

**PWYLLGOR CRONFA ELUSENNOL
CHARITABLE FUNDS COMMITTEE**

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| DYDDIAD Y CYFARFOD: DATE OF MEETING: | 28 November 2023 |
| TEITL YR ADRODDIAD: TITLE OF REPORT: | Remote Interprofessional Simulation Equipment |
| CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR: | Lisa Gostling, Director of Workforce and Organisational Development |
| SWYDDOG ADRODD: REPORTING OFFICER: | Amanda Glanville, Assistant Director of People Development Liz Tooby, Simulation and Clinical Education Coordinator |

Pwrpas yr Adroddiad (dewiswch fel yn addas)

Purpose of the Report (select as appropriate)

Ar Gyfer Penderfyniad/For Decision

ADRODDIAD SCAA

SBAR REPORT

Sefyllfa / Situation

Simulation-Based Education (SBE) provides opportunities for innovative and flexible interprofessional learning for Hywel Dda University Health Board's (HDdUHB) staff and future workforce. Health Education and Improvement Wales (HEIW) define simulation as: *"A learning tool that supports development through experiential learning by creating or replicating a particular set of conditions which resemble real life situations"*. It should provide a safe environment where participants can learn from their mistakes without any danger to patients, allowing individuals to analyse and respond to these realistic situations, with the aim of developing or enhancing their knowledge, skills, behaviour and attitudes.

SBE offers a range of opportunities, including advancing our approach to staff and student education and development. It is also an important tool for quality improvement and translational science. Simulation has been identified as a key tool for patient safety in addition to highlighting human factors and the importance of non-technical skills such as communication. To develop our approach in this field, we are looking to enhance our physical and technical infrastructure, to drive this agenda forward. This report outlines our proposal to request charitable funding for mobile simulation equipment and associated software to enhance simulations being undertaken in-situ or within training rooms.

The Health Board's mission is to be a pioneer in interprofessional learning for Wales, for which simulation is seen as a significant driver. HDdUHB have limited resources to make participants feel immersed within training sessions and simulation will provide the full benefits identified above. In addition, this equipment would also provide the added benefit to our future workforce, providing opportunities for more engaging and innovative experiences as part of our school and external engagement activities.

The Committee is asked to consider and approve this request for charitable funding for mobile simulation equipment and associated software.

Cefndir / Background

HDdUHB is committed to interprofessional learning of which simulation-based education is at the forefront of this strategy. The interprofessional learning strategy has been approved by the People, Organisational Development and Culture Committee and aligns to the 'A Healthier Wales: Our Workforce Strategy for Health and Social Care' (2020). HEIW Simulation Strategy highlights the need to inspire and promote high quality interprofessional simulation-based education and training accessible to all across the workforce. Interprofessional learning and working is key to improve patient outcomes.

SBE is a growing necessity for individuals, teams and system development, with the challenges faced by health and social care and the increased need to learn together as interprofessional teams. It allows those involved in the simulation to feel like it is a real situation which is essential to ensure the true benefits are defined.

Currently simulation equipment within HDdUHB is profession-specific and not accessible to all, especially for use interprofessionally to encourage learning as part of a multi-disciplinary team. An identified barrier to training and particularly simulation is the lack of useable space within the Health Board so providing mobile equipment that will be taken to various locations to allow for simulations in-situ. This equipment will enable HDdUHB to undertake regular immersive interprofessional simulation training, creating a much wider learning experience. It will support people in the development of the core skills and non-technical skills needed in every job including communication, teamwork, critical thinking, collaboration and adaptability, with patient safety and quality improvement as a key outcome.

The equipment will be available for all departments and service areas including clinical staff and students, estates and facilities, leadership development and volunteers.

Asesiad / Assessment

There are three key equipment aspects identified as critical to achieving successful interprofessional simulation experiences throughout the Health Board.

1. Achievement of learning outcomes through simulation training requires an immersive and realistic atmosphere. One of the key aspects of achieving this is to ensure that simulation facilitators are not in the room when the scenario itself is commenced. Allowing learners to progress through the simulation as it would happen in real life is critical to achieving fidelity and learner immersion.

To achieve the scenario, audio and visual equipment will allow separation of learners and facilitators. It would provide 'eyes and ears' as to how the scenario is unfolding in the next room. Facilitators are there to observe the scenario and highlight performance gaps that can be discussed in the post simulation debrief.

With simulation-based education being an integral part of the Interprofessional Education Plan it is anticipated that this audio/visual equipment will be of critical importance to simulation education throughout the Health Board and will therefore need to be mobile and simple to use.

