

OSU CENTER FOR HEALTH SCIENCES AND COLLEGE OF OSTEOPATHIC MEDICINE

10-YEAR INFORMATION TECHNOLOGY STRATEGIC PLAN

2026-2036



**CENTER FOR
HEALTH SCIENCES**



STRATEGIC PLAN VISION

The Strategic Plan will provide the Oklahoma State University Center for Health Sciences campus with a vision to achieve enhanced teaching and learning environments, effective and efficient patient care and support research endeavors by utilizing the latest technological trends to enable collaboration among faculty, students and staff. These objectives strategically align with our three pillars:

Educate — IT is committed to providing modern learning platforms and accessible integrated technologies that support teaching, training and workforce development.

Discover — IT is committed to facilitate quality research endeavors. The IT vision provides plans for sustaining a reliable network and data center infrastructures allowing faculty, staff and students to share data and share information securely, address cybersecurity and provide high quality customer care.

Heal — IT strengthens clinical and operational systems that enhance care delivery, improve patient experiences and support privacy, security and patient safety. By integrating systems and leveraging data, IT helps clinicians make informed decisions and deliver high quality and compassionate care.

The Information Technology Department will:

- Be a recognized and effective means of using technology to support the ongoing mission and goals of the OSU Center for Health Sciences and College of Osteopathic Medicine at the Cherokee Nation campuses.
- Provide advanced, innovative technology solutions for the OSU Center for Health Sciences and Cherokee Nation campuses and use technology to streamline/simplify the teaching and learning experience.
- Be a leader in the seamless integration of technology used on both campuses.
- Provide technology to enable effective communication, collaboration and coordination among the campuses' community and partner organizations to enhance teaching, learning and operations.
- Be recognized for excellence in achieving customer satisfaction, providing high quality and information delivery.

STRATEGY 1

Enhance Teaching and Learning Environments

Technology to support teaching and learning is well embedded in the higher education landscape. Digital technology and hardware platforms play an important role in the planning and communication of teaching materials for lectures and supporting learning activities. Educational resources and technology advancements provide a way to share digital materials that can be used, reused and repurposed for teaching and learning.

The Information Technology department plays an important role throughout a student’s academic experience on campus. This starts with initial contact and develops using the computing facilities and classroom technologies. The teaching and learning experience rely on the technology used, how well it’s integrated into the environment and the support provided.

OBJECTIVES

- Develop and deploy classroom technology that benefits a variety of teaching and learning styles while adapting to the changing technological landscape.
- Provide technology in dedicated spaces encouraging and enabling group collaboration.
- Design and deployment of informal learning spaces to foster new ideas from faculty and students.
- Track and explore new technologies for faculty and students while keeping up with trends in teaching practices.
- Develop the infrastructure and delivery technology needed to support faculty initiatives.

ACTIVITIES

- Consult with stakeholders to identify types of teaching, learning methods and styles.
- Upgrade of classroom technology on a rotation schedule.
- Develop classroom technology template layouts to streamline and simplify teaching, learning environments and learning curves associated with classroom technology use.
- Explore, design and implement physical and virtual Active Learning Classrooms.
- Explore group collaboration space layout and design and provide ideas to stakeholders.
- Provide technology in informal learning spaces on campus.
- Enhance the University network and Wi-Fi infrastructures to support teaching and learning initiatives. Continued Wi-Fi upgrades as technology evolves will allow for faster communication and response times.
- Enhance services to support teaching and learning expectations by continuing to provide classroom support.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Classroom technology modernization rate	Percent of classrooms using standardized, modern AV/IT templates.	92%	95%	95%	IT asset inventory	Desktop manager (Academic)
Wi-Fi performance in teaching areas. Limited to classrooms, learning labs, conference rooms	Average Wi-Fi throughput (Mbps) and reliability (%) measurement defined by IT	20 Mbps / 95%	25 Mbps / 98%	30 Mbps / 99%	Network Monitoring	Network Manager

STRATEGY 2

Utilize Latest Technology Trends — Student Development, Collaboration and Learning Opportunities

Providing students with the technology needed in collaborative learning spaces is critical in a student's academic experience on the Center for Health Sciences and Cherokee Nation campuses. Our goal is to provide students with collaborative learning spaces that encourage growth and discovery of new ideas. Continuing technology upkeep of formal small to mid-size group collaboration spaces along with informal group study spaces will provide students with flexibility to stimulate their potential for learning. As a student's study methods change, technology must adapt to them. Areas that are often thought of as non-traditional study areas now become an opportunity to meet, collaborate and share new ideas. Technology must extend beyond the walls of the campus to meet student needs.

