



**All You Need.**

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# ICOSYS – The Hospital Information System

The Integrated Solution for Healthcare and  
Rehabilitation

Improvement of quality and patients safety and satisfaction in situations of limited resources not necessarily is a contradiction, but the result of optimisation of processes and focussing on the real needs and wishes of the client. ICOSYS supports you with a complete integration of all areas of healthcare and offers the leading interdisciplinary approach.



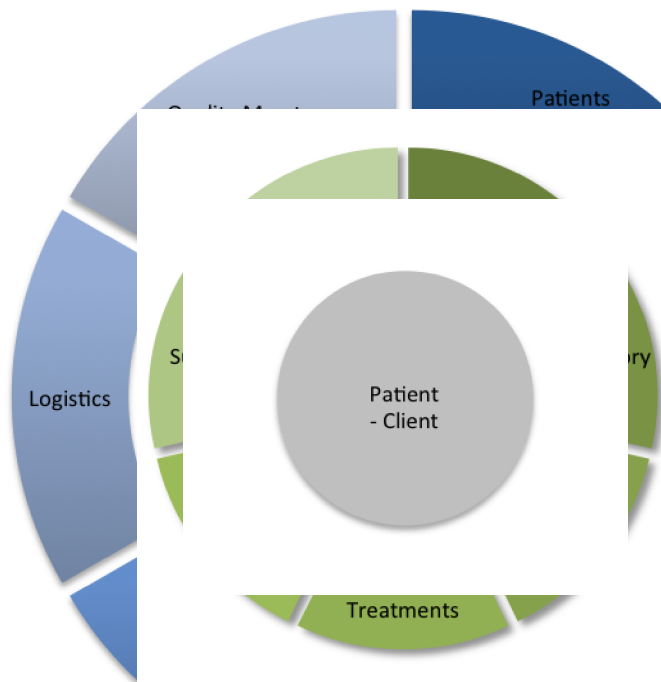
# ICOSYS – The Hospital Information System

The Integrated Solution for Healthcare and Rehabilitation

## The Outstanding Healthcare Software

ICOSYS is the unique hospital information system developed with a holistic approach towards public health in all aspects.

Central element of the planning and documentation structure is the client/patient and his/her social, psychic and biological system. These, in combination with the medical aspects, such as diagnoses and results of examinations, allow for a holistic view and therefore ensure an optimum understanding of health, sickness and handicap - a multidimensional setting with either-way interference.



ICOSYS – as much focused on the clinical and the healing processes – in addition provides management with all tools required to operate healthcare facilities in the most efficient and economic manner resulting in value added for the stakeholders

## The Holistic Approach of ICOSYS



Clients, together with their persons of reference from the family or other social environment are seen as singular and complex entities. Their goals and wishes, their diagnoses and capabilities are the basis for the measures to be taken.

The common structure and language in all documentation components ensure a comprehensive approach and a need-oriented view on the clients. Thus, the different departments are well supported to get a common picture of the client.

ICOSYS supports the communication with the payors, the relatives and with the professional network. Also health care and other providers from other facilities can be part of the documentation, especially when it comes to a professional case management.

Evaluation allows for conclusions to be drawn, which measures have been especially powerful for the clients and have been considered particularly beneficial by them. Optimizing the work with the clients and furthermore optimizing the package of services offered will initialize targeted cost optimization.



