

Wie passen SOA und IHE zusammen?

SOA = Service Oriented Architecture

IHE = Integrating the Healthcare Enterprise

KIS – RIS – PACS und DICOM Treffen 2009
Mainz, 3./4. Juli 2009

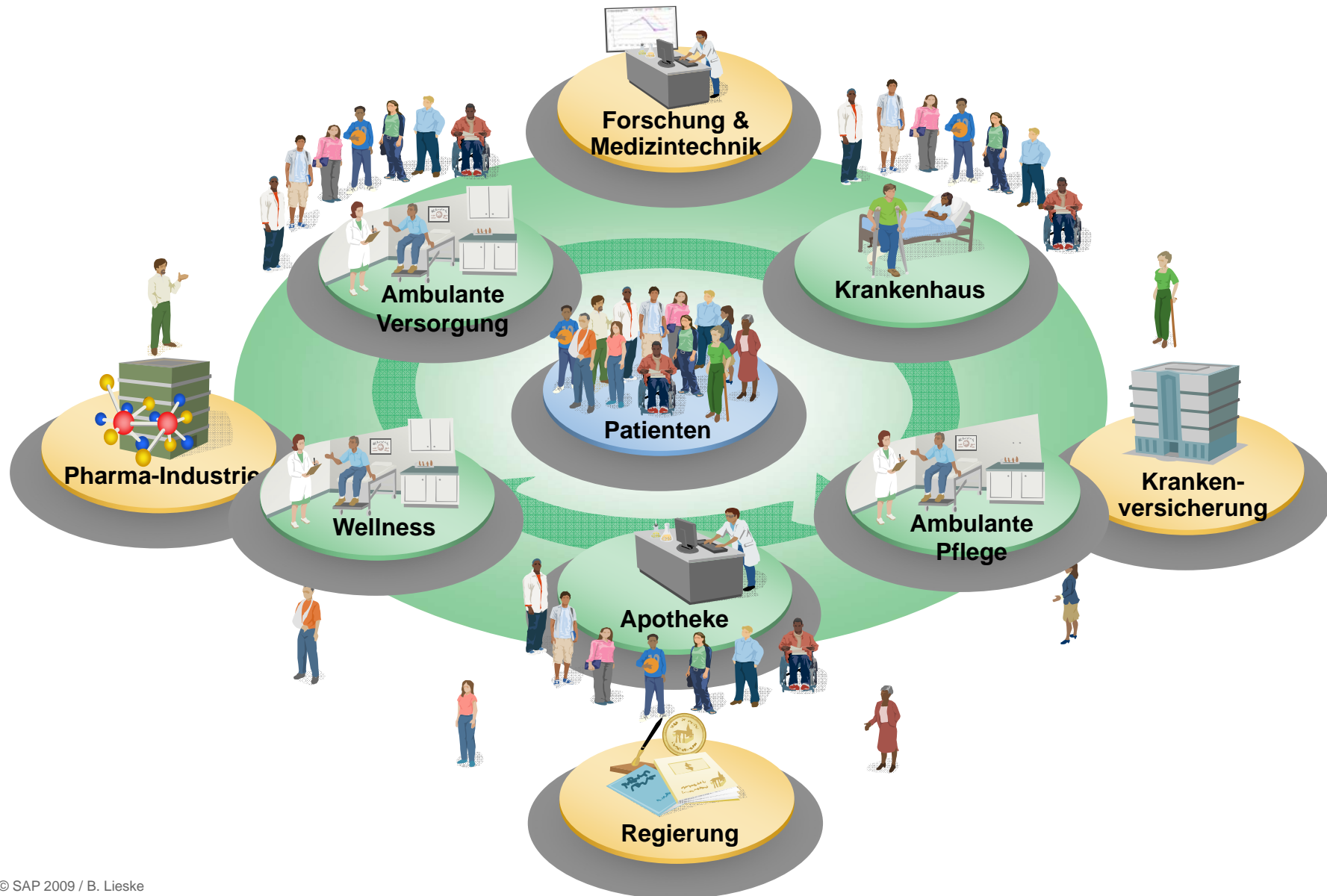


Dr. Bettina Lieske, Claudius Metze
