





INNOVATION THAT SAVES LIVES

Point of Care Ultrasound (POCUS) in Ukraine

Global Response Medicine (GRM) is a US-veteran founded international medical NGO registered in the United States as a tax-exempt, 501(c)3 organization. Established in 2017, GRM delivers emergency medical care and specialized training to people displaced by conflict, war, or disaster. Contact: andrea@global-response.org

IN COOPERATION WITH THE WORLD HEALTH ORGANIZATION, GRM HAS DISTRIBUTED MORE THAN 50 ULTRASOUND DEVICES TO HOSPITALS ALONG WITH TRAINING OF TRAINERS EDUCATION

In emergencies, stressed environments often lack access to the critical diagnostic technologies (CT scanners, MRIs, X-Rays) needed to manage complex traumatic injuries with life-threatening bleeding and internal organ damage, leaving clinicians blind to what lies beneath. Imagine a handheld battery-powered ultrasound that can be plugged into any smartphone or tablet to quickly detect internal bleeding, organ damage, and blast injuries of the lungs. Beyond diagnostics, it can also be used to gain vascular access on a patient for blood transfusions and conduct nerve blocks to limit pain during procedures in the absence of pain medications. This incredible technology exists thanks to Butterfly IQ and is now in the hands of more than 900 clinicians in Ukraine*.

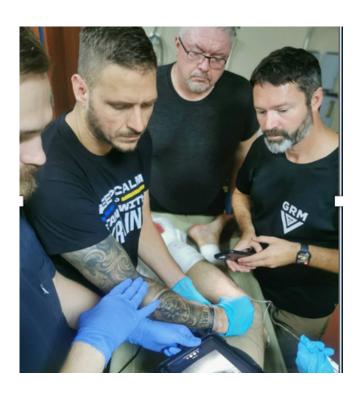
After using the Butterfly IQ ultrasound in Mexico, Iraq, and Sierra Leone, GRM prioritized the distribution and training of the device to clinicians in Ukraine. At every hospital we visit, GRM distributes an ultrasound. In every training we run, we focus on familiarization and proficiency with the device.

Not only does the device improve care at every level, quality assurance and improvement measures are built in.

Ukrainian clinicians can consult GRM doctors while scanning via live remote access and also have the ability to save and send scans. Through the app, GRM can track the number of scans per device, types of scans conducted, and the diagnoses of patients. While not a 1:1 comparison, it is truly a game-changing medical device and it costs \$2200 compared to the \$500K-\$1.5M price tag of a CT scanner.



Vascular access for resuscitation during trauma surgery



Nerve block for pain management on an amputated patient

^{*}Total Butterfly IQ devices distributed by partner organizations

TOP POCUS USES IN UKRAINE

- 1. FAST Exam (Focused Assessment with Sonography in Trauma)
- 2. RUSH Exam (Rapid Ultrasound for Shock and Hypotension)
- 3. Vascular Access

NON TRAUMA CAPABILITIES

- Cardiology
- Anesthesiology
- Gastrointestinal Organ Dysfunction
- Lung Pathologies
- OB/GYN
- Musculoskeletal
- Nursing



Evaluation of vascular flow following a partial foot amputation

THE BUTTERFLY EFFECT IN UKRAINE

900 devices distributed, 1500 clinicians trained, 50,000 scans performed. Average scan time 2 minutes and 19 seconds.



SEE ONE, DO ONE, TEACH ONE

GRM POCUS class