RESEARCH PROGRAMME / INTERNATIONAL COLLABORATION PROPOSAL

Ukrainian Digital Rehabilitation Lab

UDRL | Public Concept Note

From Ukraine’s rehabilitation needs to internationally credible evidence, validated methods and scalable technologies.

01 Programme rationale

The war has created large-scale, enduring needs for physical, cognitive and psychosocial rehabilitation in Ukraine. At the same time, providers face constraints in staffing, funding and infrastructure. Addressing these challenges requires more than new devices: it requires independent evidence of what digital methods work, for whom, at what cost and under which service conditions.

UDRL is proposed as an open international research and implementation programme bringing together Ukrainian scientific institutions, licensed clinical sites, technology developers and international partners to study, validate and scale digital rehabilitation approaches.

02 Scientific focus

A key research subject is Digital Interactive Modular Systems for Multidisciplinary Rehabilitation (DIMSR; Ukrainian acronym ЦІМС-МР). This is a proposed functional research category, not an established regulatory classification. It covers systems with a documented medical purpose, active feedback-driven exercises, software-based adaptation and modular use across rehabilitation disciplines.

Technology will be assessed against objective criteria rather than brand preference. Briolight can contribute an existing Ukrainian hardware–software platform as an initial research testbed, open to independent comparisons with other solutions.

03 Public value

- For patients and veterans: stronger evidence for safe, accessible and clinically meaningful rehabilitation pathways.
- For providers: validated methods and data on cost, workforce demand and service capacity.
- For Ukraine and international partners: domestic research capability, reproducible findings and solutions with global relevance.

Core hypothesis: modular digital systems may help deliver more high-quality care within limited resources. This is a hypothesis to test independently, not a proven claim.

UDRL / RESEARCH FRAMEWORK

04 Research workstreams

Clinical validation of digital therapeutic exercises

Indications, functional outcomes, safety and reproducibility across clinical settings; validated outcome measures, comparators and adverse-event monitoring. Findings may support, qualify or reject individual methods.

Health economics and rehabilitation service capacity

Cost per course and achieved outcome, equipment utilisation, staffing and maintenance costs, patient pathways, clinician workload, facility requirements and service throughput.

Multimodal and multidisciplinary rehabilitation

Assessing shared digital platforms used by different rehabilitation professionals, modular configurations for specific clinical needs and the transferability of validated exercises across settings.

Next-generation methods and digital infrastructure

Prospective research on structured AI-ready data, personalised exercises, remote and hybrid pathways (“clinic without walls”) and clinician decision-support tools. These approaches require separate safety and effectiveness validation.

05 Methods and independence

- Common multicentre protocols, predefined endpoints, ethics approval and responsible data governance.
- Study design, analysis, publications and conclusions led by qualified independent research and clinical partners, not equipment suppliers.
- Clinical interventions only at appropriately licensed providers; veterans’ hubs may support access, navigation and referrals.
- Vendor-neutral assessment and transparent procurement, alongside appropriate protection of partners’ intellectual property.

06 Expected research deliverables

D1 Protocols	Agreed designs, ethics procedures, outcomes and data management plans.
D2 Evidence	Multicentre clinical, economic and organisational findings, including inconclusive or negative results.
D3 Methods library	Versioned catalogue of exercises indicating evidence levels and conditions for use.
D4 Dissemination	Publications, training resources and recommendations for care providers, researchers and policymakers.

UDRL / DELIVERY & SCALE

07 Implementation pathway

The indicative periods begin once programme preparation is authorised. Each subsequent stage depends on findings, funding and partner decisions. International partner development starts immediately.

Preparation | months 0–3

Form a consortium; define research questions, potential sites, budget and ethical design; prepare grant applications. Milestone: an agreed scientific, legal and financial launch package.

I. International evidence pilot | months 4–15

Indicative network: 3–5 public or municipal veteran-facing sites and at least one private rehabilitation partner. Independent assessment of clinical, economic and organisational outcomes, alongside a first methods library. Evidence-based go/no-go decisions on specific approaches.

II. Implementation and scale-up | months 16–42

Subject to positive evidence: deploy validated configurations in hospitals, outpatient units and rehabilitation centres, tailored to patient groups and available staff. Include professional training, local maintenance, independent monitoring and sustainable funding models.

III. Next-generation rehabilitation | from month 30

Separate international research into remote and hybrid care, AI-ready data, personalisation and clinical decision support, with appropriate safety and benefit assessments.

08 Funding logic

First, research grants cover design, researchers, pilot equipment and independent validation. Following evaluation, recovery programmes, procurement and investment can support the scale-up of proven solutions. Emerging technology research may attract separate innovation funding.

Indicative scientific pilot envelope: UAH 30–100 million; reference scenario around UAH 60 million for five sites with independent evaluation. This is a planning estimate, not an approved budget or committed funding.

09 Policy and regulatory relevance

Evidence may inform future decisions by Ukraine’s Ministry of Health and National Health Service on outpatient rehabilitation services, equipment criteria and reimbursement arrangements. DIMSR remains a working research category; the programme does not seek regulatory preference for any specific brand.

10 Proposed partnership architecture

Scientific core	Ukrainian research institutions and international universities: design, ethics, independent validation, publication and grant management.
Clinical partners	Licensed hospitals and rehabilitation providers: eligible participants, clinical data and multidisciplinary care teams.
Briolight and other developers	Hardware, software, adaptation and technical support without control over independent scientific conclusions.
Public stakeholders	Potential involvement of the Ministry for Veterans Affairs, Ministry of Health, NHSU and veteran organisations in coordination, access and policy dialogue.
International partners	Research expertise, consortia, funding, infrastructure and global dissemination.

The Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy under the Ministry of Health is a potential scientific coordinator, subject to its consent and future grant terms. Mentioned partner categories do not imply confirmed participation.

11 Invitation to collaborate

- Universities and research organisations: co-design protocols, work packages and international grant applications.
- Clinical networks: help plan the pilot and participate in independent multicentre evaluation.
- Foundations and donors: fund the evidence pilot, Ukrainian research capacity, evaluation and long-term infrastructure.
- Technology partners: contribute compatible systems for fair, methodologically consistent comparisons.

12 Proposed first step

Establish a small initiating group to agree research questions, consortium roles, candidate sites and a grant coordinator. Within the first 90 days, aim for a draft protocol, indicative budget, donor landscape and agreed partner roadmap.

Join us in building independent evidence for digital rehabilitation developed in Ukraine and relevant to rehabilitation systems worldwide.

Research & Evidence: https://briolight.ua/en/research

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