Solution Management Healthcare
SAP AG Germany

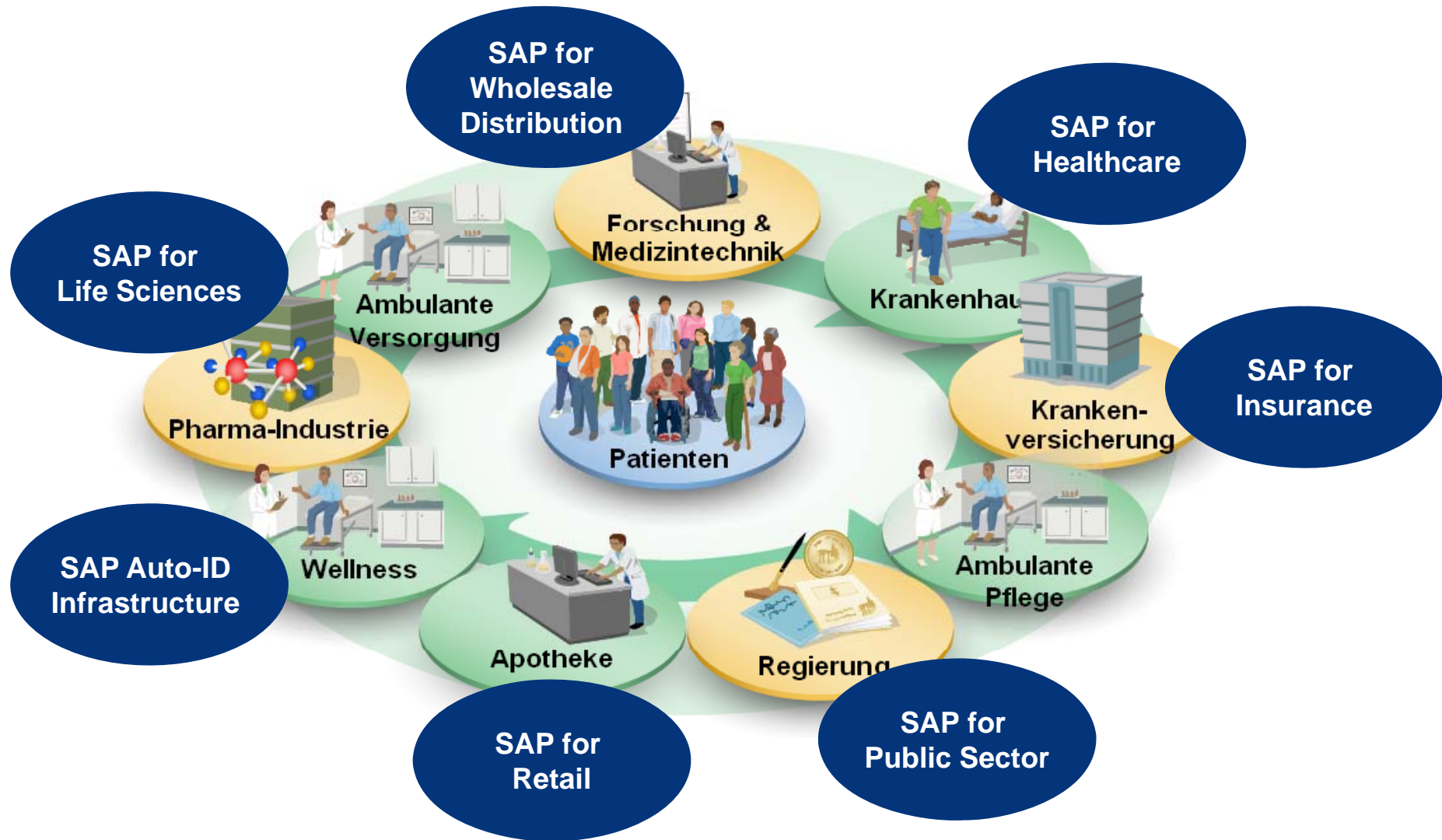
THE BEST-RUN BUSINESSES RUN SAP™

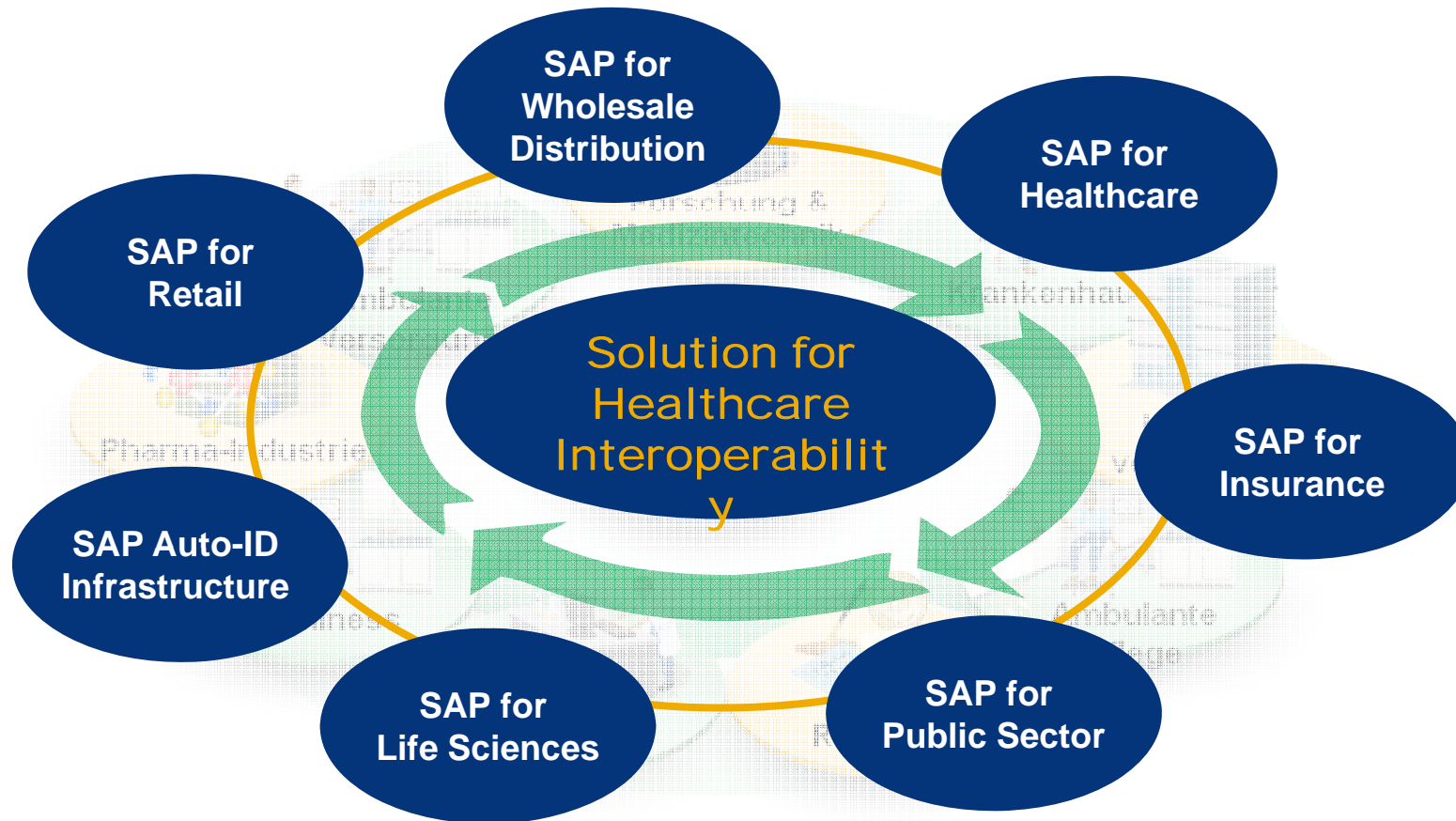


Integriertes Gesundheits-Ökosystems im Dienste besserer Behandlungsergebnisse

