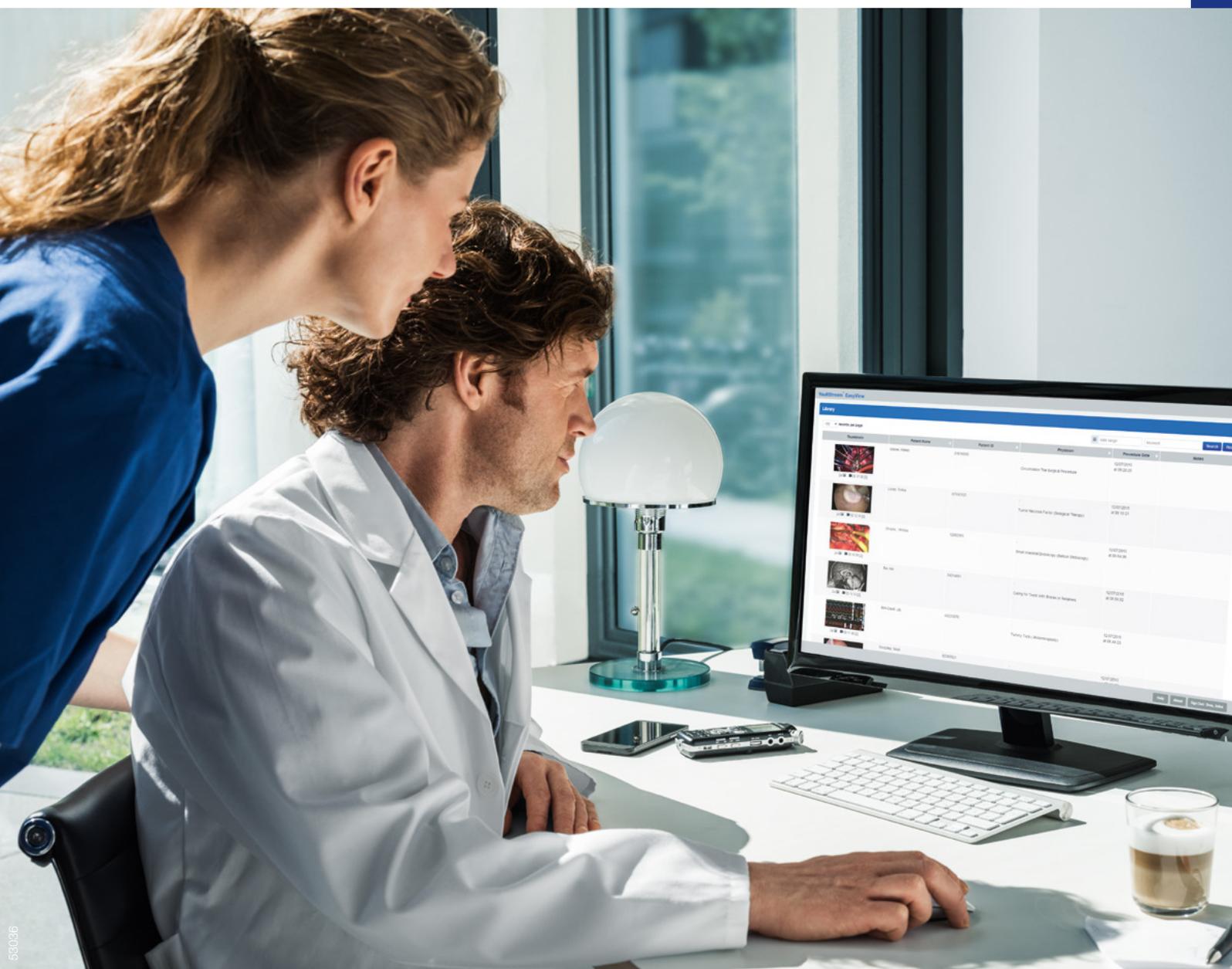# OLYMPUS

Secure, Intuitive, Anywhere

Procedure Recording and Medical Content Management

Supporting Clinical Workflow — Focusing on Patient Care

How Olympus Expanded Expertise and Portfolio

Focusing on Leading Precision Technologies and Services

Olympus focuses on improving the quality of patient care every day by developing and designing world-leading, clinically advanced precision technologies and services. Innovative products enable health care professionals in a broad range of specialist areas to look inside the body using endoscopic procedures. This allows them to see more and do more.

