

## **EMERGING POINT-OF-CARE ULTRASOUND APPLICATIONS IN OUT-OF-HOSPITAL SCENARIOS**

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Grazie alle continue innovazioni della tecnologia bio-medica, della metodologia didattica e della ricerca clinica, l'“Emergency Ultrasound” ha ampliato i suoi orizzonti e le sue potenzialità, identificandosi in un numero sempre maggiore di contesti internazionali come un'insostituibile “*bed-side/on-scene competence*”, da integrarsi in tempo reale alla valutazione e gestione clinica dei pazienti acuti e critici nei servizi intra- ed extra-ospedalieri di “*emergency & critical care*”. In base ai risultati preliminari di una “*International review / survey*” viene disegnato lo stato dell'arte delle applicazioni diagnostiche ed interventistiche della “*point-of-care ultrasound*” nei contesti “critici” extra-ospedalieri, come ad esempio: “*Emergency Medical Services, Mass casualties and Disaster Scenarios, Peace-keeping and Combat Arenas, Humanitarian Operations and Scarce-resource Primary Health Services, Sport Events & Air-Space Flights, Remote and Wilderness Areas, Telemedicine ...*”. Vengono quindi descritte, assieme alle iniziative già intraprese a livello locale ed internazionale, le proposte di prossima realizzazione per la diffusione di un approccio clinico-ecografico integrato “*point-of-care*” ed “*evidence-based*” nella “*Emergency and Critical Care Community*” mondiale, attraverso uno sviluppo “pionieristico” e “rigoroso” della Formazione, la Tecnologia, la Ricerca Clinica e la Collaborazione Internazionale.

### **ENGLISH VERSION:**

Due to continual advancements in bio-medical technology, training methods and clinical research, “*Emergency Ultrasound*” has widened its boundaries and potentialities in an increasing number of International settings, representing a valuable “*bed-side/on-scene competence*”, real-time extension of the clinical exam for the assessment and the management of the acute and critical patient in all the “*emergency & critical care*” scenarios. According to the preliminary data of an “*International review & survey*”, we'll describe actual and emerging diagnostic and procedural “*point-of-care ultrasound*” applications in the out-of-hospital critical scenarios, such as “*Emergency Medical Services, Mass casualties and Disaster Scenarios, Peace-keeping and Combat Arenas, Humanitarian Operations and Scarce-resource Primary Health Care, Sport Events & Air-Space Flights, Remote and Wilderness Areas, Telemedicine ...*”. We'll describe then, the ongoing and future initiatives focused on promoting a “*point-of-care*” clinical-sonographic enhanced approach, by fostering competence-based education, technology development, evidence-based clinical research and International Team-work, throughout the world “*Emergency and Critical Care Community*”.