

## References of ICW

### **Hospital Connectivity**

#### **Heidelberg University Hospital**

One of Germany's largest maximum-care hospitals, the Heidelberg University Hospital, and its partner clinics of Gesundheitszentren Rhein-Neckar GmbH, have opted for the ICW Professional Suite hospital connectivity solution. This solution connects the information systems of the individual hospital facilities to each other. Thus, all participants involved in the treatment have a consolidated view of their joint patients' medical documentation in a single patient record.

### **ICW CareManager for DMP Programs**

#### **BKK Hoesch and BKK VOR ORT**

Two of Germany's largest company health insurance funds, BKK Hoesch and BKK VOR ORT, have been using the ICW CareManager since November 2006 and March 2007 respectively to optimize their disease management programme (DMPs). The ICW CareManager allows the BKK staff to directly approach eligible insured persons for DMP programs and provide them with optimum care. Both health insurance funds use the ICW CareManager for their DMP programs for patients suffering from COPD and asthma. In addition, BKK Hoesch also relies on ICW's solution in their DMPs for type 1 and type 2 diabetes, coronary heart disease (CHD) and breast cancer. BKK VOR ORT will now follow the example of BKK Hoesch and implement all its DMP Programs using the ICW CareManager. At present, BKK Hoesch manages more than 24,000 insured persons with the ICW CareManager, and BKK VOR ORT over 27,000.

### **Uniq**

Uniq, the largest private health insurance company in Austria started a pilot project in the summer of 2005 for the remote monitoring and subsequent DMP management of 100 persons suffering from hypertension. This project includes a partnership with the telemonitoring provider Aipermon GmbH. After a successful start, this project has been extended until 2009 and to a total of 500 patients. Included in the solution are the LifeSensor personal health record and the ICW CareManager.

## **Health Card and eHealth Infrastructure**

### **Health Initiative Rhine-Neckar**

The Health Initiative Rhine-Neckar started to introduce an electronic health card in May 2007 in connection with the LifeSensor personal health record throughout the Rhine-Neckar metropolitan region. The project is based on the health card field test in Walldorf that was started by ICW in 2005. In a first phase, over 30 physicians and pharmacists in the communities of Schwetzingen, Walldorf and Wiesloch participate as partners in the Health Initiative Rhine-Neckar.

### **National Health Card in Bulgaria**

In January 2007, the Bulgarian Ministry of Health and the National Health Insurance Fund (NHIF) awarded the pilot project for the introduction of a national electronic health card to ICW and Cisco. By October 2007, 1,000 patients, seven general practitioners and four pharmacies were equipped with an electronic health card, a health professional card and the necessary infrastructure elements for the pilot project. The pilot project test the online verification of patient data and electronic prescriptions.

### **“bIT<sub>4</sub>health – better IT for better health”**

In 2003, after a Europe-wide tender, the German Federal Ministry for Health and Social Security started the project consortium “bIT<sub>4</sub>health – better IT for better health”, consisting of ICW, IBM Deutschland, Fraunhofer Institute for Industrial Engineering, SAP and ORGA Card Systems, to devise the general conditions and requirements for the nationwide implementation of an electronic health card. The definition of an eHealth framework and a security infrastructure was the central focus. The “bIT<sub>4</sub>health” consortium accompanies the implementation of the electronic health card beyond the definition phase of the framework architecture during the test phase up to the introduction and the first year of operation.

### **Field Test, Walldorf**

In 2005, ICW started the first large-scale field test for an electronic health card solution with a connected personal health record in Walldorf, Germany. The Walldorf field test provided valuable practical experience and prepared ICW's health card system for application in broader regional tests. In 2007, all patients and health care service providers participating in the Walldorf field test were integrated into the Health Initiative Rhine-Neckar.

### **eCard Introduction in Austria**

In 2004, ICW was involved in the implementation of the eCard, the new key to the services of the Austrian health care system. 8 million insured persons and their relatives had to be equipped with chip cards. At the same time, approximately 12,000 contract partners were connected via the GINA box (health information

network adapter) to the Health Information Network (GIN) and equipped with chip card readers.