By focusing on early detection and minimally invasive treatment of a broad range of diseases, the mission is to improve patient outcomes, minimize discomfort, and accelerate the recovery process. Cutting-edge technologies and services can also optimize OR workflows and maximize operational efficiency.

Meeting the Challenges of Today and Tomorrow

Supporting the Changing Demands in the Health Care Environment

When performing complex procedures, it is essential to have the right visual information at the right time — with no distractions. Therefore, clinicians and nurses need technologies and solutions that allow them to concentrate on all the important details.

Clinicians are also increasingly reliant on IT and biomedical technicians to keep everything up and running. And as technology is becoming more central to a hospital-wide clinical collaboration system, technicians need solutions that expand clinical capabilities and do not strain the limited resources of time, money and expertise. While outstanding clinical performance could attract a greater number of patient referrals and help to develop centers of excellence, moving to a value-based health care system pressures health care institutions' administrators to improve care quality and efficiency, ensure patient safety, and enhance patient and staff satisfaction.

Learn how Olympus addresses the needs and challenges of stakeholders across the hospital.
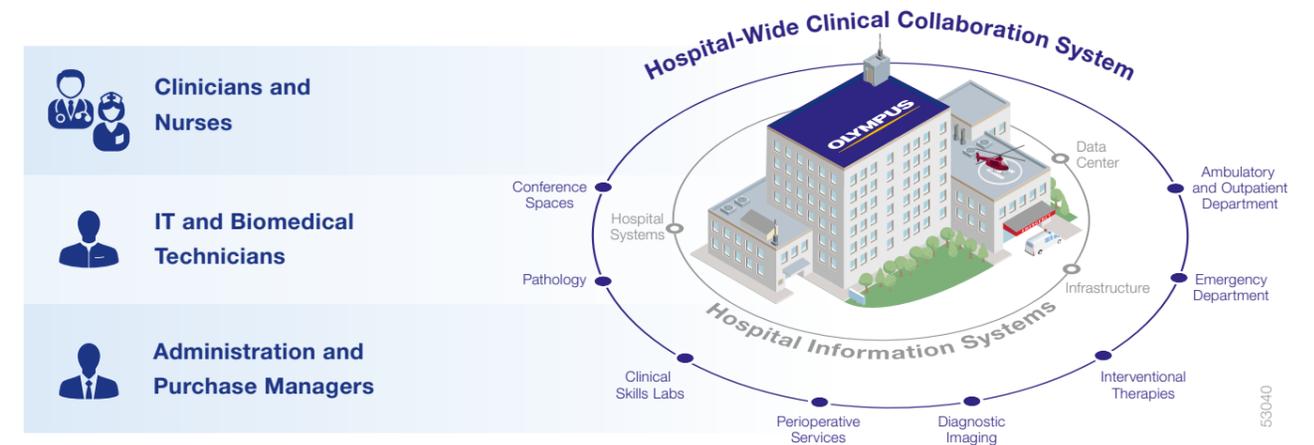
Clinicians and Nurses
· Provide exceptional image and video quality to allow precise and confident procedures.
· Integrate images and information with the HIS, PACS and VNA systems for rapid, informed decision-making.
· Simplify collaboration with colleagues and patients.
· Eliminate distractions and reduce stress with easy-to-use technology, enabling you to focus on the patient and procedure.
· Enable easy capturing, editing and sharing of all media files and presentations across the hospital or hospital chain to support training.
· Improve efficiency and reduce the learning curve with a single, intuitive interface.
· Reduce the burden of adding contextual labels to images and videos by allowing the clinician to select from predefined tags specific to the procedure.
· Streamline the workflow by automatically creating video clips around key procedure milestones.

Administration and Purchase Managers
· Support patient safety and reduce potential for errors by automating tasks and improving standardization.
· Connect clinical teams with relevant images, videos and information.
· Optimize efficiency and revenues by improving procedure-room turnover time and increasing patient throughput.
· Improve patient satisfaction by providing a smooth transition into the procedure room.
· Increase staff retention by making the clinical experience more comfortable.
· Reduce the number of people in the procedure room, thereby reducing the infection risk.