## Your Benefits at a Glance

The Properties	Our Advantage	Your Benefit
Universal Modular Structure	<p>The individual modules</p> <ul style="list-style-type: none"> <li>• Can be purchased and used independently</li> <li>• Can be interfaced to existing software solutions, and</li> <li>• Special solutions, such as regional billing modules can be integrated without any problems</li> <li>• Are fully compatible to third party software systems.</li> </ul>	<p>Because of the unique compatibility of ICOSys and the availability of numerous interfaces, software modules, which are already implemented, are easy to integrate, thus providing continuity to the user.</p> <p>Moreover, the open product and interface policy allows for integration of preferred systems and solutions in special departments on a product independent basis, e.g. Medical Imaging.</p>
Fully integrated and unique documentation and diagnoses management	<ul style="list-style-type: none"> <li>• Questions asked and answered once are available throughout all procedures and departments</li> <li>• Interdisciplinary documentation allows for correct expert's decisions</li> </ul>	<p>As a consequence efficiency of daily procedures is enhanced (also in terms of time necessary and costs) and error sources and errors deriving from multiple and separated acquisition of information are prevented.</p>
Wholly integration of accredited international classification systems, such as ICF, ICD10, and many more.	<ul style="list-style-type: none"> <li>• Guided assignment of diagnoses in accordance with international classification systems.</li> <li>• State-of-the-art integration of patient's environment and therapy aims.</li> <li>• holistic view on patients/clients</li> </ul>	<p>The application of international classification systems allows for objective, unambiguous diagnoses in international level.</p> <p>Objective descriptions and diagnoses also facilitate data exchange between specialised departments and institutes.</p> <p>Therapy plans can be matched optimally with the patient.</p>
Flexible financing options	<ul style="list-style-type: none"> <li>• Investment (purchase of licences)</li> <li>• Leasing</li> <li>• Charges per case</li> </ul>	<p>The different financing options offered allow for the right choice with consideration of budgets available (e.g. investment vs running costs).</p> <p>Especially in the public sector, implementation of ICOSys can be realised independent from investment budgets.</p>
Security of investment	<ul style="list-style-type: none"> <li>• Minimum hardware requirements</li> <li>• Customer and product support directly from the development team with highest expertise</li> <li>• Continuous enhancements of new applications and modules, as well as hardware platforms.</li> <li>• Partnerships with experts from the fields of medicine, care and management secure functional enhancements and optimum implementation of new requirements.</li> <li>• Involvement of our customers in the Product Improvement Programme.</li> <li>• excellent references – successful installations with satisfied customers.</li> </ul>	<p>The low hardware requirements provide our customers with a valuable independence from the trend towards more and more powerful end user systems, resulting in low hardware costs and extremely long time of hardware usage.</p> <p>Simultaneously, our continuous product improvement process guarantees the competitive advantage over other products, consequently securing the lead in managing all clinical and care processes while simultaneously securing the commercial success.</p>
Full Integration of mobile devices	<p>ICOSys is developed for all mobile devices (Windows, iOS, Android)</p>	<p>All clinical and care processes can be documented independent from location and data acquired of course is available throughout the system.</p> <p>From the support of all common mobile platforms, hardware costs can be optimised by choosing devices, case by case.</p>



## The Clinical Processes

...are the core processes with which the patient is in direct contact and, therefore, they are of crucial importance to the primary healing processes and therapies applied. They represent the tools and the backup for the medical and nursing staff increasing and securing patients safety and quality of services rendered. ICOSYS was developed together with experts from all fields, thus supporting the clinical processes in an unique way.

### Diagnostics

- **Assessment**
  - As per ICF (WHO)
  - As per various scoring models
  - As per individual settings
- **Medical exams internal and external**
  - Request exams
  - Document findings of medical exams
  - Interfaces to RIS/PACS
- **Diagnoses as per ICD10**

### Laboratory

- **Prescribe lab tests**
- **Document laboratory findings**
- **Option**
  - Connect labs via interfaces

### Care

- **Planning**
  - Assessment
  - Diagnostics
  - Defining goals
  - Intervention planning
- **Executing**
  - Medical recording - vital signs observation
  - Intervention logging and Documentation
  - Unforeseen events
  - Wound documentation
  - Spontaneous measures
  - Drugs handed out
- **Evaluating**
  - Goals and Interventions

### Medical Treatments

- **Planning**
  - Diagnostics
  - Planning/scheduling of medical treatment
- **Executing**
  - Intervention logging and Documentation
  - Documentation of the rounds
- **Evaluating**
  - Goals
  - Interventions
  - Document the findings – doctor's letter

