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## Virtual Reality (VR) in Healthcare in the U.S.

February 1, 2011

**Countries covered:** United States

What are virtual reality technologies and how are they being used in healthcare today? What areas of healthcare are seeing the most use of these products? What is the expected market opportunity for companies entering the market for VR equipment? Who are the main players in the VR market and what moves are they making to grow market share? These are among the questions answered in Kalorama Information's *Virtual Reality in Healthcare in the U.S.*

The use of virtual reality (VR) technologies in the U.S. healthcare industry has expanded tremendously due to extensive product development and the growing implementation of healthcare information technology (HIT) infrastructure. Virtual reality applications in the healthcare industry are associated with many leading areas of medical technology innovation including robot-assisted surgery, augmented reality (AR) surgery, computer-assisted surgery (CAS), image-guided surgery (IGS), surgical navigation, multi-modality image fusion, medical imaging 3D/4D reconstruction, pre-operative surgical planning, virtual colonoscopy, virtual surgical simulation, virtual reality exposure therapy (VRET), and VR physical rehabilitation and motor skills training. The clinical and enterprise benefits of healthcare VR technology are numerous and include improved patient outcomes, reduced medical errors, improved minimally-invasive surgical (MIS) technique, improved physician collaboration in diagnosis, and improved psychological and motor rehabilitation.

In Kalorama Information's 2nd edition of *Virtual Reality in Healthcare in the U.S.*, analyst Emil Salazar looks at the current and future market for commercialized VR technologies as divided on the basis of the four application areas:

- **Surgery**, including surgical navigation, IGS, CAS, AR surgery, and robot-assisted surgery
- **Medical Data Visualization**, including multi-modality image fusion, advanced 2D/3D/4D image reconstruction, and pre-operative planning and other advanced analytical software tools
- **Education and Training**, including virtual surgical simulators and other simulators for medical patient procedures

- **Rehabilitation and Therapy**, including immersive VR systems for pain management, behavioral therapy, psychological therapy, physical rehabilitation, and motor skills training

For each application area (market segment), the report details: **current market size**, **past market sizes** (2006-), **growth factors and trends**, and **forecasts** to 2015.

Additionally, this report contains a **review of relevant U.S. regulation**, **market drivers**, and **market inhibitors** as well as **case studies** for each application area and over twenty **detailed company profiles** for healthcare VR product manufacturers and developers. The information in *Virtual Reality in U.S. Healthcare*, 2nd ed. is based on data from multiple industry associations, U.S. governmental healthcare data, Securities and Exchange Commission filings, medical journals, and trade journals.

Additional industry insights and data were obtained through interviews with executives in the healthcare VR product industry and healthcare VR technology researchers.

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