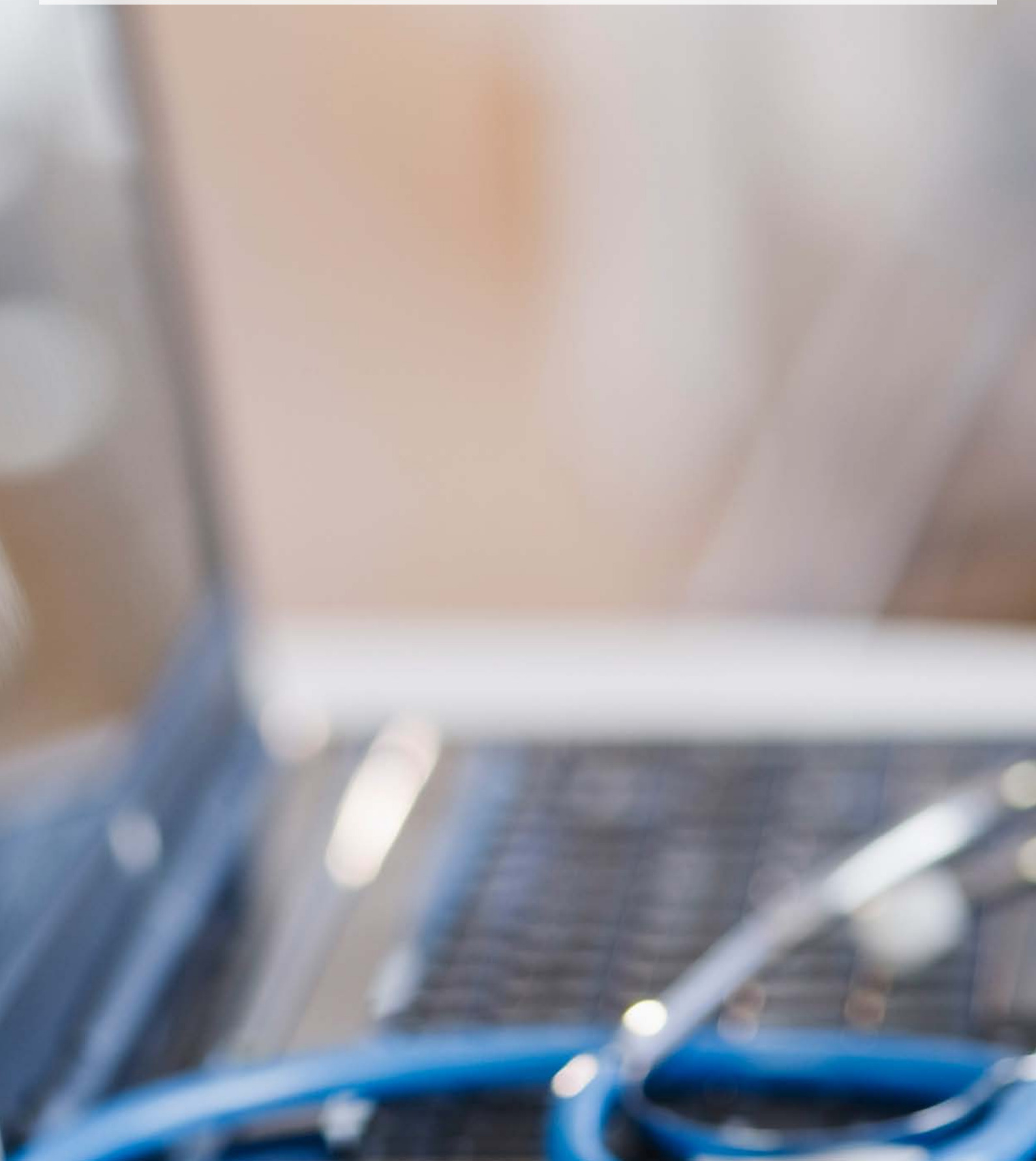
SAP Overview Brochure
SAP for Healthcare

High-Performance Healthcare Solutions That Drive Better Healthcare Outcomes

The Best-Run Businesses Run SAP™

"We are convinced that we have acquired a robust and consolidated product that supports the fundamental business processes of the organization. . . . This product guarantees us ten more years of evolution to meet our needs."

Dr. Xavier Pastor, CIO and Former Chief Medical Informatics Officer, Hospital Clínic de Barcelona, Barcelona, Spain



To remain competitive today, healthcare organizations must deliver quality care, control rising costs, improve patient safety, and increase efficiency and employee productivity. Of greatest importance, healthcare organizations need better visibility of their business to pinpoint where and how they can improve.