### Therapeutic Treatments

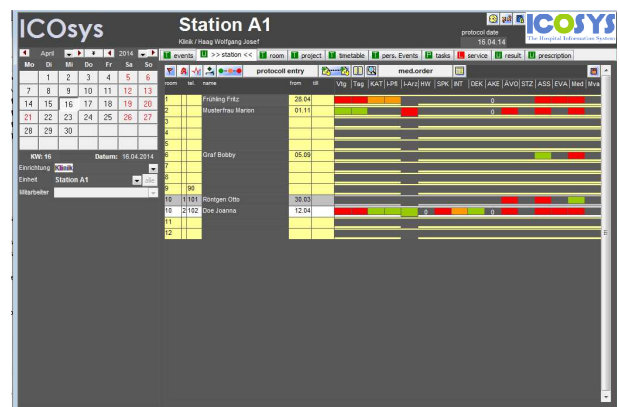
- **Planning**
  - Assessment
  - Defining goals
  - Therapy prescription
  - Therapy planning/scheduling
- **Executing**
  - Logging and documentation
- **Evaluating**
  - Goals
  - Interventions
  - Document the findings

### Surgery

- **Planning**
  - OP planning and scheduling
- **Executing**
  - OP documentation
- **Evaluating**
  - Post operation documentation

### Medication

- **Prescribe drugs**
- **Document dispensing of medical drugs**
- **Evaluate the prescription**
- **Option**
  - Individual drug catalogues can be used
  - Check for interaction of drugs
  - Check for incompatibility





## The Management Processes

...are the processes which support the primary clinical processes on hospital management level. They contain all tools for resource planning, logistics, communications, quality management, etc. Including also the commercial management modules they are essential for hospital and rehab management in order to allow for efficient and profitable management of the facility. Modules providing automatic accounting of services rendered as well as automatic billing to cost bearers allow for increase of cash flow and liquidity, important key figures for management and shareholders.

### Patients Management

- **General Patients Management**
  - Admission and Discharge
  - Customer Master Data
  - Admitting hospital/physician
  - Client's social Environment
  - Performance & Billing Arrangements
  - Approval Management
  - Recording of services rendered
    - POS for individual purchases
    - Collection of services rendered
    - Coding of services rendered
- **Inpatients**
  - Beds occupancy management
    - Graphical occupancy overview
    - Bed assignment with gender test
    - Interruptions
    - Reservations
  - Trust management
    - Account management
    - Safe key issues/return
    - Prepayments
    - Transfer account balance to bills
    - Vouchers
    - Valuables in possession of the clients
- **Outpatients**
  - Waiting room management
    - Electronic call for treatments and therapies
- **Mobile**
  - Route planning
    - Clustering of service area
    - Propose optimal assignment of clients to clusters

### Resource Management

- **Staff**
  - Human resource management
  - Crew scheduling
  - Time tracking
- **Infrastructure**
  - Organisation structure
  - Inventory management

### Communication / Documentation

- **Document**
  - Document management of incoming/outgoing documents
  - Archive management
- **Correspond**
  - Email / SMS / Fax solution
  - Support of medical platforms (eg. Austrian ELGA)
  - Administration of contacts
- **Inform**
  - Web-Information platform

### Financials / Controlling

- **Billing to clients and/or cost bearers**
  - **Accounting**
    - Integrated accounting
    - Interface to accounting
  - **Individual statistics and reports**
- Pivoting via EXCEL**

### Logistics

- **Transport service management**
  - Planning of transports
  - Performing and billing of the services
- **ERP System**

### Quality Management

- **Customer satisfaction analyses**
  - Design customer questionnaires
  - Record questionnaires
  - Analyse questionnaires
- **Complaint management**
  - Record complaints
  - Analyse and settle complaints
- **Quality documentation**
  - Issuing quality documents
  - Publishing quality documents