Clinicians and Nurses

IT and Biomedical Technicians

Administration and Purchase Managers

IT and Biomedical Technicians
· Integrate without straining storage, server and network infrastructure.
· Require minimal effort for implementation, training, management and maintenance for all staffing levels.
· Easily integrate any procedure-room image or video source and hospital-wide information systems.
· Provide hospital-grade IT security with automated security patches, virus updates and daily reports.
· Support GDPR conformance by meeting the highest standards for information security and privacy.
· Increase stability and reliability through purpose-built components with compact design.
· Maximize uptime and reduce complexity.
· Make it easy to deliver high-quality images and videos when needed.
· Reduce the total cost of ownership with industry-leading simplicity and reliability.
· Have maximum flexibility with highly scalable future-ready solutions.
· Enhance IT's role by adding a high-value system to support the equipment portfolio.
· Reduce IT workload with solutions that are simple to operate by nontechnical staff.
· Improve storage efficiency by saving only relevant footage in the HIS/PACS.

Manage Content throughout the Hospital

Olympus connects health care teams with clear visual information and collaborative insights across a wider health care environment. The scalable and innovative solution optimized for Olympus equipment and compatible with virtually any image and video source simplifies collaboration with colleagues and patients — maximizing insight and efficiency before, during and after the procedure. The hospital-wide medical content management system VaultStream enables knowledge sharing, training and professional improvement.

VaultStream Solutions Overview

Procedure Recording
Record procedures quickly and easily to facilitate training, documentation and knowledge sharing.

Medical Content Management
Maximize the value of images and videos by making them readily accessible for reviews and consultations.

Video Editing and Labelling
Create and label key-moment video clips at the touch of a button. Easily create presentation-ready videos in minutes.

HIS, VNA and PACS Integration
Efficiently and securely combine images and procedure videos with patient data from HIS, VNA systems and PACS.

Add-On Functionality

LiveStream
Secure streaming which allows remote view of surgical cases for teaching and ability to monitor status of case (within hospital network).
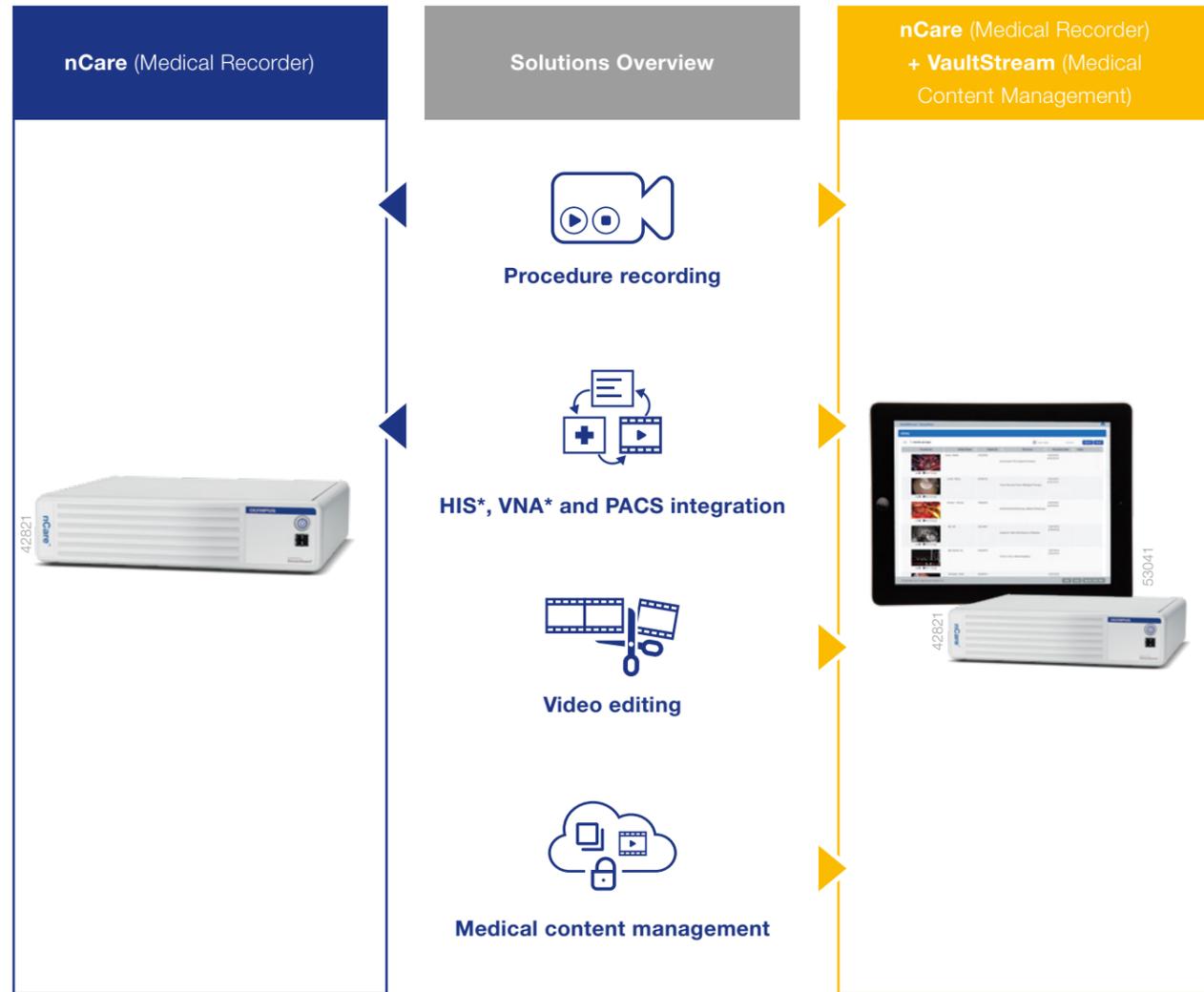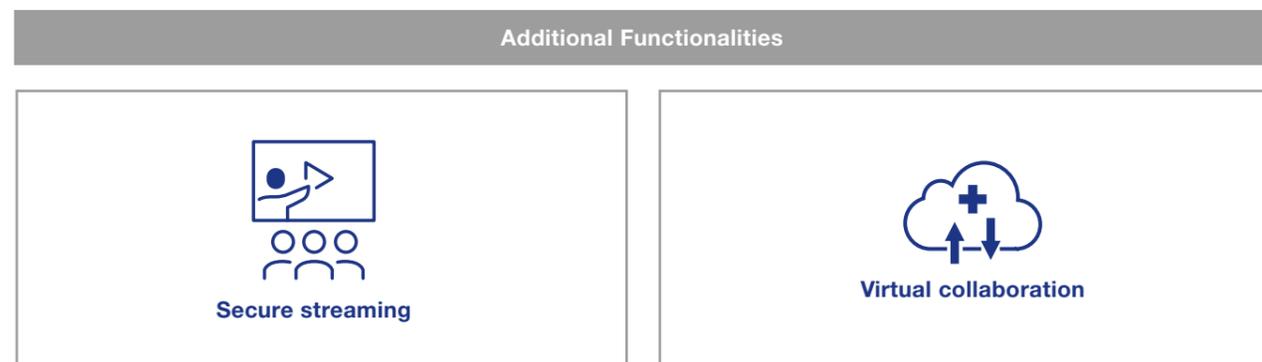
MedPresence
A hospital-wide, cloud-based virtual collaboration solution that enables care teams to quickly bring needed expertise into a procedure room from anywhere at any time.