SAP for Healthcare solutions help you achieve these results by enabling improved efficiency and effectiveness across your administrative and clinical processes. With SAP® software, you can reduce costs and increase the time spent on patient care.

Streamlined, Integrated Healthcare Processes

Healthcare organizations today face a complex set of challenges. To remain competitive, you must constantly seek to deliver quality care and improve outcomes. At the same time, you have to increase efficiency and employee productivity in order to combat skill shortages and contain rising costs and expenses. Given these circumstances, healthcare organizations have to streamline and integrate processes both horizontally – across the healthcare supply chain, extending them from physician and hospital right into the community – and vertically from management and administration to patient care. Most important, they need better visibility – both clinical and managerial – to gain a better understanding of how they operate and where they can improve.

SAP for Healthcare solutions help you achieve these results by enabling improved efficiency and effectiveness across your administrative and clinical processes. Therefore, you can reduce costs and increase the time spent on patient care.

SAP is a leading provider of healthcare solutions, with over 20 years of experience. More than 2,300 healthcare organizations and over 1,000 life sciences companies worldwide use SAP solutions. Added to this, SAP has over 30 years of experience delivering software solutions that help organizations become best-run businesses. We have applied this experience to deliver first-class solutions for the healthcare industry. Because SAP provides solutions that support healthcare-specific business processes end to end, you can focus on the priorities that matter most now and add SAP solutions when required, knowing they will integrate with your existing software.

In this brochure we've provided an overview of the SAP for Healthcare solutions. We've indicated who they will benefit most, how they can be used, and through case studies the benefits they bring. With these proven healthcare solutions, you will be able to meet the challenges your healthcare organization faces.

With SAP® software, the Hospital Clínic de Barcelona in Barcelona, Spain:

- Eliminated more than 300,000 paper requisitions for clinical tests a year, saving an estimated €175,000 per annum
- Improved the accuracy of invoicing, resulting in an estimated additional revenue of €237,500
- Enabled a patient's entire history to be viewed regardless of department and eliminated the need to input data several times
- Improved management of the patient waiting list, based on priorities and capacity planning

SAP® software drives better healthcare outcomes. For example:

- The Montefiore Medical Center in the United States saved €64 million over the last 10 years through reduced material costs, rebates, and standardized supplies.
- Orbis Healthcare Group in the Netherlands reduced overtime costs by an average of 2.5%.
- SSM Health Care in the United States reduced nonmaster item spending by 70%.
- Hôpital du Sacré-Coeur in Montreal, Canada, saved €1.36 million in nursing hours and €900,000 in other costs over five years.
- Thoraxklinik of Heidelberg, Germany, improved patient care and optimized treatment processes with an innovative service portal that won a Computer World award.
- Institut Català de la Salut in Catalunya, Spain, reduced nonattendance for hospital visits by 20%.

"Regulations are placing enormous pressures on revenues and profitability in the healthcare industry. With SAP software in place, we view this as an opportunity to outpace our competitors."

Charles Agins, Vice President of Finance, Montefiore Medical Center, the Bronx, New York