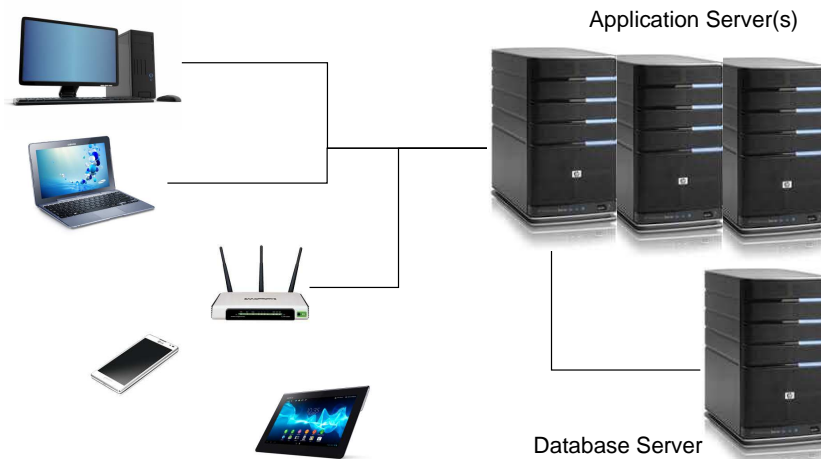
## The Modules

ICOSYS	ICOSYS-BASIC	The platforms	Back office platform Mobile platform Web platform SQL Server
	ICOSYS-LINK	The interface management	Standard interfaces Customized interfaces
ICOSYS.DOC	ICOSYS-CLIENT	Customer information system	Customer management Bed occupancy management Process management Charging of services rendered Inventory and financial management
	ICOSYS-CARE	The Service Documentation	At station's level: At patient's level Medical and nursing documentation Doctor's documentation Confidential documentation Attendance records Ambulant services documentation Mobile services documentation Patient projects and events
	ICOSYS-MOBILE	The Service Documentation on mobile devices	All medical and nursing documentation Wound documentation Medication Therapy documentation Assessments Questionnaires
	ICOSYS-CAREPLAN	The assessment, goal and service agreement	Individual future plan Spontaneous measures Individual potential of resources Specific scoring models extending the ICF catalogue
	ICOSYS-VISUAL	The visualisation of the documentation	Visualisation of potentials and deficits Protocols contextual to potentials and deficits
	ICOSYS-COCKPIT	The controlling instrument	Process controlling Controlling of approvals Financial controlling Coding
ICOSYS.ADMIN	ICOSYS-STAFF	The human resources information system	Employee master data Organisational assignments User administration Classification Process management Performance records
	ICOSYS-STAFF	The crew scheduling	Interface to ICOSYS-STAFF Web-based access to schedules
	ICOSYS-TIME	Time tracking with clock system	Management of work models Time clocks Settlement of working time
	ICOSYS-ORG	The organisation	Management of internal and other clients Organisational structure
	ICOSYS-QM	The quality management system	Customer/patients relationship management Quality management Administration of catalogues Service catalogue
	ICOSYS-INFRA	The infrastructure	Ride and trips service Management of Resources
ICOSYS.COMM	ICOSYS-DOCUMENT	The communication and documentation system	Document management Archive management
	ICOSYS-CORRESPOND	The contact management system	Master data Profiling of contacts Serial letter data bases Correspondence (Email, sms, fax, etc)
	ICOSYS-INFORM	The internal web information platform	Information and messages Document management
ICOSYS.CTRL	ICOSYS-ANALYSIS	The management information system	
	ICOSYS-STAT		report generator graphic representation pivoting EXCEL export
ICOSYS.PLAN	ICOSYS-TPLAN	The therapy planning system	Prescriptions Planning Documentation Therapist scheduling