Our Solutions, Your Decision

Connecting Health Care Teams with Visual Insights

nCare (Medical Recorder)	Solutions Overview	nCare (Medical Recorder) + VaultStream (Medical Content Management)

Procedure recording

HIS*, VNA* and PACS integration

Video editing

Medical content management

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*only with VaultStream

Additional Functionalities

Secure streaming

Virtual collaboration

New Patient Information

First Name
Last Name   required
Patient ID   required
Accession #
Gender   Female   Male   ✔ Unspecified
Date of Birth
(MM/DD/YYYY)

New Procedure Information

Procedure ID:
Physician
Procedure Type

Cancel   Register Now

53039

" I think we have finally found a system that is going to match our needs. We have been searching for a good system for our surgeons for quite a long time. "

Åse Schiefloe | Project Leader, Oslo University Hospital, Norway (August 2018)

How Our Solutions Address Your Needs

The Benefits for the Health Care Organization

Olympus products allow clinicians to effortlessly capture Full HD medical images and videos which can be edited, securely stored, shared and accessed at any time from anywhere across the hospital or hospital chain.

	Efficiency - Supports Simplified and Efficient Clinical Workflow	**Flexibility** - Scalable and Innovative Solution	**Security and Safety** - Ensuring Data Protection and Patient and Staff Well-Being
nCare (Medical Recorder)	· Capture, record, view, label, print and export procedural information via user-friendly touch-panel interface. · Automatic retrieval of patient data through DICOM work list. · Images and videos can be sent to PACS/VNA. · Searchable image and video labels.	· Optimized for Olympus and compatible with virtually any video source.	· Secure storage and access options. · Integrated power source protects media in the event of an unexpected power loss (StreamGuard). · Clinical library with images and videos linked to patient information. · Hard-drive encryption.
VaultStream (Medical Content Management)*	· Automatic transfer of images and videos at the end of procedure to VaultStream and/or PACS/VNA. · Easy access to images and videos anywhere from the patient's electronic record through a link that users access via HIS exchange of orders and results. · Integration of patient data and visual records with HIS. · Reducing the clinician burden of adding contextual labels to images and videos (AutoLabel) by allowing the clinician to select from predefined tags specific to the procedure. · Further streamlining the clinician workflow by automatically creating video clips around key procedure milestones (AutoClip) when the clinician captures an image.	· Scalable library-based solution, deployable in a single area or in multiple clinical areas.	· Teaching media library with pre-edited and anonymized video content. Multilayered Security: · Security best practices (e.g., authentication management, authorized access control, security and virus definition updates and secure connection protocols). · Enhanced protection of stored media through centralized storage. · High standards of information and communication security.
LiveStream (Streaming)*	· Streaming from nCare makes it easy for clinicians to bring their procedures to colleagues and visitors across the hospital's network.	· Viewing live video streams with the most common browsers on Mac, iOS and Windows without the need for an application installation or browser plugin.	· All setup activity and streaming of video is encrypted end-to-end, ensuring the protection of personal data.
MedPresence (Virtual Collaboration)*	· Efficient problem-solving and increased staff productivity. · Virtual access to technical support may reduce OR downtime.	· Allowing experts to join the live procedure from across the organization, around the world and at any time.	· Session access only for authorized participants (Azure AD, ADFS). · Optimized infection control by reducing the number of people in the procedure room. · End-to-end encryption including encryption of MedPresence video streams (AES-256 encryption) and secure storage of MedPresence collaborators' data.

*Requires nCare medical recorder in the procedure room.

nCare Medical Recorder

Secure and Intuitive Design to Support Health Care Teams

nCare is a connected medical recorder that captures Full HD images and videos from up to two surgical devices simultaneously. nCare easily, reliably and securely connects clinicians with the critical visual information they need at any time. The user-friendly solution fits nearly anywhere, from an endoscopic cart to an equipment boom.

The flexible nCare recorder can be deployed as a stand-alone device or integrated into hospital networks and hospital-wide information systems. Recorded visual data can be stored locally on the nCare recorder, saved externally to a USB drive, or stored securely and managed automatically on VaultStream, a centralized medical content management system.

Hospital-Wide Solutions
· PACS interface (DICOM Worklist/Export).
· Expandable and integrated with VaultStream (VSS).
· HL7 orders and results (HIS integration, VSS required).

Flexibility in Health Care Environments
· Capture virtually any video signal up to 1080p HD.
· Single- or dual-channel recording.
· Power on from cart.
· Remote image capture and video recording with iPad/
  iPhone within hospital's network.
· Remote access with iPad/PC from anywhere via access to
  hospital's network.

Safeguarding Recorded Images and Videos
· Protection against data loss in case of power interruption.

Supports Efficient Clinical Workflow
· Efficiency through automated patient registration.
· Capture, record, view, label, print, export and search.
· Integrated audio preamplifier and voice frequency overlay.

Intuitive User Interface and Easy Control
· Side-by-side comparison.
· Easy control via touch panel, remote PC or iPad.
· Medical-grade touch panel, native 1080p resolution.
· Quicker user interface responsiveness and better
  performance for video playback.

Connecting Experts
· Browser-based access to live streaming within the hospital
  network (LiveStream).
· Virtual collaboration including shared control and two-way
  real-time telestration (MedPresence).

VaultStream Medical Content Management

Meeting the Demands of a Hospital-Wide Solution

Access Digital Images and Videos Rapidly and Securely across the Hospital

Clinicians capture thousands of clinical images and videos every year. Health care organizations need an efficient way to ensure medical content is safely stored, but still easily accessible for consultations, procedure reviews, teaching and quality initiatives. VaultStream is a smart, centralized medical content management system that provides storage and access to recorded clinical images and videos linked to patient data across the hospital.

Hospital-Wide Solution (Connectivity)

For clinical images and videos to be of value, clinicians must be able to quickly and easily access them for future reference, review and consultations. Olympus gives clinicians the ability to search and view medical content easily and securely from virtually anywhere with access to the hospital's network.