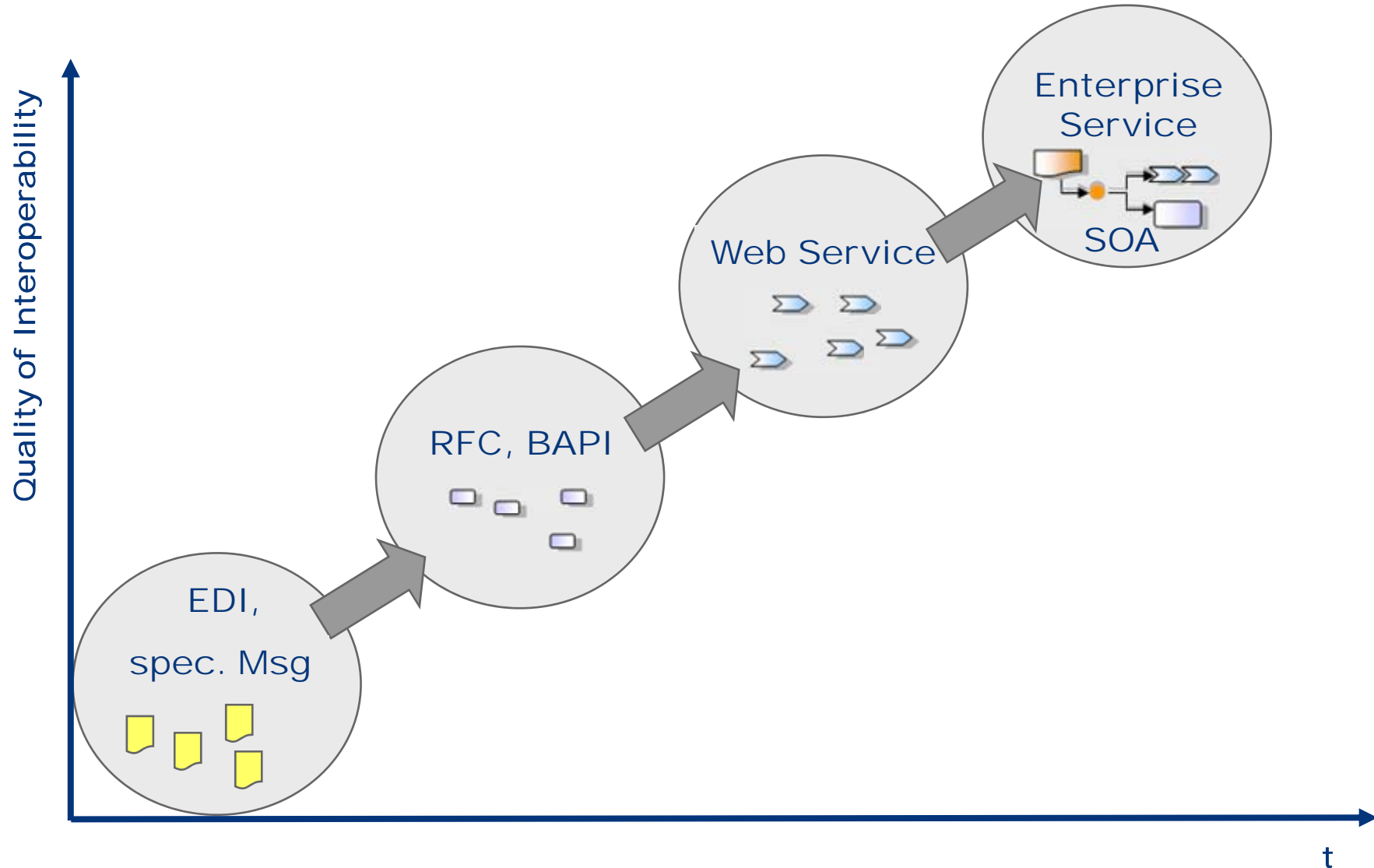


IT-Unterstützung für die Akteure im Gesundheitswesen

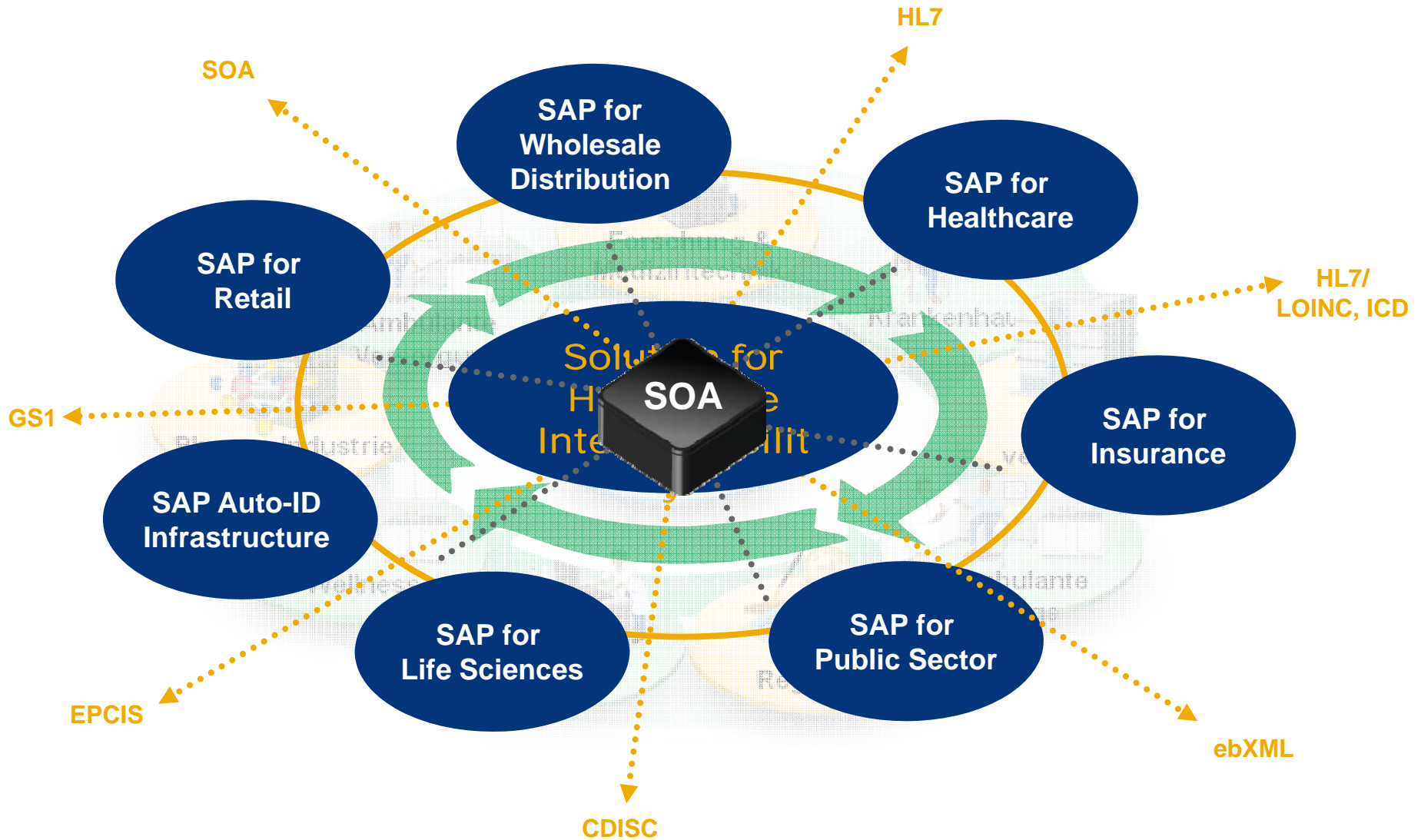




Semantic Interoperability is the Key Challenge



Need of Supporting SOA and Healthcare Standards



Need of a Common Reference Model



Partner Systems' Concepts and Terminology

Clinical System xx v2

Clinical System yy v4

...

Encounter

Encounter Bridge

Drug

Procedure

Charge



Common Reference Model

SAP Concepts and Terminology

IS-H 4.72

CHN V1

Case

Material

Movement

ERP 2005

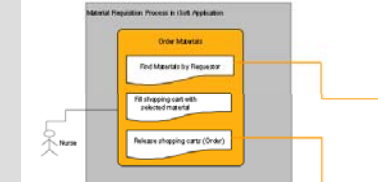
Service

SRM

Invoice

Use Cases

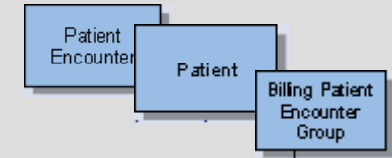
Use Case A: Hospital Requisition Process (SRM-Scenario)