Key Healthcare Trends

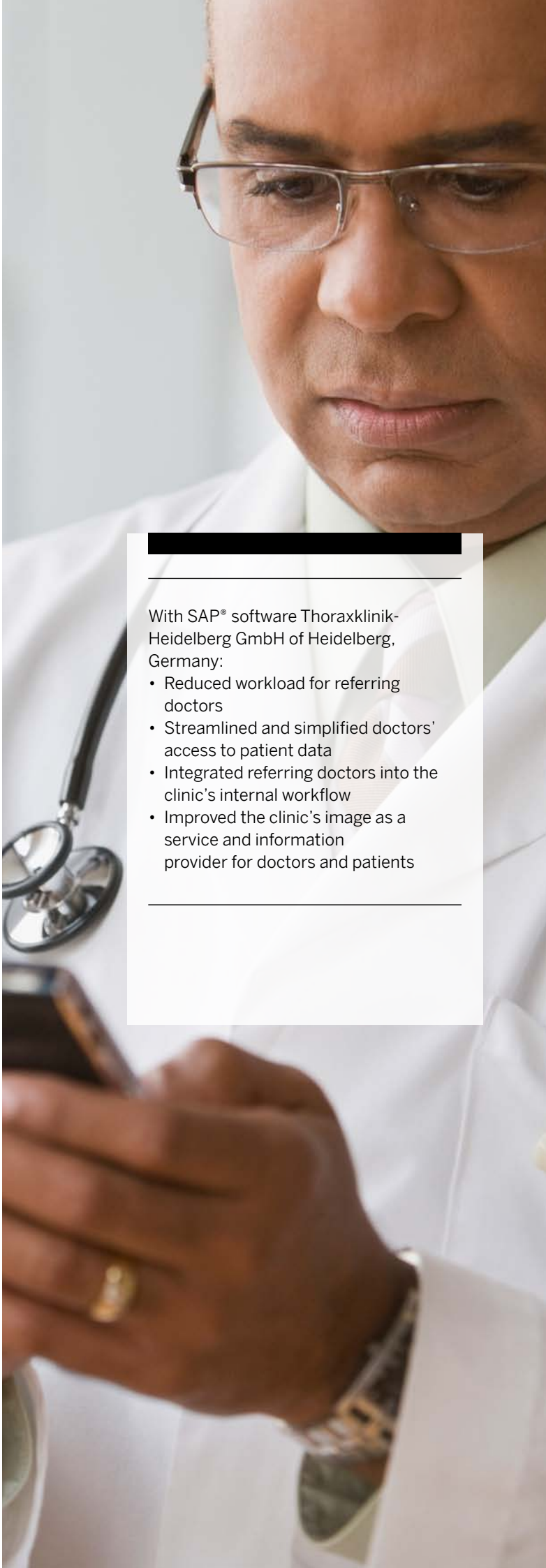
The healthcare industry is known for constant innovation. The rate at which pioneering drugs and techniques are invented continues to accelerate, catalyzed by advances in knowledge and technology.

However, to continue to be successful, healthcare organizations need to match this clinical innovation with administration and management transformation to address four key trends:

- Rising costs and expenses
- More demanding customers
- Skill shortages
- Increased patient safety and quality of care

CONTAINING COSTS

Whether publicly or privately funded, all healthcare organizations are under pressure to contain costs so that clinical care is affordable and available to all. Faced with this situation, healthcare organizations must look at how they can streamline and standardize both administrative and clinical processes so that the processes become more efficient and more repeatable, not only reducing costs but also increasing quality.



With SAP® software Thoraxklinik-Heidelberg GmbH of Heidelberg, Germany:

- Reduced workload for referring doctors
- Streamlined and simplified doctors' access to patient data
- Integrated referring doctors into the clinic's internal workflow
- Improved the clinic's image as a service and information provider for doctors and patients

MANAGING PATIENT EXPECTATIONS

Healthcare consumers are better informed and therefore expect top quality in the treatments they receive. And driven by their experiences in other areas of life, patients now expect to be treated as customers. They expect faster responses, quicker attention, improved collaboration between healthcare organizations, and easier communication with their healthcare providers.

To meet patients' expectations, healthcare providers have to become more performance driven. They must measure and monitor their processes so they can establish a culture of continual improvement. They must become more transparent, publishing the results so customers can see how they are performing in order to establish trust.

At the same time, healthcare organizations have to continuously appraise how they deliver care, taking advantage of new technologies and bringing care closer to the patient.

ATTRACTING AND RETAINING SKILLS

There is a shortage of skills in the healthcare industry, with an increasing proportion of healthcare workers approaching retirement age. The trend shows that fewer nurses and doctors are being trained although, as the population ages, demands on the healthcare system are increasing.

To maintain levels of service, healthcare organizations must attract and retain the highest-quality staff. Doing so requires first-rate human capital management practices in order to manage, motivate, and reward staff.

INCREASING PATIENT SAFETY AND QUALITY OF CARE

Patient safety will always be critically important, and with the vast volume of drugs and treatments available today, it is absolutely vital that healthcare providers keep abreast of adverse reactions in order to safeguard patients' health.

In addition, monitoring treatment success rates is becoming an essential factor in raising standards of care and reducing costs by identifying best practices and the most effective clinical pathways.

Healthcare solutions from SAP help organizations support these trends and issues, supplying comprehensive and sophisticated functionality right across the healthcare ecosystem.

SAP Solutions at a Glance

The following table provides an overview of the comprehensive range of healthcare applications available from SAP.