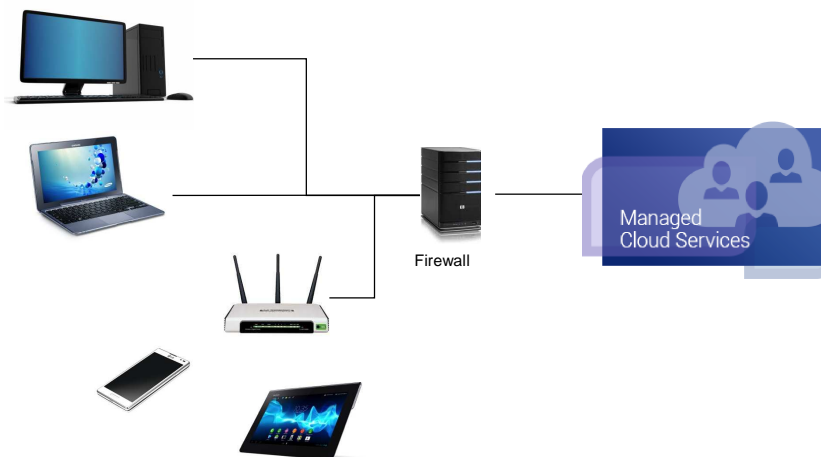


## The Software Architecture

### The Home Architecture



### The Cloud Architecture



## System Requirements



### Server

- Windows Server 2003 or higher
- dual processor 1 GHz
- 8 GB RAM
- 100 GB hard disc
- values given depend on the number of users (above values are minimum requirements)
- database: MS SQL Server 2005 or higher
- Exchange Server/Webserver if required
- recommendation: split database server and application server

### Network

- sufficiently quick network to allow for multi user operations (min 100 Mbit LAN)

### Clients

- min. requirement processor 1 GHz, 1 GB RAM
- Windows XP or higher
- MS Access 2003 or higher (runtime version)
- alternative access via terminal server (remote desktop)

### Platforms

- Windows PC (Linux, MAC: via remote desktop)
- smartphone/tablet (Android, Windows, Blackberry, iOS)

### Interfaces

- time mgmt. software
- duty roster software
- accounting and payroll
- ERP systems (e.g. SAP)
- time recording
- web portals of cost bearers and insurances
- customised interfaces on demand

## Our References

### Hospitals:

- Sauerland Klinik Hachen, Deutschland - Spezialklinik für Multiple Sklerose
- Privatklinik Lassnitzhöhe - Rehaklinik (neurologisch und orthopädisch)
- Privatklinik St. Radegund - Rehaklinik (psychiatrisch)
- Privatklinik Hollenburg - Rehaklinik (psychiatrisch)

### Geriatric Care:

- Verein Aktiv - Hauskrankenpflege in Salzburg
- AVS Kärnten - geriatrische Pflegeheime an 4 Standorten

### Handicapped Aid:

- Lebenshilfe Kärnten - Einrichtungen der Behindertenhilfe - Wohnheime und Werkstätten an 5 Standorten in Kärnten
- Rettet das Kind Kärnten - Einrichtung der Behindertenhilfe - Wohnheim und Werkstätten
- Assista Oberösterreich - Einrichtung der Behindertenhilfe - Wohnheime und Werkstätten an 5 Standorten
- Pflegeheim Neutillmitsch - (psychiatrisch)
- Pflegeheim Mariatrost - (psychiatrisch)
- SHT-Lobby - Casemanagement, Verein für Schädel Hirn Trauma PatientInnen

### Therapeutic Institutes:

- Rettet das Kind Kärnten - Ambulatorium für Therapie von Kindern und Jugendlichen
- APT Graz und APT Hartberg - Ambulatorium mit über 25.000 aktiven PatientInnen

### Others:

- Brolli - Textilreinigungen - Zeiterfassungssystem ICOsys-Time
- Raiffeisen Ware inklusive 22 Raiffeisenlagerhäuser - Analysetool für Bilanzen und Umsatzentwicklungen

## ICOSYS

by MANAGEMENT PARTNERS

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