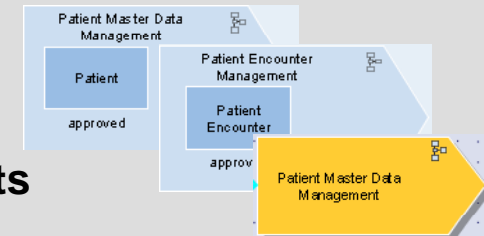
Roles



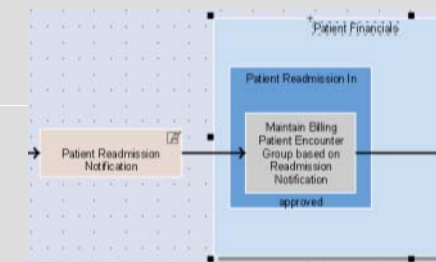
Business Objects



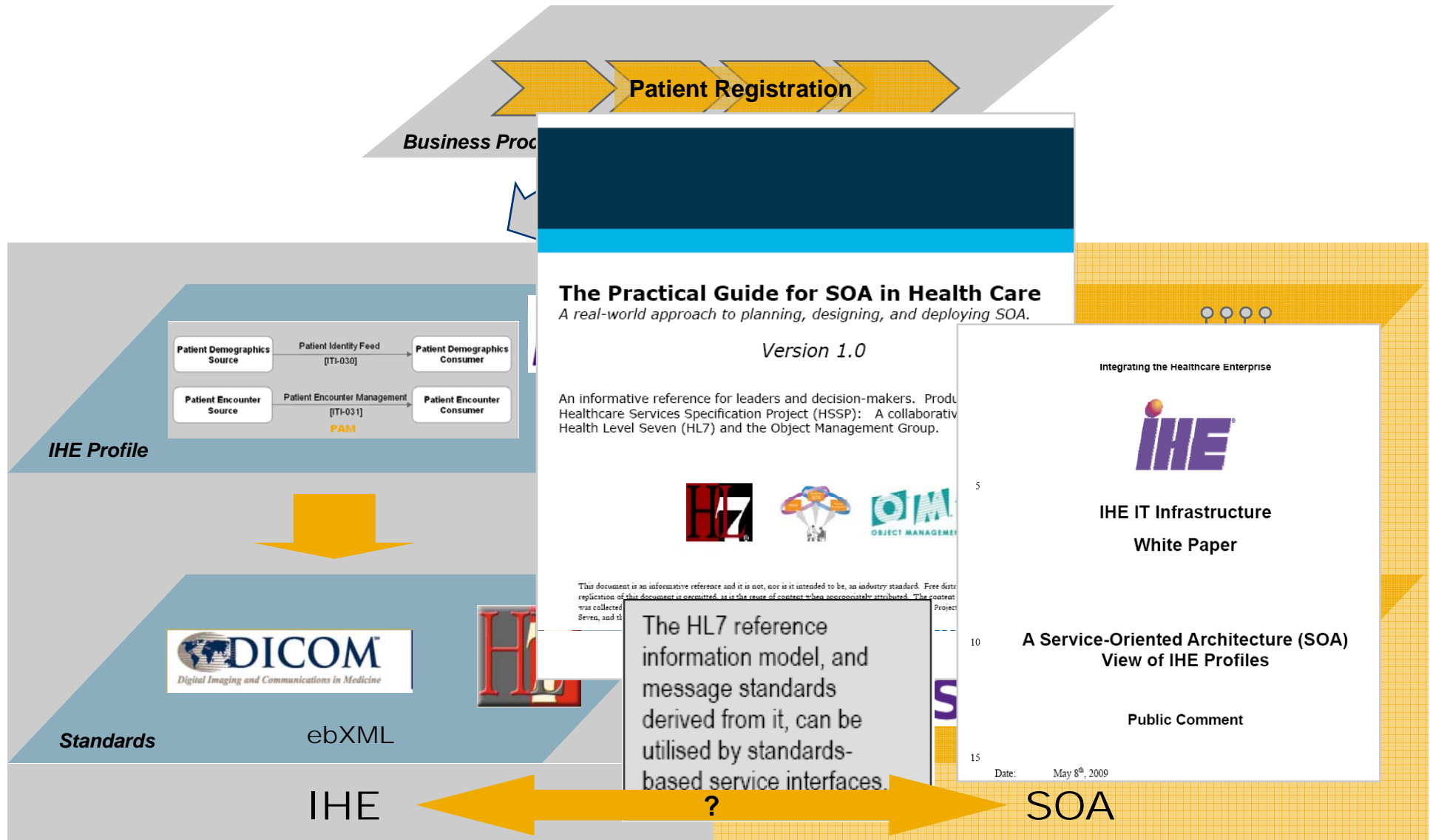
Enterprise Process Components



Enterprise Services



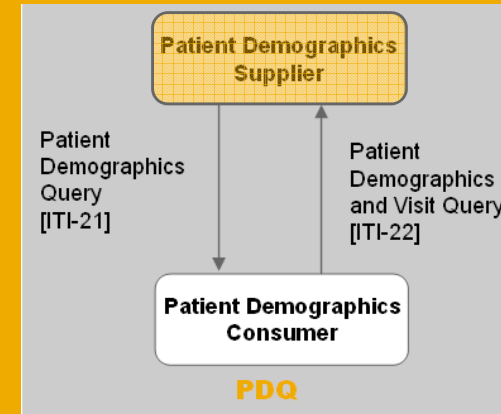
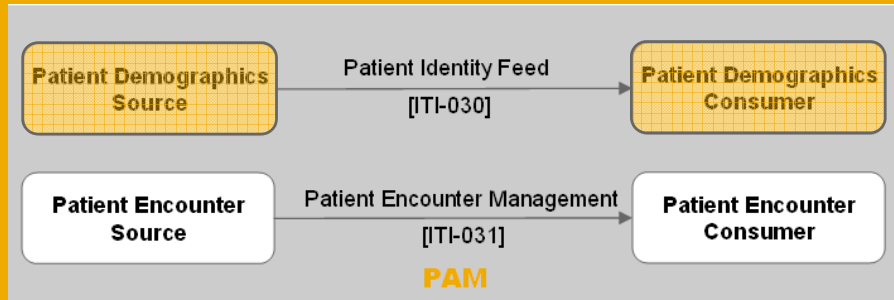
SOA versus IHE/HL7 *oder* Wie passen SOA und IHE zusammen?