We request funding for purchase of a SMOTS (Scotia Medical Observation and Training System) developed by Scotia UK, costing £22,428.

This system will provide facilitators with three cameras to observe and record the simulation.

There are also three directional microphones to record audio. The video and audio will be fed wirelessly from the simulation room into a laptop running the SMOTS control centre program. Facilitators will be able to manage recording of the simulation and observe for performance gaps. With a connection lead the video and audio can also be fed from the laptop to a television, enabling group monitoring if required.

The entire SMOTS package works within a self-contained wireless network that will not require any connection to the IT network. Discussions between the informatics/digital services team, Simulation Coordinator and the SMOTS representative have confirmed that the system will work independently from the HDdUHB network. The self-contained simplicity of SMOTS will allow simulation champions to set up the system without requiring network specialist support. Initial setup training will be provided by Scotia UK specialists to simulation champions, who will then be able to provide in house setup training. The SMOTS equipment is designed to be portable with equipment collapsing into a purpose-built suitcase that can be transported as required.

2. IRiS is a software program that delivers a simulation design platform enabling users to create high quality simulation scenarios that are structured within an evidence-based framework. The IRiS authoring tools will allow inexperienced simulation facilitators to develop their own high quality customised scenarios, guiding them through the process and developing their knowledge and design skills at the same time.

Simulation training is only as effective as the scenario design allows, therefore the structured guidelines provided by the IRiS program will allow simulation designers to create simulation designs of the highest quality within an effectively short time frame.

Whilst providing a simulation authoring tool, IRiS also provides access to a database of simulation scenarios designed by other users of the program. These scenarios can be loaded and used as they are or can be adjusted if required to meet specific required learning outcomes. As simulation champions begin designing their own scenarios, these can be added to the IRiS database, which will provide a positive national advert of the simulation work being undertaken, thus supporting attraction.

A request for 10 IRiS access licences for three years is included, which are generic and transferable whilst simulation champions are developing scenarios, costing £9,562.

Over the three years it is planned that the Simulation Coordinator will guide and facilitate the use of software. At the end of the licence period, it is planned that we will have generated a core group of experienced simulation designers, who will then be able to provide in-house workshops on simulation design and pastoral support for new simulation champions. It is anticipated that we will no longer need access to the IRiS software and will furthermore have developed our own database of pre prepared simulation scenarios.

3. The use of interactive manikins has become an integral part of conducting effective simulation scenarios. Choosing the right manikin is also critical to achieving required learning outcomes. This bid has selected a Laerdal 'Nursing Anne Simulator' manikin for its broad application of uses, costing £24,471. Many manikins are designed solely for immediate life support training, which limits the type of simulation scenarios they are suitable for.

The Nursing Anne simulator manikin is designed to fit within a broad range of simulation scenarios which will allow for multi-faceted use. The manikin, along with a vital sign monitor and faculty user control pad, will allow simulation champions to program a wide range of simulated patient illnesses that will allow learners to develop their patient assessment skills in recognition of the deteriorating patient.

The manikin will also provide the opportunity for development of clinical skills including intravenous cannulation, urinary catheter placement and administration of intravenous fluids. As a skills trainer, the manikin has the capacity to provide development of knowledge and skills for health care support workers along with nursing and medical staff. The manikin is multi-jointed which increases the usage in different scenarios as it can be placed in a lying and sitting position.

The wide array of usage allows the manikin to provide alignment with the Health Board Interprofessional Education Plan. The manikin is designed to be broken down and fitted into a portable suitcase allowing it to be transported.

The Laerdal manikin has the capacity to link to the SMOTS audio/visual system so that during the simulation scenario, observers can see the patient vital signs along with video/audio feed. Facilitators are then able to adjust the patient vital signs to reflect the actions taken by learners during the simulation.

We have selected a geriatric manikin design as this reflects much of the population. The manikin is purposely designed to be of an androgynous appearance and reflects a broadly Mediterranean appearance.

| <u>Item</u> | <u>Costings</u> |
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| SMOTS system | £22,428.00 |
| IRiS system licences (VAT exempt) | £ 9,562.00 |
| Manikin (VAT exempt) | £24,471.00 |
| Total | £56,461.00 |

In addition to the capacity to enhance the learning experience and opportunity for multi-disciplinary working, focus improvement patient care and service levels, the investment will also support school and future workforce engagement. This simulation equipment will allow for the introduction of modern work experience opportunities, including meet the professional days and fully immersive practice the profession experiences and masterclasses and widening participation activities.

