H91   **The Introduction of a Mobile Application to Assist in the Evaluation and Investigation of Death Scenes in Forensic Medical Practice**

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Learning Overview: The goal of this presentation is to discuss the development of a mobile app designed to function on smart phones and tablets, to assist Medical Examiners (MEs) and death investigators in the systematic evaluation and contemporaneous recording of appropriate findings at a death scene. Other ME offices and those officials involved in medicolegal investigation of death may benefit from this overview.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by introducing/proposing the use of a relatively simple but functional mobile app to ensure contemporaneous and standardized collection and recording of information at the death scene, which can then be relatively easily shared with other parties at distant locations.

The introduction of mobile application technology may substantially assist in ensuring that relevant and standardized information is systematically and contemporaneously captured, stored, and made available for assessment by trained professionals, thereby assisting in eventual criminal and civil justice administration. This tool may have potential for significantly improving the quality of medicolegal death investigation, not only in South Africa, but internationally.

Thorough medicolegal death/crime scene investigation—and the recording of relevant findings—plays a critical role in the overall understanding and elucidation of non-natural deaths. Information gathered at the scene of death assists in planning the subsequent death investigation (including, in particular, the autopsy and related special investigations, such as toxicology) and thus ultimately may play an important role in establishing and validating the cause and manner of death.

By applying commonly available smart phone/tablet technology in the form of an application ("app") to the death scene, a simple yet effective aid to death investigation has been developed at the Department of Forensic Medicine of the University of Pretoria for routine use by death investigators and pathologists. This application allows for structured, rapid, and real-time capture and storage of relevant information in electronic format (including photographs), which can in turn be immediately made available by means of wireless transmission technology to off-site parties, including consultant pathologists, police officers, etc. Security of information is ensured by appropriate data encryption technology.

A multiplicity of relevant facts or information fields may be easily and accurately incorporated into the on-site data capture, including elements such as crime/death scene Global Positioning System (GPS) coordinates, ambient temperature, scene photographs, etc. The information can then be transmitted and stored in electronic format and/or linked to existing (or subsequent) data archives. This application is specifically geared toward supplementing or enhancing the information fields/sets that forensic pathologists may require or find to be of value in order to prioritize scene attendance, plan and conduct their postmortem examinations or viewing procedures, or to interpret subsequent autopsy findings. The tool may particularly benefit countries or communities where there is a lack of adequately skilled or trained death scene investigators—which may indeed compromise the quality of the initial investigation (and even lead to grave miscarriages of justice).

Mobile Application, Death Scene Investigation, Forensic Pathology