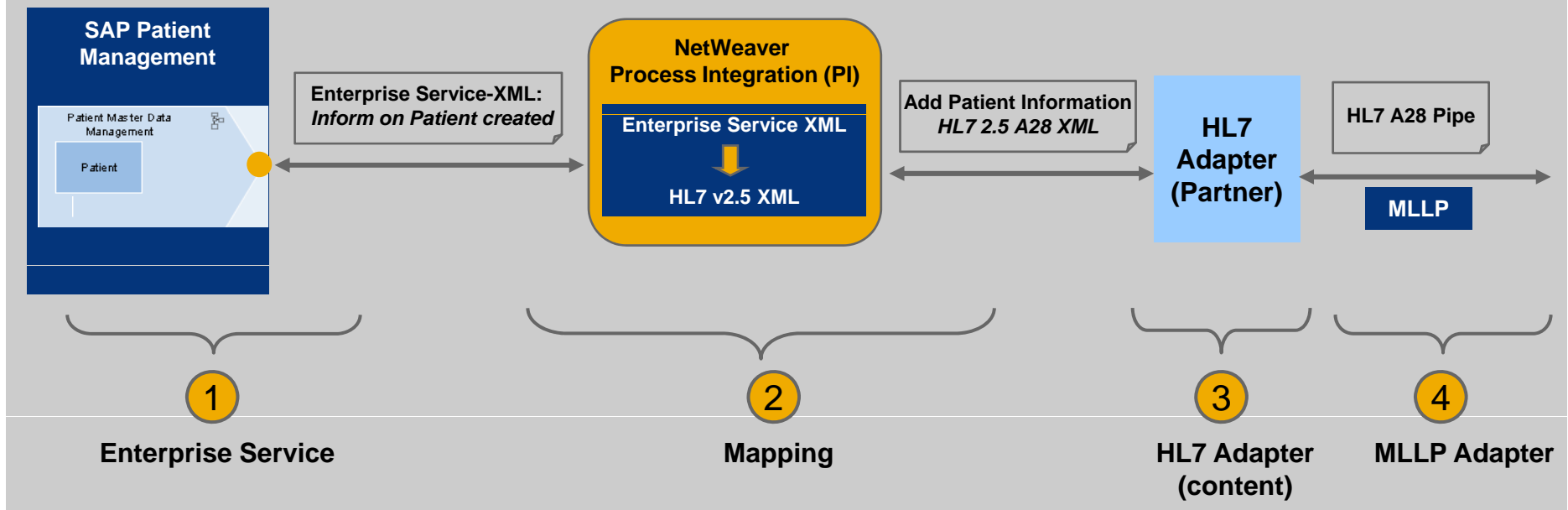
SAP supports IHE Profiles through SOA



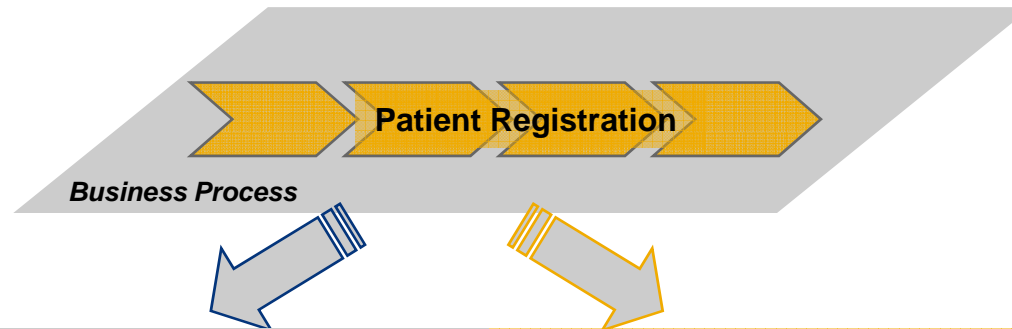
IHE Profiles



SAP Solution (Example: PAM, Patient Identity Feed - Create Patient)



Conclusion: IHE **with** SOA!



Business driven Requirements and semantics

- Use Case
- Business processes
- Roles
- Responsibilities (actors)
- Communication content

- *Transport protocol*
- *Authorization, authentication*

IHE/HL7

Modeling, methodology and technical architecture

- Service, Consumer, Provider
- Business Object
- Process Components
- Communication patterns
- Quality of service

SOA

Thank you for your attention
and more Information ...



<http://esworkplace.sap.com>

<http://bpx.sap.com>

SAP ES WORKPLACE

Wiki Patient Administration

My Home > Enterprise Services (ES) > Home > Patient Administration

Patient Administration

Added by [Tobias C. Petersen](#), last edited by [Tobias C. Petersen](#) on Jan 09, 2009

Labels: [es](#), [SAP](#), [ES](#), [Enterprise Services](#), [ES](#), [ES](#)

The **Patient Administration ES bundle** uses application-to-application (A2A) on SAP ERP 6.0 with the many third-party systems typically deployed in the hospital (Admission, Discharge, Transfer).

Rather than forcing customers to discard their old user interfaces in favor of services that easily integrate SAP functionality into existing interfaces, the bundle called Integrating the Healthcare Enterprise (IHE, [www.ihe.net](#)). Using the services in the Patient Administration ES bundle provides for user clinical, lab, financial, patient administration, and scheduling systems, even

The services in the Patient Administration ES bundle support the following IHE profiles:

- Profile PQQ: Transaction Patient Demographics Query (DT1-211), Actor I
- Profile FAK: Transaction Patient Identity Feed (DT1-030), Actor Patient
- Profile FAK: Transaction Patient Identity Feed (DT1-030), Actor Patient

Wiki Medical Activities, Patient Billing and Invoicing

My Home > Enterprise Services (ES) > Home > Medical Activities, Patient Billing and Invoicing

Medical Activities, Patient Billing and Invoicing

Added by [Saprasana Ramani](#), last edited by [Julian Handberg](#) on Dec 05, 2008

Labels: [medical](#), [activities](#), [patient](#), [billing](#), [invoicing](#), [es](#), [bundle](#), [enterprise](#), [sap](#)

The **Medical Activities, Patient Billing and Invoicing ES bundle** uses the bundle of core services in a third release with a reduced scope of services.

