HCI ASMIS

Advanced **S**urgical **M**edia **I**nformation **S**ystem
Medical image- and video storage with HL7 and DICOM connectivity
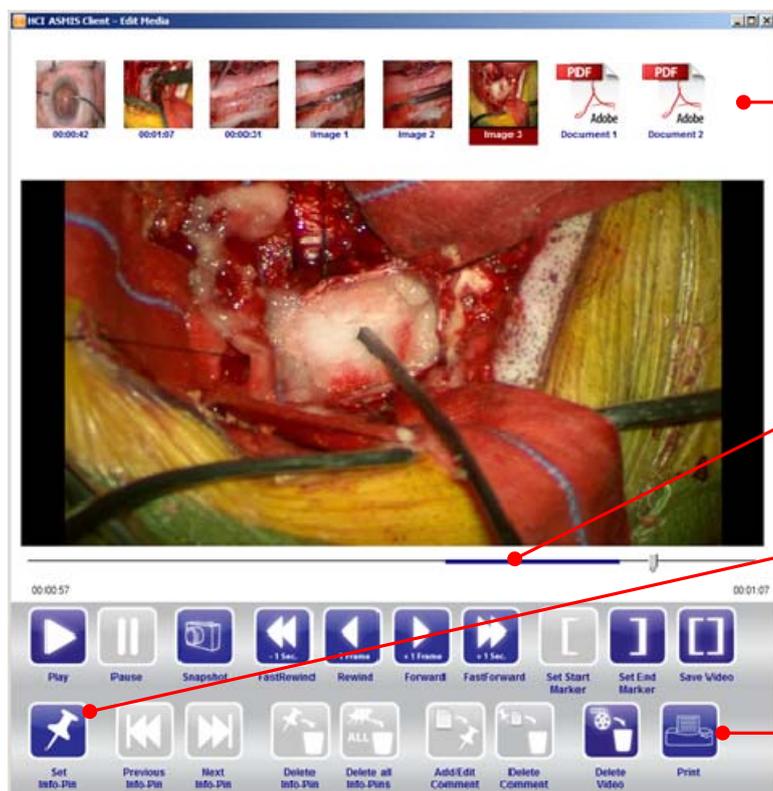The smart surgical video-management software for documentation and PACS II integration

Todays modern cameras and imaging devices for surgery offer higher resolution and precision for better and faster surgical results. High-Definition video capabilities make more details visible to the surgical team. This new opportunies lead to the need of a reliable, easy-to-use and standard-based image- and video-management system that integrates seamlessly into the surgical and IT-workflow.

ASMIS is a solution for intermediate / time-limited storage of surgical images and videos. It allows surgeons to access their recordings from a normal PC to review images and videos for editing and documentation. Edited / selected files are automatically converted to DICOM objects, for easy integration into the existing EPR (Electronic Patient Record).

Advanced Surgical Media Information System:

- Intermediate storage solution for images and videos from Digital integrated Operating rooms
- Ideal for HD-videos from Endoscopy as well as from Microscopy, OR-light cameras etc.
- Automatic patient-data assignment from HIS / OR-planning / scheduling tools via HL7
- Video editing and media-selection for documentation and longtime storage (Video-PACS)
- Integrated patient-database for fast access with search functions for name, ID, procedure type, date/time, name of surgeon etc.
- IHE conform for data security and privacy

Whether the hospital wants to keep the recorded images and videos for educational, legal or other purposes, ASMIS is the smart solution for resource-friendly intermediate storage with industry standard import- and export interfaces.

Supports JPEG, PDF, MPEG 1/2/4 Video

Video edit function for SD-and HD videos

„Info-Pin" function for easy marking of interesting points in the video and adding comments there

Print-templates for fast and easy reports

ASMIS accepts standard media formats like MPEG2, MPEG4 and JPEG from surgical cameras and Digital Integrated OR-systems. Patient data is automatically aquired by HL7-messages received from HIS, the OR scheduling / management tool or the HCI Patient Order Manager. The ASMIS internal SQL-database allows easy access to patient-related images and videos during the pre-defined „lifetime" of the files. Authorized users can edit videos and select files for documentation and automatic DICOM conversation. When the lifetime of the files is expired, the media-objects are either automatically deleted or transfered to another archive. This ensures that the massive amount of video-data does not flood the patient records or existing PACS. Only „the interesting 5%" is kept for longtime storage.

ASMIS allows also the export of media-files in their native, open fomat, but with optional information to be „burned" into the files. These overlay info can be patient name, case desription, the hospitals logo or other user defined text.

Advantages for surgeons
- Easy access to videos and photos made during the procedure at any time from a normal PC
- Easy editing of videos for educational purpose
- „Info-Pins" can be set within the video, for marking interesting points, with comment function
- Customizable print-templates for for easy documentation and reporting, with images and comments automatically added
- Media files are accessibe within the normal clinical portal afterwards

Advantages for IT-admins:
- Automatic, policy-driven file management
- Only edited and explicit desired media files are kept for long term archiving
- No „waste" of expensive PACS storage capacities
- Easy integration into the existing clinical image distribution / portals thanks to standard DICOM / PACS access to media files
- Full audit-proof access- and activity logs

Medical data communication:
HL7 Ver 2.3 / 3.0 query function for aquisition of patient demographical data

DICOM SCP for images, PDFs and Videos (MPEG2@DICOM)

Media support (import):
MPEG2 and MPEG4 Full-HD Video with up to 1920x1080 (1080p)

JPEG-images, PDF-Files

Video-Edit function:
Reviewing of JPEG, MPEG and PDF files

Comment function for JPEG and MPEG („Info-Pins")

Editing of videos to keep interesting sequences and get rid of uninteresting sequences (trimming)

Media support (export):
MPEG2 and MPEG4 Full-HD Video and JPEG-images, PDF-Files as DICOM objects

MPEG2 and MPEG4 Full-HD Video and JPEG-images, PDF-Files as „open" media objects with optional overlay text / logos

Server requirements:
MS-Windows 7 or Windows Server 2003-2012

Quad-Core CPU, min 16 GB RAM

HDD space min 1,5TB, RAID recommended

Security and privacy:
LDAP / NDS support for user authentication

IHE compliant, supports ATNA framework and other IHE privacy framework profiles