

National Heart Centre Chooses Avaya to Support Major Expansion and Regional Push

Challenge

With increased competition in the healthcare sector, the National Heart Centre Singapore (NHC) needed a communications solution that is scalable, more flexible and with richer functionalities. As NHC will soon move to bigger premises, the centre took the opportunity to begin implementing a telephony system which could later be scaled up to cater to increased demands at the new location.

Solution

After a comprehensive evaluation, NHC decided on an Avaya system for its ease of management and scalability. The Avaya solution consists of an IP telephony system with Automatic Call Distributor (ACD), IP Agent and several softphones for trial before the large scale implementation at the new premises.

Value Created

- **Lower cost of ownership** – NHC was able to avoid the prohibitive cabling and tunnelling cost with the switch to the hybrid IP-PBX solution
- **Ease of scalability** – NHC has chosen a capacity that will cater to its future needs while still operating only what it requires for current operations
- **Increased productivity of staff** – the Operations (Support Services) department is able to add new phone extensions easily in-house
- **Better flexibility and ease of management** – phones are deployed according to staff needs and implemented at a manageable phase to ease any switchover issues

About The National Heart Centre Singapore

Emerging from Singapore General Hospital's departments of cardiology and cardiothoracic surgery, Singapore Heart Centre (SHC) was established in 1994 to provide one-stop ambulatory centre. In 1998, four years after the formation of SHC, a national heart centre was formed. The National Heart Centre Singapore has since become the premier cardiovascular care centre in Singapore and the region.

Now into its 10th year, NHC has achieved several firsts in Asia, including, being the first centre to use VITALConnect®, which allows remote access to Cardiac Tomography (CT) reports, as well as the first heart hospital outside USA to receive the Joint Commission International accreditation for Quality Approval.

NHC, however, is not sheltered from increasing competition in the healthcare industry, both locally and in the region. Deregulation, an aging population and increased opportunities from regional patients have put pressure on NHC to relook its priorities and business direction. The centre therefore needs to improve its operational efficiency, expand its offerings and upgrade its facilities, while at the same time, keep its fees competitive.

Before the Transformation: Expanding Capabilities with Improved Infrastructure

Previously, NHC was using an extension of the communications system at the Singapore General Hospital (SGH), where it was located. SGH provided the administration, cabling and other support services required for the phone system. The simple analog system utilised 300 pairs of LAN cables which were run underground.

When the SGH relocated its call centre out of the premises it shared with NHC and the National Cancer Centre (NCC), it left behind the ACD, which was subsequently

shared between NHC and NCC. However, the ACD was close to its maximum capacity and was reaching its end-of-life. NHC needed a new system that would support its continued expansion and future growth plans.

NHC is also planning for its move to bigger premises in 2013. The new premises will allow NHC to enhance its service offerings and provide more sophisticated patient care. Envisioned as a regional centre for cardiovascular healthcare, the centre's new premises will require a communications solution with rich functionalities that is easily scalable to meet changing demands.

Among the options that NHC explored included installing a new PABX, shared with the NCC, to keep costs low. However, this option quickly became unfavourable as tunnelling costs for underground cabling is highly prohibitive.

“Avaya was very supportive and provided useful information throughout the proposal stage. As a result, we were able to discuss and further refine the blueprint of the implementation to better suit users' needs.”

*Chia Puay Choo,
Assistant Director,
Operations, (Support Services),
National Heart Centre Singapore*

After careful consideration and studying the proposals from various vendors, NHC decided to adopt a hybrid solution from Avaya.

“We are most concerned with the future relevance of the new system we adopt, given that we are moving to much bigger premises, with plans for an expanded service offering underway. For these reasons, we have chosen the Avaya system which we believe has the capacity to meet our future needs,” said Ms Chia Puay Choo, Assistant Director, Operations (Support Services), National Heart Centre Singapore.

Avaya's Transformative Solution: Scalable and Future-Proof Infrastructure

NHC started discussions with Avaya in February 2008. The key priorities – to ensure a future proof solution and smooth crossover – remained at the top of the agenda.

