

With the objective of reducing the number of medical errors made due to inadequate patient history, LifeMedic seeks to provide this information to emergency care doctors through the use of the Internet, telecommunication, and wireless communications technologies.

Keywords: communications, information technology; Internet; LifeMedic; medical history; treatment
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Intelligent Care Management Systems

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A clinical information system is capable of ensuring that the health care professional adheres to best clinical practice or evidence-based medicine. Adherence is by means of a prompting system, as in the "Care Plans Manager", and a rule-based-engine, as in the "Medical Sentinel" system.

Care Plans Manager provides autoprompters that advise the doctor on the recommended treatment and management for the patient at various stages of the disease management process. Care Plans ensure that doctors adopt best clinical practise and evidence-based medicine to manage patients. The system also will track and audit the reasons for deviation from the recommended management protocols. This is a powerful tool, allowing doctors, at all levels of practice, to deliver optimum health care based on current standards.

"Medical Sentinel" is a rule-based engine that is capable of monitoring specific conditions, triggers, and events. Examples are blood results, clinical measurements, and scores from specific scales, like the Glasgow Coma Scale. When these triggers are activated, there will be a predefined action ranging from automatically ordered laboratory tests to the prescription of specific drugs. This serves to deliver uniform care for the patient once the correct algorithms have been built into the Sentinel structure.

Together, they work to optimise the care process ensuring a minimum standard and quality of care is provided to the patient.

The Prompted novaEMR takes into consideration the workflow of the health care professional. Once again, for the individual portions to work, it is recommended that the novaEMR portion of Vesalius has to be in place. Although there is also a possibility of interfacing with other systems, it would not be preferred.

Although the separate components can be adopted as plug and play components, they also function optimally when linked together using the novaEMR Vesalius as the platform of choice. "Care Plans" ensures that for a specific disease condition, the health care professional follows a minimum level of care in the ordering of investigations, drugs and management plans. "Medical Sentinel" waits for specific trigger events and conditions, only to fire reactionary orders in response to variances from the established parameters.

Health care professionals benefit from its automated

process and warning/prompter system; its facilitation of the workflow; its administrative functions; and its potential to reduce mistakes and medical errors.

Keywords: Care Plans; information systems; health care management; medical sentinel; monitor; protocols
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2.12. Disaster Management and Humanitarian Relief

Disaster Evaluation: Guidelines for Evaluation of Medical Response in Disasters

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Disasters always have been a part of life. The occurrence of a disaster creates varying degrees of chaos combined with a mismatch between resources and needs. Extraordinary efforts are needed to restore an affected society back to its pre-event status, but, currently, much of the aid provided is based on intuition and anticipation, and not necessarily is rooted in understanding and knowledge. Today, we can respond quickly, but the accuracy of what we provide to meet the needs of the stricken society may have deteriorated. Without structured and objective evaluations of the responses and the measures taken to prevent or mitigate the effects of events resulting in disasters, it is not possible to optimize the absorbing capacity of a society and the responses to such disasters. Evaluations are designed to enhance the effectiveness, efficiency, and economies of such activities and should be viewed as efforts at continuous quality improvement.

Prior to the introduction of these guidelines, there did not exist any universally accepted organized methodology for the conduct and reporting of the evaluations of the medical effectiveness, efficacy, and benefit:cost relationships of disaster medical responses and relief efforts. In addition, both the responses and the projects for their evaluation are multidisciplinary, and there are no universally recognized, common definitions of terms and abbreviations used among the multiple disciplines involved in reporting the results.

The overall objective for the use of the guidelines is to attenuate or eliminate the damage from disasters. This could result from the elimination of hazards, decreasing the risks for the actuation of the hazard, augmenting the capacity of the society and environment at risk to absorb the disruption from an event.

The guidelines provide a conceptual framework that assimilates what is known about disasters into a series of definitions and concepts that provide standardized ways of evaluating disasters, the hazards and events that cause