Modernizing tech to help healthcare alliance achieve network wellness.

When three hospitals and 25 clinics came together to provide regional healthcare services, the CIO and IT team inherited an overly complex network built with multiple vendor products and partially implemented solutions. The Zones and Cisco teams together with the alliance’s IT team implemented a new network that solves the unique information, technology, bandwidth, and integration challenges for the IT department.

**RESULTS**
- Reduced down time
- Simplified resource management
- Improved wireless connectivity
- Supportable and sustainable network
- Reliable, seamless, and highly secure health data communications
- Flexible, future-ready infrastructure

**SOLUTION**
A modern, integrated Cisco network to support IT strategic plans and to ensure secure, uninterrupted access to resources.

**CHALLENGE**
Overly complex network built with multiple vendor products and partially implemented solutions.
THE CHALLENGE
When an affiliated healthcare organization was established, the CIO and IT team inherited an overly complex network built with multiple vendor products and partially implemented solutions. As quickly as possible, they needed to implement a modern, integrated network that would provide system reliability, operational interoperability between hospitals and clinics, and secure remote access from rural locations.

THE SOLUTION
Since the alliance wanted a Cisco solution, Zones technical resources and our dedicated Cisco solution engineer conducted extensive discussions with their team to understand their pain points, strategic objectives, and infrastructure requirements.

The Zones team then worked closely with Cisco to architect a standardized next-generation solution to meet the alliance's need for an integrated network that provides high availability and ease of management.

The Zones and Cisco teams together with the alliance’s CIO, solution architect, network manager, and network architect developed a project plan that details a four-phase approach.

In addition to following best practices for successful results, the phased implementation ensures that the healthcare alliance has uninterrupted availability to patient data and resources.

**Phase 1:**
The project began with design and discovery of the existing environment, which included visual inspection of all 3 data centers and 5 of the 25 clinics. That was followed by the network and architecture design.

The project team documented all information and subsequently developed a deployment strategy and network cut-over plan.

**Phase 2:**
Staging, pre-configuration, and testing of the new Cisco networking hardware occurred at the Zones integration and logistics center.

**Phase 3:**
The deployment strategy and cut-over plan documented during phase 1 establishes these significant milestones:

> Milestone 1: Implementation of service provider network
> Milestone 2: Replacement of network switching and routing
> Milestone 3: Implementation of secure remote access
> Milestone 4: Decommissioning, un-racking, and disposition of all old hardware

**Phase 4:**
Knowledge transfer and “as built” documentation is reviewed during onsite and remote workshops. Follow-up to the initial training is made available via WebEx KT.
THE RESULTS

The Cisco network, which is based on a set of best practices and guiding principles, is providing the network foundation for reliable, seamless, and highly secure health data communications across the affiliated hospitals and clinics.

The new network is designed to solve the unique information, technology, bandwidth, and integration challenges for the IT department.

With the Cisco network in place, the organization’s IT team is poised for ongoing success with:

> Reduced down time
> Simplified resource management
> Improved wireless connectivity
> Supportable and sustainable network

The healthcare alliance is well positioned to continue their mission of providing extraordinary healthcare to the residents of their region.

The Cisco Solution:

The primary products used to architect the organization’s new solution include:

> Cisco Unified Computing System (UCS) server platform
> Cisco Nexus data center switching
> Cisco Catalyst core and edge switching
> Cisco Aggregation Services Routers (ASRs)
> Cisco Integrated Services Routers (ISRs)
> Cisco wireless access points
> Cisco ONE Software Foundation for Access: Switching and Wireless
> Cisco ONE Software for Data Center: UCS
> Cisco Software Support Service
> Cisco Smart Net Total Care Service
> Cisco Learning Credits for authorized training