Retaining 200 of its 250 analog phones, NHC identified about 70 users to switch to an IP-based phone system. These users form the core group who will help assess new functionalities and uncover any user issues related to the IP phones. Any feedback and experiences from this group became important input when the system is rolled out to other users in the future.

The hybrid solution is supported by Avaya S8730 Server and G650 Gateway. NHC also installed the IP Agent for their call centre agents.

“Avaya was very supportive and provided useful information throughout the proposal stage. As a result, we were able to discuss and further refine the blueprint of the implementation to better suit users' needs,” Ms Chia commented.

Such refinements included changing some of the proposed 1608 IP phones to the 1616 model for more functionality, as well as deploying the 4621 & 4622 IP Phones at the call center to allow users the flexibility to use either handsets or headsets.

“We added a further 24-port analog card to manage the migration better, and installed, on a trial basis, several sets of the IP softphones and EC500 extension to cellular. Our future need is a priority for NHC. Avaya offered us the flexibility and ease of scalability we need while allowing us to consider future expansion,” added Ms Chia.

After the Transformation: Better Operational Efficiency and Ease of Management

The unique implementation strategy adopted by NHC was designed to allow the centre time to refine the system, iron out any user issues and try out new functions prior to the major expansion expected in the new premises.

“Being in a competitive environment, we are concerned about a smooth switchover to the new system as we move to bigger premises. We are also mindful of the sensitivities in dealing with our patients and is therefore more careful in ensuring that there is no service disruption or system glitch arising from the move and expansion,” said Ms Chia.

To minimise disruption and ensure a smooth crossover, analog users will be moved to an analog line first, before switching to an IP-based phone. Chia also revealed that the switch to IP Phones was done in phases so as to allow time for progressive user training.

Indeed users seem to need some time to get used to the rich functions offered by their new phones. However, with Avaya's user friendly interface, teaching call centre and secretarial staff to utilise the new phone capabilities is easy.

The call centre, utilising Avaya's Call Management System, can now capture more information to facilitate reporting and administration. Integrated into the national Outpatient Appointment System (OAS), the 8-seat call centre is now seeing increased agent productivity and improved customer service.

The Support Services department is also experiencing increased efficiency as a result of the new implementation. Technical staff can install new phones and add new extensions in-house, saving time and costs.

"Unlike previously, we can now manage new phone line requests better. If a new line requires laying of new cables, we simply implement an IP Phone instead," Ms Chia remarked.

NHC is currently testing out various system capabilities as part of its future expansion plans. These include video conferencing, one-number reachability, fax integration and modular messaging.

"We have a vision to embrace unified communications in the future to enhance operational efficiency and increase the productivity of our staff. We are certain that the Avaya solution we implement will grow with us, as we are gearing up to meet increased demand for our clinical services," Ms Chia concluded.

Learn More

For more information on how Avaya Intelligent Communications can take your enterprise from where it is to where it needs to be, contact your Avaya Client Executive or a member of the Avaya Authorized BusinessPartner program, or visit **"Do Your Research"** at www.avaya.com.

The quotes in this case study are statements by Chia Puay Choo, Assistant Director, Operations, (Support Services), National Heart Centre Singapore

“ We have a vision to embrace unified communications in the future to enhance operational efficiency and increase the productivity of our staff. We are certain that the Avaya solution we implement will grow with us, as we are gearing up to meet increased demand for our clinical services. ”

*Chia Puay Choo,
Assistant Director,
Operations, (Support Services),
National Heart Centre Singapore*

APPLICATIONS

- Avaya Call Management System
- Avaya IP Agent
- Avaya Extension to Cellular
- Avaya IP Softphones

SYSTEMS

- Avaya Communication Manager
- S8370 Server
- G650 Media Gateway
- Avaya one-X Deskphones
(1600 Series IP Telephones)
- Avaya 4600 Series IP Telephones

ABOUT NATIONAL HEART CENTRE SINGAPORE

National Heart Centre Singapore (NHC) is the national referral centre for cardiovascular disease in Singapore. It provides comprehensive preventive, diagnostic, therapeutic and rehabilitative cardiac services to local and overseas patients.

For more information visit the NHC Website: www.nhc.com.sg

ABOUT AVAYA

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness.

For more information please visit www.avaya.com.