



## Cisco HealthPresence

### **Q. What is Cisco HealthPresence?**

**A.** Cisco HealthPresence is a new concept developed by the Cisco Internet Business Solutions Group (IBSG) and prototyped at the Cisco Technology Centre. Cisco HealthPresence is based on market-ready Advanced Technologies. Using the network as a platform, Cisco HealthPresence combines state-of-the-art video, audio, and medical information to create an environment similar to what most people experience when they visit their doctor or health specialist.

HealthPresence creates a live, “face-to-face visit” experience over the network for clinicians and patients. The visit is enhanced by the availability of vital signs and diagnostic information generated from a variety of market leading third party medical devices. Simply put, HealthPresence is an alternative healthcare delivery model offering improved access to care and convenience for both patients and healthcare professionals.

### **Q. What are the applications for Cisco HealthPresence?**

**A.** Health systems globally are challenged to meet increasing demand for services. Shortages of human resources in terms of sheer numbers and specialists, combined with aging populations result in an ever-increasing health delivery cost that far outpace GDP for many countries. Given these circumstances, the traditional solution of adding capacity by increasing human resources suggests that we need to develop alternative solutions.

Cisco HealthPresence enables health providers to offer their services over the network, thus creating a new delivery model. Cisco HealthPresence will enable delivery of health services to a variety of settings such as community centres, surgeries, office buildings, hotels, educational campuses. Cisco HealthPresence is exclusively based on IP Communications technologies.

By using the network as the platform, and incorporating IP Communications, Cisco HealthPresence provides effective health services from healthcare professionals to multiple patient sites - delivery points. To that the extent, HealthPresence optimizes the capacity and the reach of regional, healthcare organizations. Of course, individuals still will require occasional in-person visits to the doctor, the hospital or surgery. HealthPresence simply augments this capacity with resources and expertise as needed in a patient-friendly and convenient way.

Imagine a world where a face-to-face visit with your doctor can take place in your



community centre without scheduling; where remote areas will have access to specialists; where educational and corporate campuses will be able to offer scheduled health services to their students and employees. A visit to a HealthPresence site may be followed by an electronic or a printed prescription for your local pharmacy, a consultation with a dietitian for a new diet regimen, or an order to your local hospital for a specialty test. Accessing services locally means that healthcare professionals can extend services to the underserved in remote locations that can't justify a fully staffed clinic. Other use cases suggest that this will be an appropriate solution for institutional health, mental health, chronic disease monitoring and other like services. Further, a mobile Cisco HealthPresence unit using satellite link may be used for quick deployments following natural disasters or for periodic specialty service delivery.

The objective is to make scarce and skilled resources readily available in the support of healthcare delivery. The examples above are but a few of the potential applications to illustrate the ways in which Cisco HealthPresence can improve access to care and new healthcare delivery models.

**Q. What is the Cisco HealthPresence patient experience?**

**A.** Cisco HealthPresence allows patients to have a live, face-to-face consultation experience as if they were in a traditional medical facility.

Cisco HealthPresence is essentially a health service delivery site - a self contained unit or Pod. HealthPresence Pods may be located in GP surgeries, community hospitals, shopping malls, schools, senior centres, or employer sites. The Pods can be equipped with a digital signage indicating availability, types of services offered or other relevant information. HealthPresence Pods typically have an attendant to greet patients, help with registration (if needed), assist with the medical devices, and, of course, make sure the Pods are clean and ready for use.

**Q. What constitutes the Cisco HealthPresence solution?**

**A.** Cisco HealthPresence is a platform that combines state-of-the-art video, audio, and a secure networking infrastructure powered by IP-based videoconferencing and IP Contact Centre technology. The combination of these two advanced technologies creates an effective virtual healthcare service ecosystem. Since Cisco HealthPresence is an IP network platform, all the Pods (service location sites) are connected with health providers that may be co-located in a call centre or are part of a distributed "virtual" call centre brought together by a secure network.

The screens used in the Cisco HealthPresence Pod present almost life-size images of the healthcare professional and patients, with the clarity of a full, high-definition (1080p) image, and without the voice or image delay common with standard videoconferencing equipment.

HealthPresence is using the network as the platform to connect medical devices, including thermometers, scales, blood pressure cuffs, glucose monitors, multipurpose scopes, stethoscopes, and handheld cameras.

In addition to videoconferencing equipment and medical devices, HealthPresence Pods may be equipped with card or biomedical identification devices, signature pads, printers, and other display units necessary for the kinds of services offered at the site.

**Q. What differentiates Cisco HealthPresence from a typical telemedicine solution?**

**A.** In addition to offering excellent video and audio quality, Cisco HealthPresence is entirely based on IP technology, allowing the connection of many end points (care delivery sites) to many health provider sites using call centre technology. Cisco HealthPresence establishes a session with the patient by simultaneously connecting video, voice, and data by means of IP network for data communication from the Pod's medical devices to a remote healthcare service provider. This is similar to voice call centres where calls may be transferred, queued, routed based on user choice, or rules-based routing. Most telemedicine solutions are typically point-to-point connections with limited routing capabilities, often requiring the user to know not only phone numbers and IP addresses, but also the availability of the remote providers. IP call centre technology mitigates these hurdles. Ultimately, the same technology will allow us to move many of these capabilities to the home representing the ultimate convenience for accessing health services.

**Q. What are the benefits for patients?**

**A.** With Cisco HealthPresence, patients will benefit from:

- An improved access to care and medical specialists at convenient locations
- A high-quality remote consultation experience
- A faster access to the right specialist. HealthPresence call centre technology connect and expert to a patient in real-time
- Follow-up and impromptu visit. Episodic care, occupational health, and mental health services will become more available in more convenient locations
- Possibility to offer care during non-traditional "office hours" or after hours

**Q. What are the benefits for healthcare providers?**

**A.** Health service providers will be able to offer easier access to care for patients especially, in remote areas without travel. Follow up visits and chronic disease management is likely to become more effective thus avoiding complications and more acute interventions.

**Q. Who are the ideal candidates for Cisco HealthPresence?**

**A.** The ideal candidates will be hospitals and healthcare systems, GP clinics and surgeries, mental health service providers, retailers and other care providers depending on the market.

Cisco HealthPresence is part of the broader Cisco Unified Communications collaboration portfolio that is intended for healthcare environments. Many of these models will evolve in collaboration with Cisco's partners.

**Q. What are the basic components?**

**A.** Cisco HealthPresence consists of core and advanced Cisco technologies, including Cisco TelePresence, Cisco Unified Communications, Call Centre, and other networking technologies. A detailed Bill of Materials has been developed and will be modified according to the specifics of the deployment.

**Q. Is Cisco HealthPresence available now? Is it available globally?**

**A.** Currently Cisco is testing the concept with partners in Scotland in partnership with NHS Scotland and the Scottish Centre for Telehealth. Other early field trials of this concept are being negotiated.