Availability of Charitable Funds

It is proposed that the following charitable fund is used to support this request:

- T600 Support for Life Response Fund (balance: £198,461.50 M7 2023/24)

This funding application complies with the charitable fund eligibility criteria as follows:

- Education and training over and above that provided by the NHS which will improve staff knowledge and performance in their roles within the NHS.
- Books, educational DVDs, posters, leaflets, information screens for education of staff or staff welfare and wellbeing.

Argymhelliad / Recommendation

The Committee are asked to consider and approve an application for £56,461.00 of charitable funding to support the cost of the Remote Interprofessional Simulation Equipment.

Amcanion: (rhaid cwblhau)

Objectives: (must be completed)

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| Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor: | 4.20 The following thresholds are approved in the Charitable Funds Procedure: "Expenditure less than £10,000 shall only need approval by the nominated fund manager. All expenditure in excess of £10,000 and up to £50,000 will require the approval of the Charitable Funds Sub-Committee. Expenditure in excess of £50,000 will require the approval of the Charitable Funds Committee. Expenditure over £100,000 will require the approval of the Corporate Trustee |
| Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score: | Not Applicable |
| Parthau Ansawdd: Domains of Quality Quality and Engagement Act (sharepoint.com) | 7. All apply |
| Galluogwyr Ansawdd: Enablers of Quality: Quality and Engagement Act (sharepoint.com) | 6. All Apply |
| Amcanion Strategol y BIP: UHB Strategic Objectives: | 2. Working together to be the best we can be 3. Striving to deliver and develop excellent services 5. Safe sustainable, accessible and kind care 4. The best health and wellbeing for our individuals, families and communities |
| Amcanion Cynllunio Planning Objectives | Not Applicable |

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| Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2021-2022 | 2. Develop a skilled and flexible workforce to meet the changing needs of the modern NHS |
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| Gwybodaeth Ychwanegol: Further Information: | |
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| Ar sail tystiolaeth: Evidence Base: | <p>Ferguson et. Al., (2020) Implementing, embedding and sustaining simulation-based education: What helps, what hinders. <i>Medical Education</i>, Vol. 54 (10), p. 915-924.</p> <p>Hawker C, Diaz-Navarro C, Jones B, Mitra S, Cook SC & Bartholomew B. 2022. Developing an All-Wales definition of Simulation-Based Education. <i>International Journal of Healthcare Simulation</i>. 2(1): A40-A41. doi: 10.54531/INHM4618</p> <p>HEIW. 2023. Summary – All Wales Simulation-Based Education and Training Strategy for Healthcare Workforce. https://heiw.nhs.wales/files/summary-all-wales-simulation-strategy-mg-draft-1-002pdf/</p> |
| Rhestr Termau: Glossary of Terms: | <p>HDdUHB – Hywel Dda University Health Board</p> <p>HEIW – Health Education Improvement Wales</p> <p>SBE – Simulation-Based Education</p> <p>SMOTS – Scotia Medical Observation and Training System</p> |
| Partïon / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Cronfa Elusennol: Parties / Committees consulted prior to Charitable Funds Committee: | Jo Davies – Professor of Simulation at Swansea University |

| Effaith: (rhaid cwblhau) Impact: (must be completed) | |
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| Ariannol / Gwerth am Arian: Financial / Service: | Not Applicable |
| Ansawdd / Gofal Claf: Quality / Patient Care: | <ul style="list-style-type: none"> • Allows the safe use of simulation, providing a more competent and confident workforce. • The equipment will support the patient experience through reflective practice, including communication, teamwork, etc. • Supports multi-disciplinary working and training to reduce patient risk and quality issues. • Allows practice of high-risk procedures in a safe environment, therefore reducing the risk of patient harm. • Provides assurance of assessment of skills and competencies |

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| Gweithlu: Workforce: | <ul style="list-style-type: none"> • Attraction tool for registered professions by promoting simulation development. • Supports the workforce for modern digital techniques in learning. • Demonstrates investment and value in our workforce. • Attraction through school engagement and work experience to promote the professions. • Recognising the mobile nature of this equipment, promotes equity across the whole HDdUHB footprint. |
| Risg: Risk: | <p>Reduces risk due to the assessment of skills, practising of high-risk procedures and supporting significant areas of challenge. One example being communication in a high risk/pressure situation.</p> |
| Cyfreithiol: Legal: | <p>Not Applicable</p> |
| Enw Da: Reputational: | <p>Improves reputation as a employer and as a provider of care as outlined in the paper.</p> |
| Gyfrinachedd: Privacy: | <p>Not applicable</p> |
| Cydraddoldeb: Equality: | <p>Improved equality as a result of being able to offer training in all regions, providing access to all.</p> |