Healthcare Solution	Trend Addressed	Function
SAP® ERP Human Capital Management solution	• Attracting and retaining skills • Containing costs • Enabling knowledge transfer to guarantee updated professionals	Human resources
SAP ERP Financials solution	• Containing costs • Gaining insight with a real-time integrated view	Finance
SAP Supplier Relationship Management and Logistics for Healthcare package	• Containing costs • Establishing consolidated material management with a professional buyer setup	• Finance • Operations • Materials management
SAP Patient Management for Healthcare package	• Managing patient expectations • Increasing patient safety and quality of care • Performing accurate billing and using coding rules • Integrating admission, discharge, transfer (ADT) processes	Operations
Clinical care software (Siemens i.s.h.med from SAP)	Clinical care; increasing patient safety and quality of care	Operations
Strategic IT software	Closing the strategy-execution gap by integrating a strategic view and consolidated data with operational work	IT
SAP BusinessObjects™ portfolio of solutions	• Gaining insight • Containing costs • Managing patient expectations • Increasing patient safety and quality of care	• Operations • Finance
SAP Collaborative E-Care Management application	• Increasing patient safety and quality of care • Maintaining patient and physician relationships • Integrating care provision into the community	Operations

SAP Solutions for Healthcare

SAP ERP HUMAN CAPITAL MANAGEMENT

The SAP ERP Human Capital Management (SAP ERP HCM) solution helps executives, HR professionals, and managers forecast, plan, and hire the best talent. The software contributes to increased managerial effectiveness and efficiency in cultivating the skills of the workforce and training staff.

Using one HR solution for all talent management processes helps you quickly understand where your workforce's talents lie and align the goals of employees with the organization's overall strategy.

SAP ERP HCM has sophisticated facilities for automating core HR processes, such as employee administration, payroll, and legal reporting; increasing efficiency; and supporting compliance with changing global and local regulations.

KEY BENEFITS

The SAP® ERP Human Capital Management solution can help you:

- Improve workforce potential while supporting future innovation, growth, and flexibility
- Impart knowledge to employees, partners, and customers through e-learning, classroom training, collaborative learning, and information distribution
- Make sure that people with relevant skills are assigned to appropriate jobs within set timescales
- Improve compliance with global and local regulations
- Reduce the costs of retaining and replacing employees

SAP ERP FINANCIALS

The SAP ERP Financials solution is a complete financial management solution designed to provide end-to-end support to meet the needs of the most complex healthcare organizations. With its comprehensive financial and management accounting, financial supply chain management, and treasury applications, it helps you accurately manage liquidity and cash. You can streamline processes, lower costs, anchor the financial health of the organization, and reduce the cost of compliance and risk. In addition, SAP ERP Financials allows you to accelerate your financial close, deliver faster, more accurate financial reporting, and gain greater insight and visibility across your organization for improved decision making.

KEY BENEFITS

The SAP® ERP Financials solution contributes to:

- Improved ability to identify which clinical processes drive costs and understand where revenues come from
- Streamlined labor-intensive tasks, including intercompany reconciliations, automated journal entries, and consolidation
- Faster detection and analysis of deviations
- Reduced operating and financial costs
- Improved cash flow
- Improved compliance with regulatory reporting requirements

"Using SAP ERP HCM in conjunction with the Harmony application we can plan more carefully and utilize our human resources and talent more effectively."

Mirella Bouweriks, Director of Human Resources, Orbis Healthcare Group, Sittard, the Netherlands

THE CLINICAL SUPPLY CHAIN

The SAP Supplier Relationship Management and Logistics for Healthcare package helps you take control of your purchasing and inventory to improve availability while driving down costs. The package automates, simplifies, and accelerates procure-to-pay processes for goods and services. Using it, you can reduce procurement costs, build more collaborative supplier relationships, and better manage supply bases.