In Healthcare there are a lot of systems where medical activities (charged) & systems where information about the performed test is entered (diagnosed) these medical activities have to finally be available for the billing processes. The Patient Management which offers the billing functionality.

But it's not only A2A integration that the bundle supports, the services could make billing relevant information available there so that the user has always for example time for a schedule who orders treatment or outpatient visits. In difference in planning. The bundles offers a service that allows the schedule process.

Audience:

The bundle is designed for healthcare Providers (hospitals or Rehab Centers), **Nurses, Schedulers, Planners, Admins** as well as **Clerks** will find the bundle of great value.

Increased efficiency is created by offering an interface for sending medical activities to SAP Patient Management and avoiding re-entering the data. Also, by offering a service for sending medical activities to the (its) other applications (i.e. clinical applications or scheduling system).

Medical Activities, Patient Billing and Invoicing (click to enlarge)

SAP COMMUNITY NETWORK

Welcome [Claudia Metzger](#)

How to Contribute | My Profile | Site Index | Languages

Advanced Search

SAP Community | SAP Community | Forums | Wiki | Blog | Articles | Downloads | eLearning | Events | Subscriptions

Healthcare

Mr. Schultz Takes Control (PDF 162 KB)

Nobody likes to be sick, but if your health does take a plunge, it's good to know you are in competent hands. But there will be more issues to consider in the future: Healthcare systems globally are facing radical changes. Read more in the SAP Info article (supported with permission from SAP S&P). 20 Mar 2008

Wireless Sensor Networks for SAP Healthcare

The latest blog by [Saprasana Ramani](#), senior researcher in the SAP research program "Security & Trust," offers a look into the SAP research team's current work on a prototype which integrates a wireless sensor network into SAP's Core Business Suite for Collaborative Health Networks (CHN). 20 Mar 2008

SAP, Androids, and Healthcare

[Claus Entenroth](#) of IBM e-Association takes his award-winning Clinical Workstation Widget feature and puts it on a mobile device.

Customer Relationship Management at HospEd

In the first blog for [BPM](#), [Jose Maria Escobar](#), Healthcare Business Manager at SAP Espana, shares the improvements needed in the daily work of the nursing staff of a care provider group as the result of a CRM implementation. 20 Mar 2008

GET THE SDN NEWSLETTER
SIGN UP TODAY!

CONTRIBUTE AND CONNECT
EARN POINTS ON SDN AND BPM

Register Now

Join SDN or the BPM Community for exclusive content. Already a member of one? Update your profile to exclude the other.

Forums

Healthcare
Industry Solutions General
All Industry Forums
Business Process Expert General Discussion
All Business Process Expert Forums

Blog

Healthcare

Downloads

Download [SAP Business Connector](#) to view, customize, or create your own business.

Home | Country Sites | Log In | Create New Profile | Contact SAP

Your Resource Center

ALIGN FORCES FOR COLLABORATIVE SOLUTION

Partnership in Collaborative Health Networks improves patient care by streamlining the way the SAP NetWeaver platform, this while controlling healthcare costs.

SAP FOR HEALTHCARE: LOWERING THE PRESSURE ON HEALTHCARE ORGANIZATIONS

Your industry faces many challenges: improving patient care, controlling costs, meeting government regulations.

SAP for Healthcare can help you meet the challenges by streamlining and integrating your healthcare processes – administrative and patient-centric – on an open, growth-capable platform. Installed in more than 500 organizations, the SAP portfolio allows you to reduce costs and increase the amount of time spent on patient care.

SAP BUSINESS MAPS FOR HEALTHCARE

See how SAP solutions can support your business processes.

Start Now

Dr. Bettina Lieske
Solution Manager Healthcare
ISM Healthcare



SAP AG
Dietmar-Hopp-Allee 16
69190 Walldorf, Deutschland

T +49/6227/7-48129

E bettina.lieske@sap.com

Copyright 2007 SAP AG. All Rights Reserved



No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, System i, System i5, System p, System p5, System x, System z, System z9, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, Informix, i5/OS, POWER, POWER5, POWER5+, OpenPower and PowerPC are trademarks or registered trademarks of IBM Corporation.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

The information in this document is proprietary to SAP. No part of this document may be reproduced, copied, or transmitted in any form or for any purpose without the express prior written permission of SAP AG.

This document is a preliminary version and not subject to your license agreement or any other agreement with SAP. This document contains only intended strategies, developments, and functionalities of the SAP® product and is not intended to be binding upon SAP to any particular course of business, product strategy, and/or development. Please note that this document is subject to change and may be changed by SAP at any time without notice.

SAP assumes no responsibility for errors or omissions in this document. SAP does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained within this material. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.

SAP shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials. This limitation shall not apply in cases of intent or gross negligence.

The statutory liability for personal injury and defective products is not affected. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third-party Web pages nor provide any warranty whatsoever relating to third-party Web pages.