



HUBMED
ADVANTAGE THROUGH INNOVATION

& Clinical Implementation

PROJECT LIST 9 Jul 26

JHUBMED – PILOT PROJECTS

Project Name	Description
PHOBOS	Using Machine Vision to increase the Op effectiveness of MOD's Military Working Horse (MWH) capability, maximising herd health through earlier disease detection & intervention while also reducing the human resource cost.
SPIELBERG	Novel non-pyrotechnic tech solutions that generates gunshot, blast and direct FPV drone strike effects to battle inoculate Soldiers and Military Working Dogs, but without the significant administrative burden and other limitations of live/blank ammunition.
MORRIGHAN	Exploring the optimal doctrine, concepts and physical capabilities for uncrewed systems (UxS) to conduct heavy lift logistics carriage and, in extremis, casualty evacuation (CASEVAC) by UAS.
BALTO	To develop a bespoke inventory management system with secure edge-to-cloud connectivity integrated with commercially available hardware to both track stock, automate reports to the rear-party and provide adequately detailed data to track usage trends and wastage.
BESSO	AI-powered data analysis and automation product to improve focused on organisational learning data. The product will scrape data relevant to lessons from closed (often siloed systems) and open sources into a data lake, forming a searchable and interrogable repository of lessons data. AI will be used to analyse this data, replacing existing grey-it processes and provide automated workflows for strategic and operational support to decision makers. BESSO will focus on Med lessons data for the pilot to demonstrate success.

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HALBERD	A small forward surgical capability: agility, projection, reduced time to Damage Control Resuscitation and Surgery (DCR/DCS), reductions in logistical burden, reduced medical risk and force enablement.
HARMOS	To optimise the production of Healthcare Risk Assessments (HRAs) by the designated Competent Medical Authority (CMA) (DMS OF5 personnel) for military activity across Defence. Intent to use latest Agentic AI – assisted technologies to improve the validity of evidence in the decision-making process, improve relevance of mitigations and save valuable time in workforce time in production.
MALAMUTE	Effective cooling of Military Working Dogs, mitigating the risks of developing Heat Illness, and the morbidity and mortality of MWD heat illness casualties.
CAYENNE	Clinical trial of Capsaicin patch to relieve symptoms of Non-Freezing Cold Injury (NFCI).
CALIDUM	Fwd Point of Care Diagnostics to test and target treatment against Multiple Pathogens. Validating bespoke testing panel.

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SYNTHESIS	An agnostic sensor system of systems, able to simultaneously monitor multiple casualties and provide a continuous triage capability during a MASCAL scenario.
VERITAS	Live Language Translation on the edge.
COEUS	Advanced brain health data capture and analytics platform, to access cognitive function in relation to TBI and blast exposure.
KOURAGIO	Electronic documentation access and platform, for the delivery of Cancer related information, to support Service personnel working following a cancer diagnosis, caring for a loved one or supporting colleagues.
GELIDA Ice Cold Water Immersion Therapy (ICWI -T)	Implementation across Defence of ICWI-T as a treatment capability for patients with severe exertional heat illness.

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GREY MANE	Adoption of Intra Nasal Ketamine as an adjunct or first line analgesic for use by non-medics at point of wounding.
STANCH	Tranexamic Acid (TXA) is a drug that stops bleeding but must be administered asap (minutes) to save the most lives. A TXA auto-injector may reduce the mortality of the most seriously injured by over 10%. Opportunity for use in UKR being explored.
AETHER	To reduce the cost, logistical burden and risk of cylinder oxygen use across Defence by introducing a novel breathing system that allows efficient usage and recycling of oxygen at point of care.
SENTRYFLOW	Early and real-time autonomous detection of viral and bacterial pathogens via Untap Health's wastewater testing product, allowing earliest-possible (presymptomatic) intervention measures to interdict the spread and progression of infections in populations
NCH - AAJT	Trailing Abdominal Aortic Junctional Tourniquet (AAJT) within the UK setting as management device for Non-Compressible Haemorrhage, Assisting in development of SOPs and Algorithms as well as a fielding plan, with the goal of implementing the device within UK Medical Modules.

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iCOVER	iCOVER is a brief peer delivered, six-step psychological grounding intervention designed to rapidly reorient SP experiencing an ASR and return them to functional duty. Adapted from a recognised model and refined by NATO and US military research. iCOVER was trialled in the UK with 150 Army personnel. Results of the trial found that 44% of those that had experienced combat had witnessed an ASR in others, however fleeting, whilst 17% had experienced that sense of being overwhelmed themselves. The pilot seeks to ensure wide Defence adoption.
PHYLAX	Deliver high local antimicrobial concentrations directly into contaminated wounds using an established antibiotic carrier (PerOssal beads). Local delivery achieves drug levels far above those safely achievable systemically, targeting the window between wounding and delayed surgical wound excision when systemic antimicrobial exposure at the wound surface is poor and increasingly undermined by antimicrobial resistance (AMR).