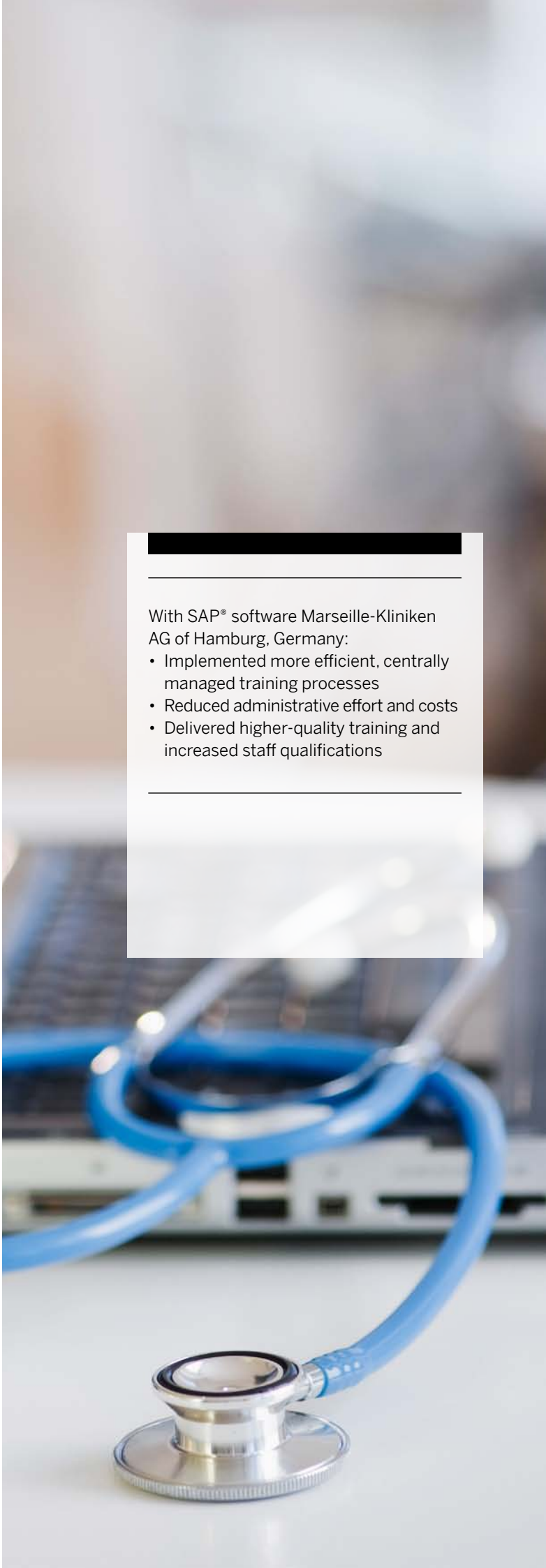
The SAP Supplier Relationship Management and Logistics for Healthcare package gives you greater insight into your purchasing spend, allowing you to source more strategically and negotiate more favorable terms with suppliers. Through standardized processes, it helps eliminate rogue purchasing.

Important for healthcare organizations, the software includes serialized product tracking to maintain a complete audit trail of transactions and sophisticated authentication to help stop counterfeit products from entering the supply chain.

KEY BENEFITS

The SAP® Supplier Relationship Management and Logistics for Healthcare package supports:

- Increased productivity with a tailored, automated solution for ordering and replenishing supplies
- Increased patient safety by using patient and drug matching to reduce medication errors
- Complete visibility of inventory and orders to avoid unnecessary replenishment and waste as well as out-of-stock situations
- Timely replenishment and improved warehouse processes to help increase asset turnover
- Complete visibility of the asset base, enabling better planning, acquisition, tracking, maintenance, and retirement of capital assets
- Product traceability, for higher, more efficient compliance with statutory regulations
- More accurate inventory, which reduces logistics costs



With SAP® software Marseille-Kliniken AG of Hamburg, Germany:

- Implemented more efficient, centrally managed training processes
- Reduced administrative effort and costs
- Delivered higher-quality training and increased staff qualifications

SAP Solutions for Healthcare

SAP PATIENT MANAGEMENT FOR HEALTHCARE

The SAP Patient Management for Healthcare package provides the administrative processes for registering and maintaining information about patients within the care process. The software enables every aspect of treatment to be recorded, both inside and outside the hospital, which results in the maintenance of a complete, accurate, and confidential central record.

SAP Patient Management for Healthcare helps optimize inpatient areas and outpatient clinics by supporting the coordination of patient appointments as well as handling waiting lists and the allocation of beds. As it contains details of all treatments, the patient record provides the basis for accurate invoicing and payment handling. In addition, SAP Patient Management for Healthcare integrates tightly with SAP ERP Financials, effectively linking front-end and back-end processing.

KEY BENEFITS

The SAP® Patient Management for Healthcare package helps increase patient throughput and admission staff efficiency, which results in:

- The ability to make appointments and plan other resources for highest profitability
- Higher utilization of wards and service facilities
- Fewer coding and billing enquiries to healthcare personnel
- Improved accuracy of payments
- Reduced costs for integration with accounting and financial management
- Improved patient loyalty
- Increased accuracy and efficiency between front-end and back-end processes

"The electronic order is sent to the pharmacy. There the drugs are in single sleeves, each with an RFID tag. Then they are packaged and delivered to the ward. At the bedside the nurse reads the patient's RFID tag and the drug's RFID tag. The system gives a green light for acceptance or a red light to stop the process. Therefore, we can be sure that the right drug gets to the right patient at the right time."

