ABSTRACT BOOK
FINAL PROGRAMME

3rd Croatian & International Congress on
Telemedicine and E-Health

3 HRVATSKI I MEĐUNARODNI KONGRES
TELEMEDICINE I E-ZDRAVSTVA

Telemedicine on Croatian Islands and in Costal Area—
Real Time Telehealthcare—Anytime—Anywhere
Urgent and Intensive Care Medicine - Special Topics

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compression, DivX mean score was significantly reduced (p=.002). At sub-category analysis, the
difference was still significant for gray-scale and fundamental imaging and for optimal resolution, but not
for color or II harmonics imaging or sub-optimal resolution. At regression analysis (whole database),
session sequence, detail resolution, compression grade, algorythm, image bitrate, echocardiographic
view and hertz used all influenced independently the mean score. Our study supports the use of MPEG-
4 algorythms to greatly reduce echocardiographic file sizes and cost, and to enhance archiving and
transmission of echocardiographic examinations. Quality evaluation studies should account for the many
independent variables that affect image quality grading.

- Island telemedicine network infrastructure
  Zvonimir Stanić

  Taking into consideration location of some of the Croatia’s islands and very low population density, we
have identified several educational issues: lack of teaching staff, relatively small number of pupils in
several schools and commuting problems of teachers and pupils that are further influenced with
relatively poor ferry lines and other transportation means. Scope of this project is connecting regional
island schools with their main schools, providing connection to the Internet over wireless connections
that would enable distance learning and videoconferencing, and dissemination of educational materials
online, thus reducing the need for commuting. This would enable us to improve the quality of teaching in
smaller regional island schools and provide access to education for a smaller number of pupils that were
so far left out of the system, due to organizational reasons. To provide connections to Internet and
ensure network connections between schools, we would use existing CARNet network, that has its city
POPs (Points of Presence, nodes) in almost every major city along on coast. While comparing locations of
the island schools and island medical centers, we have concluded that these locations are mostly
neighbouring, or are located quite close to each other. Therefore, future information and communication
infrastructure should be planned in such a way to meet the needs of both educational and medical
systems on the islands.

- Practical challenges in a heterogeneous global telemedicine architecture
  Peter Killcommons

  Medweb has over its 15 year history developed a robust experience in the practical application of
telemedicine and teleradiology. We have had the opportunity to develop an architecture to manage High
Volume Medical imaging workflow across a global organization. This presentation provides insight into
the impact of firewalls, intrusion dectione systems, and multi-domain security issues from an IT
perspective, acceptable user interface performance from a clinical practitioners pepective, and real
world accounting of the frequency and types of problems typically encountered in this environment.
These include political, technical, and architectural problems as well as some suggested solutions.

- Strategic Planning of Integrated Health Information System
  Ljerka Luć

  The primary aim of the Integrated Health Information Strategy is to recommend the necessary actions to
rectify present deficiencies in health information systems and to put in place the frameworks to ensure
the optimal development and utilisation of health information. The key to successful implementation of
ICT is a strong and universally accepted strategy. A mid- and long term ICT strategy is necessary to
achieve such goal. The main objective of this assignment is to develop a mid- and long term ICT strategy
within the health care sector. The Integrated Health Information Strategy focuses on health information in
its own right rather than on information and communications technology (ICT). The Integrated Health
Information Strategy addresses the major information needs of individuals and broad interest groups
within society. The use of information to support safe and high-quality client/patient care and in planning,
developing, evaluating and accrediting the quality of the health services is a central theme. Special
attention must be given to establishing processes and infrastructures to underpin future health
information developments. Furthermore, it is recognised that effective use of health information is largely
dependent on the skills and knowledge of health service staff and the culture of the environment in which
they operate. Keywords: Strategic Planning, ICT, Health Information Systems, Strategy.