

**General Session-I****Technology****Monday, 10 May, 13:00–14:15 hours****Chair: Saiedeh vonKeitz, Genro Ochi****G-1****Hospitals and Year 2000 Computer Compliance: An Unforeseen Disaster***David Jaslow, MD, MPH;<sup>1</sup> Arthur Papacostas, PhD;<sup>2</sup> Jodi Jones, BA<sup>3</sup>*

1. Temple University Division of Emergency Medicine
2. Temple University Computer Services
3. Temple University School of Medicine

**Introduction:** Year 2000 (Y2K) compliance refers to computer ability to recognize the last two digits of the year 2000 as the beginning of the 21st century, not the beginning of the 20th century. Detection is imperative, since all computer-operated and management information systems within a hospital could shut down the moment the next millennium begins. A recent survey of the US health-care industry found that organizations lag behind most other industries in preparedness for what could be the greatest worldwide disaster in the last hundred years.

**Objective:** To present the Temple University Health System (TUHS) planning process to attain Y2K compliance.

**Methods:** The vice president for computer services of Temple University (AP) spearheads a multi-million dollar effort to prevent computer standstill in all components of the TUHS. We currently are midway through a five-step process that will enable us to achieve our goal.

**Results:** Task forces have been assembled within TUHS to analyze and remedy problems associated with automatic date-based functions. These include facilities, biomedical equipment, information systems and interfaces, telecommunications, fixed asset management, and others. Each task force has defined goals and objectives that are designed to enable full compliance by either rewriting computer applications or replacing computer systems. These are outlined in a flow diagram, along with specific tasks in the overall change process, such as assessment and prioritization of inventory, resource development and vendor tracking.

**Conclusion:** The TUHS Y2K project is rewriting computer applications and replacing computer systems to avoid mission-critical computer failure associated with entering the new millennium.

**Keywords:** computers; disaster; failure; hospitals; planning; preparedness; Y2K; year 2000

**G-2****Factors that Affect Information Management during Hospital Disasters***David Jaslow, MD, MPH;<sup>1</sup> Arthur Papacostas, PhD;<sup>2</sup> Jodi Jones, BA<sup>3</sup>*

1. Temple University Division of Emergency Medicine
2. Temple University Computer Services
3. Temple University School of Medicine

**Introduction:** Reliable and continuous information flow is important for effective hospital disaster response. The disaster literature is filled with evidence that communication systems and information management succumb quickly in disasters, but few solutions have been offered.

**Objective:** To discuss elements that undermine effective communications and information flow, and to present one strategy for dealing with these problems.

**Methods:** The communications and information management infrastructure of a university hospital was examined for threat resistance, survivability, utility, and versatility for both internal and external crises. Losses of telecommunications and data management systems were analyzed for their effects on patient care and hospital operations. A comprehensive action plan was developed to assure the safeguarding of information systems and the availability of redundant communication systems.

**Results:** The Hospital Emergency Incident Command System (HEICS) was utilized as the basis to construct a position description for an information manager. This person is responsible for risk assessment, hazard identification, and contingency planning for all hospital information systems during disaster operations. Identifiable weaknesses include a lack of communications capability in proposed command post locations and insufficient protection of non-automated medical records. Other concerns include computer and medical record security, year 2000 compliance, and lack of redundancy in paging and other notification methods. To enhance familiarity and discourage fear of disaster operations, the entire disaster plan will be loaded into a central server for easy accessibility during a crisis.

**Conclusion:** Advanced planning, dedicated staff, and redundant communications systems are crucial to successful information management during hospital disaster response.

**Keywords:** communications; contingency planning; data management; disaster; hazard identification; hospital; hospital emergency incident command system (HEICS); incident command system (ICS); information management; infrastructure; planning; risk assessment; telecommunications

**G-3****Light Guidance in the Darkness of Disaster Situations***Leo Hatjasalo;<sup>1</sup> Matti A.K. Mattila, MD, PhD<sup>2</sup>*

1. MTG-Engineering Ltd., Helsinki, Finland
2. Department of Research, Kuopio University Hospital, Kuopio, Finland

It is important that people easily find their routes out of dangerous areas. However, it is as important that members of different rescue groups are guided easily to the place where they are directed to work.

Verbal guidance has many intrinsic drawbacks. It continuously demands manpower, and advice given is forgotten easily. In darkness, these problems increase logarithmically. There is an urgent need for the solutions to these problems.