Dr. Martin Specht, Head, Department of Electronic Data Processing, Jena University Hospital, Jena, Germany

CLINICAL CARE

To provide healthcare providers with leading-edge clinical information software, SAP has formed a strategic alliance with Siemens Healthcare.

The i.s.h.med hospital information system has already demonstrated its effectiveness in more than 360 modern hospitals in 16 countries. As a central element for planning, documentation, management, and communication, it helps almost all kinds of health professionals deliver high-level care to patients economically.

i.s.h.med provides complete, reliable electronic patient records and enables real-time access to them. Its specialized functionality supports the entire clinical order entry workflow and optimizes the medication process, from ordering medications to dispensing them. In addition, i.s.h.med helps you plan, optimize, and monitor schedules for all service facilities and contributes to increased quality of care through flexible and open pathway support.

As the only integrated clinical system for the SAP for Healthcare solution portfolio, i.s.h.med combines flexibility with a broad range of functions that support your processes from the ward to administration and from your outpatient clinic to the operating room.

In certain cases, customers may have already installed a clinical solution. Thanks to the approach SAP promotes with service-oriented architecture (SOA) and the SAP NetWeaver® technology platform, connecting such alternative clinical solutions to the full SAP for Healthcare set of solutions is straightforward. It has been successfully implemented by a number of our customers.

SAP also provides integrated software that helps organizations proactively manage episodes of care across multiple providers, for example, at hospitals and doctors' offices.

KEY BENEFITS

The i.s.h.med hospital information system from Siemens Healthcare integrated with the SAP for Healthcare solution portfolio helps you achieve:

- Improved employee empowerment and streamlined workflows to maximize productivity and patient satisfaction
- Reduced IT complexity by eliminating custom interfaces
- Reduced cost of ownership with a single platform approach
- Improved understanding of the patient status shared by all healthcare providers

STRATEGIC IT

Promoted by SAP, service-oriented architecture (SOA) is a blueprint for an adaptable, flexible, and open IT architecture that facilitates the development of service-based, modular business solutions. Enterprise services are at the heart of SOA. They are highly integrated Web services combined with business logic and harmonized semantics that can be accessed and used repeatedly to construct end-to-end business processes.

Using enterprise services, you can leverage SAP solutions in conjunction with partner and proprietary solutions to build new, flexible, and innovative applications rapidly based on a single integration concept.

With its service-enabled software, the SAP NetWeaver technology platform, and the services that complement SAP applications, SAP has facilitated the move to SOA for businesses and increased the ease of adopting SOA.

KEY BENEFITS

Adopting a service-oriented architecture (SOA):

- Protects investment in existing applications
- Allows fast adaptation to changing business requirements through process flexibility
- Enables collaboration across business processes and organizational boundaries, as well as between SAP® and non-SAP software
- Allows connectivity and interoperability across multivendor solutions
- Incorporates open Internet standards and healthcare industry standards, such as Health Level Seven (HL7) and "Integrating the Healthcare Enterprise" (IHE)

"Within a year of deploying SAP BusinessObjects solutions we were able to incorporate about 10 different source systems in our data warehouse. Today the data warehouse incorporates 17 different source systems."

Sidney Fernandes, Assistant CIO and Director of Application Development, USF Health

SAP Solutions for Healthcare

SAP BusinessObjects PORTFOLIO OF SOLUTIONS

The SAP BusinessObjects portfolio of solutions provides the tools and applications healthcare organizations need to connect people, information, and businesses across business networks to optimize performance.

SAP BusinessObjects business intelligence solutions enable employees to access, format, analyze, navigate, and share structured and unstructured information across the organization to make better decisions.

SAP BusinessObjects enterprise performance management solutions help you plan more quickly, budget more accurately, and align strategy with execution more closely. Department-relevant metrics can be cascaded down the organization to increase accountability, while dashboards based on individual roles help employees quickly identify deviations from the plan and proactively take action.

SAP BusinessObjects governance, risk, and compliance solutions help you proactively balance risk and opportunity across business processes and respond more quickly to changing business conditions.

SAP BusinessObjects analytic applications help you gain actionable insight into your business performance so you can empower employees to make better decisions and continually improve outcomes.

KEY BENEFITS

The SAP® BusinessObjects™ portfolio of solutions can help you:
- Align strategy and execution more closely
- React more quickly to changing business conditions
- Uncover trends more quickly
- Analyze business performance more accurately to gain actionable results
- Improve decision making

"Risk management is an important element of our management and information system. It contributes very significantly to increasing the identification with our company goals."