Protecting Patient Privacy

Hospital-wide security and virus protection safeguard patient privacy and assist you with GDPR conformance. Secure connection protocols ensure procedure data is available only to authorized users and prevents data loss in case of power interruption.

Secure Access to Libraries: Anywhere and Anytime

Configurable data retention policies allow clinical and nonclinical teams to control efficient storage utilization. VaultStream also provides the ability to create a teaching library for managing content for learning and presentations.

VaultStream EasyView

An application that enables an authorized user to access post-procedure images and videos without the need to export patient data to insecure computers or flash drives. VaultStream EasyView lets clinicians interact with their data with the same precision available in the procedure room. Clinicians can search for procedures, review images and videos, capture additional still images, add labels or compare current and historical recordings side-by-side.

VaultStream AutoLabel

Enables further standardization of labeling workflows by presenting clinicians with a predefined list of labels for a procedure, eliminating the need to review previously captured images to add clinical context. Hospitals and clinics can customize these AutoLabels for specific procedure types and workflows.

VaultStream AutoClip

This feature allows users to easily create video clips of a prespecified duration at the touch of a button, enabling physicians to focus on critical moments of a procedure.

VaultStream EasyPost

Clinicians can be confident that all procedure videos will be available anywhere, anytime thanks to the automatic background video-recording feature which is embedded in the innovative EasyPost video production. Additionally, the video footage can be adjusted before submission to PACS, ensuring storage efficiency.

VaultStream EasyCut

A simple, yet powerful video-editing application that helps clinicians create their own presentation-ready videos quickly. Point-of-care editing enables clinicians to "bookmark" key procedure moments. EasyCut automatically renders bookmarked sections into custom-length clips and can insert final clips directly into the presentation.

A Perfect Match for ENT Departments' Needs

· Full HD video recording and image capture.

· Side-by-side video and audio comparison.

· Hertz frequency and audio recording features.

· Frequency overlay with stroboscopy.

· Frame-by-frame playback as well as slow motion and fast-forward.

Related Products and Services

EASYSUITE - OR Integration Platform

EASYSUITE is the next-generation OR integration solution portfolio, offering efficient multidisciplinary collaboration through scalable video-over-IP routing of uncompressed 3D/4K video signals, hospital-wide image management and virtual collaboration. The EASYSUITE brand comprises the following main products and solutions:

- The video management platform **ES4K** serves as the basis for the new OR integration solution, providing video-over-IP routing of uncompressed 3D/4K video signals. ES4K is compatible with the Olympus medical equipment controller UCES-4, supporting the standardization of the procedure.
- The remote collaboration solution **MedPresence** is a software add-on. It stands for "medical virtual presence" and enables remote collaboration.
- The networked and highly flexible medical recorder **nCare** is compatible with nearly every video source and supports various medical specialties.
- The secure, intuitive, hospital-wide medical content management system **VaultStream** provides storage of and access to recorded clinical images across the hospital.
- **Project management** and **workspace design** are services Olympus offers to provide assistance from design to installation, improving the OR workflow.
- **Service solutions** help customers secure their investment by offering on-site and remote support, maintenance and loan equipment, regular software updates, as well as on-site training.

One System for All

Designed to meet the needs of multiple specialties like general surgery, urology, gynecology, ENT and more, VISERA ELITE III offers 3D and 4K imaging, impressive fluorescence-guided surgery, well-proven Narrow-Band-Imaging (NBI) and Yellow Enhancement (YE), all in one system. Benefit from compatibility with scopes, camera heads and ENDOEYE series of the latest generation to efficiently reduce investment costs.

Innovation That Grows With You

VISERA ELITE III is your new versatile OR standard. Different disciplines can choose configurations and use peripheral technology according to individual needs. This provides standardization of OR workflows along with true flexibility. Only pay for what you need, keeping the possibility for future upgrades through software licensing.

ORBEYE

The ORBEYE 4K 3D orbital camera system is a next-generation product for conducting surgical microscopy. The heads-up posture during surgery cannot just eliminate the discomfort of using a traditional surgical microscope, but also enables the surgical team to see the same image and participate more effectively in surgery.

Record your procedure locally, manage your surgical data in a wholistic medical content management system, and leverage global peer consultancy for your surgical performance and teaching capabilities.

ORBEYE and nCare: Free yourself from the constraints of standard surgical microscopes to reach beyond the limits of the operating room.

Secure, Intuitive, Anywhere

OLYMPUS

> www.olympus.eu/contentmanagement