYS

From a delivery and scaling perspective, the pilot indicates that Sunguarding Anglesey is a low-cost, high-visibility prevention initiative with strong partnership potential. It aligns with visitor safety, public health, tourism reputation, community wellbeing, and inclusive service delivery. However, successful expansion will require a more formal operating model, including sponsorship, agreed responsibilities for equipment management, consistent signage, training uptake among beach wardens and a stronger evaluation framework. Table 4 considers the potential risks and issues of the pilot and any future engagement.

Risk or issue	Impact	Suggested mitigation
Low visitor awareness of Beach Wardens' Hut	Reduced engagement with resources and survey participation	Improve signage, use beach-front outreach, and involve local businesses in promotion
Campaign may mainly reach already-engaged sunscreen users	Limited impact on higher-risk groups	Target outdoor workers, tradespeople, sports groups, and tourism staff
Dependence on voluntary effort	Inconsistent delivery if resources are not coordinated	Define roles, create a rota, and secure council or partner support for daily set-up and pack-down
Need for ongoing sunscreen and dispenser funding	Expansion may be constrained by cost	Develop sponsorship packages and engage local businesses, tourism partners, and health stakeholders
Evaluation data may be incomplete	Limits evidence for future funding and publication	Increase QR-code visibility, use brief assisted surveys, and track engagement at each site

Table 4. Risks and issues.

Community Interest: An Invitation to Share the Sunguarding Anglesey Pilot

A local networking event took place at the time of the launch of the Sunguarding Anglesey pilot and invited Teifi Jones and Jean Ross to attend. This meeting aimed to celebrate the impact of an Economic Development initiative on Anglesey, share learning from the programme, and hear from businesses and partners who had contributed to strengthening the economy and the Welsh language. Teifi Jones presented an overview of the programme and some of its successes, including businesses supported and jobs created. Jean Ross introduced her involvement in the community and why she promoted her student nurses to develop this work. She also took the opportunity to share the pilot with key parters and businesses in the area (Figure 12).



Figure 12. Interview between commentator Alun Roberts and Jean Ross. Photograph: Teifi Jones.

LOOKING TOWARDS THE FUTURE: PILOT EXPANSION PLANS FOR 2027

Discussions are taking place between the Isle of Anglesey County Council and Jean Ross (Otago Polytechnic) regarding expansion of the pilot programme particularly with outdoor workers and tradespeople, who are often exposed to long periods of UV radiation. The Beach Wardens will be encouraged before summer 2027 to undertake relevant educational modules designed specifically for outdoor workers. The long-term vision is to:

- Expand the model to all Anglesey beaches with Beach Wardens, subject to sponsorship and operational capacity.
- Create a standard Sunguarding beach pack including signage, educational posters, bilingual flyers, Braille materials, sunscreen dispenser guidance and QR-code evaluation prompts.
- Develop a targeted outreach stream for outdoor workers, tradespeople, sports participants, tourism operators, and families with children.
- Encourage Beach Wardens and relevant outdoor staff to complete Melanoma Fund educational modules and record participation.
- Formalise responsibilities for equipment installation, removal, restocking, and basic monitoring at each site.
- Use local businesses and community venues as secondary distribution points for materials and potential sponsorship.
- Strengthen the evaluation plan by collecting survey responses, social media metrics, anecdotal feedback, sunscreen usage indicators, and stakeholder reflections.
- To achieve this goal, sponsorship will be sought to support the purchase of sunscreen, dispensers, signage, promotional resources, and education. Additional stakeholder support will also be required to assist with daily installation and removal of equipment and displays.

CONCLUSION

The pilot demonstrated that working in partnership, visible sun-protection infrastructure, and coordinated communications can generate public and stakeholder engagement with skin cancer prevention. It also identified practical requirements affecting delivery, including site visibility, equipment management, staff participation, audience targeting, and evaluation design.

The findings should nevertheless be interpreted as preliminary. The pilot did not implement or evaluate every component of the Sunguarding model and cannot demonstrate sustained behaviour change. Future delivery should establish clear implementation responsibilities, record participation in educational activity, distinguish communications reach from behavioural outcomes, and use a prospective evaluation framework. Subject to these improvements, further delivery across Anglesey could test whether the approach is feasible, transferable, and capable of influencing protective behaviour over time.

The community development nursing project promoted social justice by identifying and responding to health needs, empowering community members, supporting participation, recognising the relationship between environmental and human wellbeing, and preparing nursing students to address health inequities through community partnership and advocacy, in this case the Sunguarding Anglesey Pilot.

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Jean Ross (https://orcid.org/0000-0003-2467-9233) is a Professor of Nursing at the School of Nursing, Otago Polytechnic. She is also an advocate for sustainable rural community development and nurse education. Jean has been the editor of *Scope (Health & Wellbeing)* since its inception. Jean's practice is research-orientated which both informs and directs her scholarly work. Community engagement and development comprise her practice with nursing students and community members.

Teifi Jones is Destination Development Officer at Anglesey Council. He is experienced in community and sport development, economic development, and place-making. Passionate about Wales, its communities, the Welsh language and the outdoors, he works with businesses, communities, and partners to support sustainable growth, enhance visitor experiences, and promote local opportunities.

Keith R. Roberts is a Councillor with over twenty-five years' experience of local government and specialities in education and local government standards. He has experience in school governance as member and chair at primary and secondary levels in both Catholic and public education streams plus establishing provision of education in developing nations. His principal employment (prior to retirement) was in the police service, local government, European development and the civil service.

Michelle Baker is CEO of the Melanoma Fund, leading its work in skin cancer prevention and behaviour change. She has developed Sunguarding®, the charity's prevention framework spanning education, sport, workplaces and outdoor settings, and works with organisations across the UK to embed practical, sustainable approaches to UV and heat protection.

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