Volker Lowitsch, Head of IT Management, University Hospital Aachen, Aachen, Germany

SAP Solutions for Healthcare

COLLABORATIVE E-CARE MANAGEMENT

The SAP Collaborative E-Care Management application connects patients, care providers, and their families through medical monitoring software and mobile devices to better manage their health with individualized treatment plans.

KEY BENEFITS

The SAP® Collaborative E-Care Management application can help you:

- Enhance stakeholder decision making through provision of directly accessible, accurate, useful information
- Make healthcare proactive by providing information in real time
- Reduce healthcare costs through earlier identification of problems, which can accelerate response times, reduce errors, enhance efficiency, and minimize unnecessary doctor visits and hospital admissions
- Better target your healthcare programs so you can identify where the maximum benefit of your investment in those programs lies and help reduce program drop-out rates
- Enable healthcare providers to operate effectively with existing resources despite an aging population

Healthcare organizations today face a complex set of challenges. To remain competitive, you must seek to deliver quality care and improve outcomes. At the same time, you have to increase efficiency and employee productivity and contain rising costs.

Case Study 1 – Montefiore Medical Center

Based in the Bronx, New York, the Montefiore Medical Center treats more than 60,000 inpatients, conducts 1.8 million outpatient visits, and makes more than 400,000 home visits a year. It is one of the largest academic medical centers in the United States.

CHALLENGE

Remain profitable despite declining rates, rising costs, and ever stricter regulations, while continuing to provide top-quality healthcare.

SOLUTION

The SAP ERP application with focus on materials management.

BENEFITS

- Material cost savings of €58 million over 10 years
- Payback in three years
- First-year reduction in supply chain management costs of €3.2 to €4.8 million
- Purchase-order cycle-time reduction from 24 days to 1 day
- Delivery-to-payment cycle-time reduction by 99.4%
- Item-replenishment cycle-time reduction by 96.1%
- Annual cost savings of up to 65% from supplier aggregation and rationalization
- Increase in inventory turns from 12 to 18 per year

"We've taken out tens of millions of dollars in product costs and delivery of pharmaceuticals through contract pricing. SAP software has enabled us to make this happen."

Charles Agins, Vice President, Finance and Executive Director of Business Information Systems, Montefiore Medical Center, the Bronx, New York

Case Study 2 – Orbis Healthcare Group

Headquartered in Sittard in the Netherlands, Orbis Healthcare Group employs 6,300 staff and provides hospital, psychiatric institute, nursing home, hospice, and home health services.

CHALLENGE

Implement a better way of scheduling the workforce to reduce the need for 85 department heads, nurses, and secretaries who generate monthly shift plans with handwritten notes and Microsoft Excel spreadsheets.

SOLUTION

The SAP ERP Human Capital Management solution with the SAP NetWeaver technology platform.

BENEFITS

- Six planners now do the work of 85.
- Shift schedules can be created 50% more quickly.
- Cost from overscheduling workers was reduced by an average of 2.5%.
- Manual data entry was eliminated, reducing error rates and accelerating data transfer.
- Employee satisfaction was improved due to transparent processes, Web access to schedules, and the ability to match hours to payroll stubs to validate compensation.

"About 70% of Orbis's costs are HR related. When you can make HR run more efficiently, the savings come quickly, and they are substantial."

Mirella Bouweriks, Director of Human Resources, Orbis Healthcare Group, Sittard, the Netherlands

Why Select SAP Software?

DELIVER BEST-IN-CLASS APPLICATIONS

With industry-leading solutions that integrate business processes across your entire landscape – from administration to operations and clinical to financials, including your external supply chain – you get help reducing integration costs.

REDUCE RISK

At over 2,300 healthcare organizations worldwide, SAP solutions have proven they can deliver significant benefits, making them a more attractive option than less widely used applications.

REDUCE OPERATING COSTS

Support for care and administrative processes from beginning to end – combined with analytical functions that deliver greater insights and help improve planning and strategy – raises your efficiency and decreases costs.

IMPROVE PATIENT CARE

You get built-in support for best practices and help in monitoring treatment success rates, which enables you to adapt and define clinical pathways. As a result, patient safety, care, and satisfaction is improved, transparency is increased, and you can produce better reports needed for regulatory compliance with less effort.

EXTEND REACH

SAP solutions support extended industry and healthcare networks, which contributes to increased efficiency and improved patient care. In addition, the software streamlines and automates your business processes and the flow of information between organizations as well as within your own company.

