

## Virtual Interprofessional Education (VIPE)–The VIPE Program: VIPE Security, a Multi-sectoral Approach to Dealing with Complex Wicked Problems

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**Introduction:** The Virtual Interprofessional Education program is a multi-institutional consortium collaborative formed between five universities across the United States. As of January 2022, the collaborative includes over 60 universities in 30 countries. The consortium brings healthcare students together for a short-term immersive team experience that mimics the healthcare setting. The VIPE program has hosted over 5,000 students in healthcare training programs. The VIPE program expanded to a VIPE Security model to host students across multiple disciplines outside the field of healthcare to create a transdisciplinary approach to managing complex wicked problems.

**Method:** Students receive asynchronous materials ahead of a synchronous virtual experience. VIPE uses the Interprofessional Education Competencies (IPEC) competencies (IPEC, 2016) and aligns with The Health Professions Accreditors Collaborative (HPAC) 2019 guidelines. VIPE uses an active teaching strategy, problem or case-based learning (PBL/CBL), which emphasizes creating an environment of psychological safety and its antecedents (Frazier et al., 2017 and Salas, 2019, Wiss, 2020). Following this model, VIPE Security explores whether the VIPE model can be tailored to work across multiple sectors to discuss management of complex wicked problems to include: climate change, disaster, cyber attacks, terrorism, pandemics, conflict, forced migration, food/water insecurity, human/narco trafficking etc. VIPE Security has hosted two events to include professionals in the health and security sectors to work through complex wicked problems to further understand their roles, ethical and responsible information sharing, and policy implications.

**Results:** VIPE demonstrates statistically significant gains in knowledge towards interprofessional collaborative practice as

a result of participation. VIPE Security results are currently being analyzed.

**Conclusion:** This transdisciplinary approach to IPE allows for an all-hands-on-deck approach to security, fostering early education and communication of students across multiple sectors. The VIPE Security model has future implications to be utilized within multidisciplinary organizations for practitioners, governmental agencies, and the military.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s24

doi:10.1017/S1049023X23001036

## The Quality of Hospital Disaster Plans in Belgium: Evaluation Research. Development and Content Validity of a Questionnaire to Define the Quality Key Performance Indicators Influencing Hospital Disaster Preparedness: A Modified Delphi Study

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**Introduction:** Emergency and disaster situations have a major impact on hospitals, some of which are already overloaded daily. The recent COVID-19 outbreak, attacks in Brussels, floods in Wallonia and influx of Ukrainian refugees show that the risk of facing a disaster and involvement of local hospitals (and stakeholders) is real. However, how hospitals implement their own hospital disaster plan (HDP), the position of the hospital disaster coordinator (HDC) and the real efficacy of these measures remain unclear. Therefore, an evaluation tool with an expert-consensus set of Key Performance Indicators (KPIs) and an evaluation of the HDC position is needed

**Method:** A semi-quantitative survey, as part of evaluation research, was designed by a research group. This questionnaire was based on the document analysis of the main topics of the national template and accompanying legislation. To establish consensus on the importance of the KPIs concerning the HDP, a three-round email-based modified Delphi study (Policy Delphi) was undertaken.

**Results:** For a task group, 15 qualified multidisciplinary professionals (in-hospital) agreed to participate, 11 completed all rounds. As a pilot group, a total of 25 ‘experts on the field’, were purposively selected from Belgian hospitals, nine of them completed the questionnaire. The modified Delphi reached the agreed consensus threshold (i.e.75%), resulting in five main themes: demographic characteristics/profile HDC, hospital incident management system (HIMS), pre-incident phase, incident phase, post-incident phase. Collectively including a

core set of 289 KPIs (29 indicators to assess progress concerning the HDC position).