ICW supplied, adapted and optimized the Java Virtual Machine (JVM), which is used as middleware in the GINA box. In addition, ICW was involved in the code review.

### **Networking of Office-based Physicians**

#### **Patient-Partner Association**

In 2005, the Bavarian physicians' network Patient-Partner Association (PPV) and the health insurance funds AOK Bavaria, signed an agreement on GP-based integrated care that provides for electronic communication between the participating physicians and patients using the web-based personal health record LifeSensor. 69 general practitioners, 13 medical specialists and over 6,000 patients now use the LifeSensor personal health record with great success. The medical practice network study, made in 2006 by the University of Erlangen, concluded that the PPV is the leading medical practice network in Germany and Switzerland with respect to management, structures and IT.

#### **“Partnership for the Heart”**

Together with Charité University Medicine Berlin and Aipermon, ICW won a tender by the German Federal Ministry of Economics and Technology in September 2004. In this project, ICW is involved in the development of a remote homecare system designed to care for patients with chronic heart failure. The aim is to prevent hospitalizations and save on expenses using telemedical care. A central component of this project was a software solution for telemedical workplaces and a patient record that collects data like blood pressure, weight and ECG values. These data are transmitted wirelessly from homecare devices and analyzed by authorized medical professionals.

In a clinical study after the development phase, the two health insurance funds Barmer Ersatzkasse and Bosch Betriebskrankenkasse are involved. The study aims to test the remote homecare system at Charité Hospital in Berlin as well as at Robert-Bosch Hospital in Stuttgart with approximately 450 patients over a period of 12 months.

#### **German GP Association**

In 2007, Hausärztliche Vertragsgemeinschaft and ICW founded the joint venture HÄVG Software GmbH to equip general practitioners with ICW's communication and documentation software “Hausarzt+” as well as to establish and operate a novel GP online network. This will improve the processes and profitability of sign-up models, agreements on GP-centred care and integrated care contracts. The new network is not only open for GPs but basically to all players in the health care system for the exchange of medical information.

### **Torrance Hospital Independent Practice Association Medical Group (THIPA)**

In December 2007, The Torrance Hospital Independent Practice Association Medical Group (THIPA) has selected ICW to provide an integrated electronic patient record to its 400+ physician network. The first phase of the ICW implementation is already underway. Clinical and administrative data from THIPA's core systems, as well as those of its key partners, such as Torrance Memorial Medical Center, is being aggregated and displayed for clinicians through ICW's interoperable EPR. Subsequent phases of the project will include the integration of ICW's interactive Care and Disease Manager (for chronic illness best practices, geriatric monitoring, general health and wellness tracking) and ultimately a networked LifeSensor personal health record.

### **Cooperation with Health Care Institutions**

#### **BARMER**

In December 2007, BARMER, Germany's largest health insurance provider, started evaluating the effects of the personal health record on patient health behaviour and on health care delivery in a Germany-wide research study. A research group led by Dr. Hanna Kirchner is responsible for the design and execution of the project. An interdisciplinary scientific advisory board is providing support for the research study. ICW was chosen as the technology partner to provide the Web-based personal health record, LifeSensor, for the three-year research study. As part of the study, BARMER provides its 7 million+ insured members access to their personal health records.

#### **Memorial Hospital of Rhode Island**

In summer 2007, ICW Inc. and the Warren Alpert Medical School of Brown University's Center for Primary Care and Prevention (the Center) at Memorial Hospital of Rhode Island, a leading research and teaching institution, entered into a strategic collaboration to "develop and test a 21st century patient-centred, e-Health model of care". The key objective of the strategic collaboration is to show evidence of improvement in quality of care and patient safety by linking, and in this case, actually integrating a patient owned and controlled personal health record to their provider's electronic medical record. In addition to the integration of the PHR-EMR within the initial program objectives, the collaboration will also set up the foundational capabilities to enable connectivity for a broader, multi-stakeholder and interoperable regional health information exchange.