REDUCE COST OF OWNERSHIP

By supporting the open and flexible technology of SOA, SAP software helps you develop and adapt your SAP applications while lowering your total cost of ownership.

GAIN END-TO-END SUPPORT

SAP not only delivers solutions that provide comprehensive support for your business processes, but it also provides consultancy services to help you derive the maximum benefit from your SAP applications.

With SAP® software, Ulm University Hospital in Ulm, Germany:

- Improved support for decision-making processes
- Could identify cost-saving potential more easily
- Gained better information for negotiating budgets with health insurers
- Streamlined processes for gathering and transmitting information for external reporting

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With SAP® software, Institut Català de la Salut in Catalunya, Spain:

- Reduced hospital visits due to indexed scheduling
- Reduced nonattendance by 20% by using SMS messages
- Decreased image printing, logistics, and administrative headcount costs
- Standardized processes and clinical practice
- Made over 6 million electronic medical records available throughout the organization

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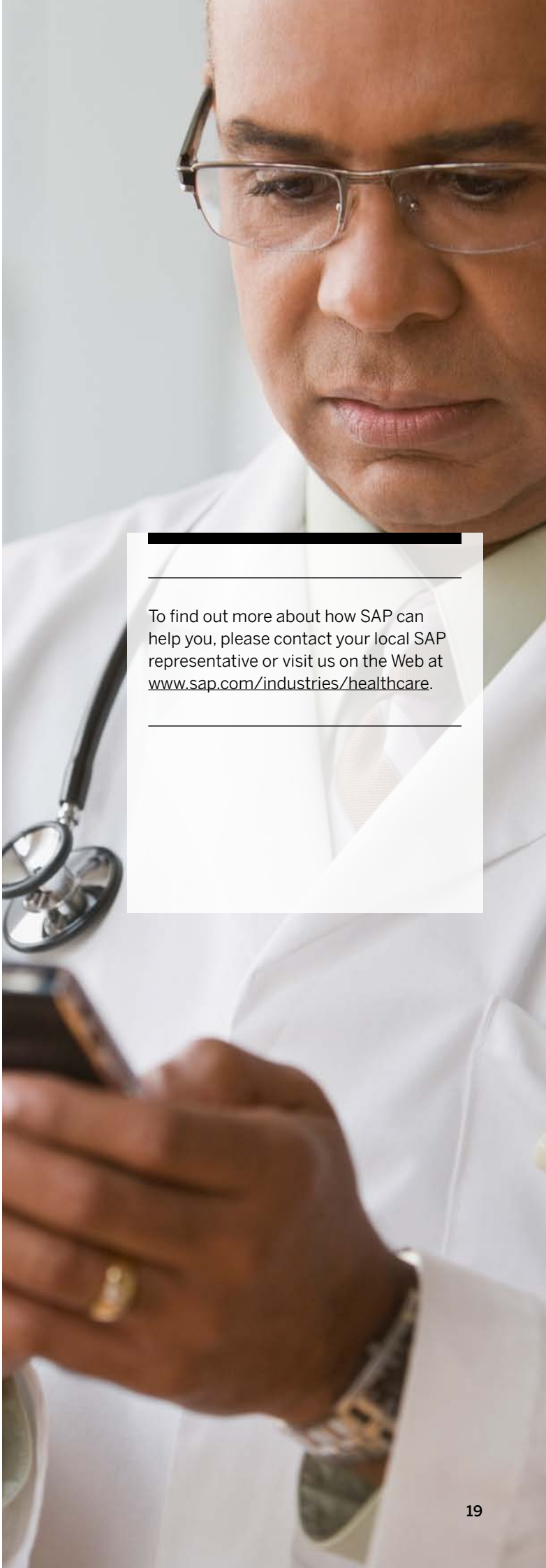
The Next Steps

At a time when the pressure is increasing to deliver more with less, healthcare organizations must put in place integrated and superefficient processes on both the administrative and clinical sides of their business if they are to be successful.

By doing so, they will not only drive greater efficiency and, as a result, lower costs, but they will also improve the effectiveness of treatment, resulting in higher-quality patient care.

SAP can help your organization achieve both these outcomes. We have leading solutions that support healthcare processes from end to end, from finance to pharmacy, supply chain to surgery, patient management to pathology.

In addition, our industry experts have in-depth experience of healthcare gained from over 20 years of helping healthcare providers become best-run businesses.



To find out more about how SAP can help you, please contact your local SAP representative or visit us on the Web at www.sap.com/industries/healthcare.

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