**Conclusion:** This study employed a modified Delphi approach to establish consensus, resulting in the development of an evaluation tool to measure hospital disaster preparedness and to evaluate progress of the HDC position within Belgian hospitals. All indicators were considered relevant and immediately implementable. When the implementation of KPIs is completed, the statement is that a HIMS exists within the hospitals.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s24–s25

doi:10.1017/S1049023X23001048

### Twenty Years on from WCDEM-13, Melbourne 2003: Impact of the Melbourne Statement

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**Introduction:** Melbourne hosted WCDEM-13 in May 2003 when Congress participants endorsed a Melbourne Statement with five actions. Twenty years on, WCDEM-22 in Ireland provides an opportunity to reflect on the impact of the Melbourne Statement.

**Method:** A desktop review of Congress and subsequent documents informed by the personal experiences of the co-authors, who contributed to the Local Organizing Committee for the Melbourne Congress and/or subsequently through the WADEM Oceania Chapter.

**Results:** The WADEM Education Sub-committee, co-chaired by a Melbourne member, followed through with one of the key actions from the Melbourne Statement: “WADEM will promote international professional standards and education programs for persons involved in disaster prevention, preparedness, response, and recovery.” The Education Sub-committee held a series of European meetings, resulting in an international meeting in Brussels in 2004 producing ‘International Guidelines and Standards for Education and Training to Reduce the Consequences of Events that May Threaten the Health Status of a Community’. This was presented to the 2005 WCDEM in Edinburgh, and later published in PDM (2007), thereby meeting a second action from the Melbourne Statement. However, this energetic, collaborative, and productive process subsequently ‘failed to thrive.’ The influence of three further Melbourne Statement actions, were harder to analyze. WADEM members in Australia led other identifiable actions e.g. formation and leadership of the WADEM Oceania Chapter (2008); a National Framework for Disaster Health Education in Australia (2010); and Teaching Emergency and Disaster Management in Australia: Standard’s for Higher Education Providers (2017).

**Conclusion:** The insightful Melbourne Statement reflected the times and led to identifiable, but limited, WADEM outcomes. Congress participants endorsed an Outcomes Statement at WCDEMs in Edinburgh (2005) and Amsterdam (2007) but not at subsequent WCDEMs. Outcome Statements have

become commonplace in professional congresses, and it may be timely to re-introduce Congress Statements as a feature of future WCDEMs.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s25

doi:10.1017/S1049023X2300105X

### WHO Guidance on Research Methods for Health Emergency and Disaster Risk Management

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**Introduction:** The World Health Organization (WHO) has developed and supported numerous initiatives to build capacity and awareness about health emergency and disaster risk management (Health EDRM). These include establishing the Health EDRM Research Network (Health EDRM RN) in 2018 and the publication of the Health EDRM Framework in 2019. These initiatives recognize that research is vital to generating the evidence to inform decision making and research that is integral to disaster preparedness, response and recovery will be vital to delivering the aspirations associated with caring, coping and overcoming in an increasingly challenging world.

**Method:** To strengthen the capacity for conduct and use of research, resources were developed by the WHO Guidance on Research Methods for Health EDRM.

**Results:** This first WHO textbook on Health EDRM research methods was published in 2021 and updated in 2022 with a chapter on Health EDRM research in the context of COVID-19. The 44 chapters offer practical advice about how to plan, conduct and report on a variety of quantitative and qualitative studies that can inform questions about policies and programs for health-related emergencies and disasters across different settings and level of resources. Case studies of direct relevance to Health EDRM provide real-life examples of research methods and how they have modified policies.

More than 160 authors in 30 countries contributed to the guidance, which is relevant to researchers, would-be researchers, policy makers and practitioners. It should help improve the quality of Health EDRM research; the quality of policy, practice and guidance supported by the evidence generated; and research capacity, collaboration and engagement among researchers, the research community, policy-makers, practitioners and other stakeholders.

**Conclusion:** The Guidance is being supplemented by additional resources, including audio podcasts, slideshows, video presentations and webinars, and the content as a whole will be discussed in this presentation.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s25

doi:10.1017/S1049023X23001061