OBJECTIVES

- Integration of technology in existing collaborative learning spaces on campus.
- Using technology, create informal group study and collaboration spaces around campus.
- Extend the campus network to enable non-traditional locations on campus to become collaborative learning spaces (indoor/outdoor).
- The campus network and Wi-Fi capabilities provide stability, reliability and coverage needed as students' collaboration spaces change.

ACTIVITIES

- Consult with stakeholders to determine types of collaboration technology needed.
- Develop templates of collaborative technology layouts to streamline and simplify learning environments and use.
- Explore, design and implement technology in formal collaborative spaces.
- Explore, design and implement technology in informal collaborative spaces.
- Explore group collaboration space layout and design ideas and provide ideas to stakeholders.
- Enhance the University network and Wi-Fi infrastructure to collaborative learning spaces on campus.
- Assist in the implementation of artificial intelligence technologies to enhance learning methods for students and efficient delivery of curriculum for faculty.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Outdoor/nontraditional Wi-Fi coverage, target existing coverage areas	Percent of campus outdoor areas with reliable Wi-Fi	5%	10%	13%	Wi-Fi heatmaps	Network team
AI enhanced learning tools adoption	Number of AI tools deployed for student learning	3%	40%	60%	AI governance reports	AI governance /academic tech

STRATEGY 3

Network Infrastructure

The Information Technology department’s goal is to provide the Center for Health Sciences, Cherokee Nation campuses and OSU Medicine clinics with reliable network resources, which systems and services are dependent on. These systems must maintain a superior level of performance and reliability to support the mission of the University while being cost-effective, scalable and accommodating to changing needs and technologies. The Information Technology department will provide a reliable high-performance network and application infrastructure providing anytime, anywhere access to services to all faculty, staff and students.

OBJECTIVES

- Provide reliable, high performance network infrastructures with capability of redundancy.
- Ensure networks are stable, scalable and secure.
- Establish policies and procedures for updating network technology.
- Ensure all network appliances and switches are operating current supported versions of software.
- Develop and maintain a technology roadmap for the campuses that is aligned with the University’s strategic priorities.
- Provide a robust, stable wireless network and systems that support multiple platforms and devices.
- Provide advanced unified communications services (email, calendar, voice and video conferencing) to support teaching, learning and administrative functions.
- Perform security risk assessments of all network infrastructure systems.

- Perform third party penetration and vulnerability tests.
- Implement a vulnerability management plan for vulnerability detection, monitoring and internal and external audit compliance.

ACTIVITIES

- Upgrade of network appliances and switches on a rotation schedule.
- Monitor and upgrade core and edge switch systems to ensure systems are operating under current supported software.
- Utilize the network technology and upgrade roadmap to align with strategic priorities.
- Ensure campus wireless network is up to date on the latest software version and is secure.
- Upgrade and unify core communication services for ease of use.
- Perform security risk assessments annually of all critical systems.
- Perform third-party penetration and vulnerability testing annually.
- Perform continuous internal and external vulnerability scanning and monitoring, with annual assessments.
- Implement tools that have artificial intelligence models to better monitor and protect our networks.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Network uptime, track by outages	Percent uptime of core network	98%	99%	99.9% ISP resiliency required	Network monitoring	Network manager
Switch and appliance modernization	Percent of switches/appliances on supported versions	98%	98.9%	99% Correlated to investment	Asset management	Network manager
Wireless network performance	Wi-Fi reliability and speed across campus	Latency < 60ms	Latency < 50ms	Latency < 30ms Correlated to investment	Wi-Fi analytics	Network manager
Annual security assessments	Completion of risk assessments and pen tests	Full annual cycle	Full annual cycle + remediation	Full annual cycle + remediation	Security reports	Assoc VP or IT/Network manager
Vulnerability remediation SLA	Percent of vulnerabilities remediated within SLA	55%	80%	95%	Vulnerability scanner	Security Team

STRATEGY 4

Data Center Infrastructure

The Information Technology department’s goal is to provide our campus community with reliable information technology resources on which other systems and services are dependent. The data center infrastructure must maintain a superior level of performance and reliability to support the mission of the University while being cost-effective, scalable and accommodating to changing needs and technologies. The Information Technology department will provide a reliable high-performance data center infrastructure that provides anytime, anywhere access to services to all faculty, staff and students.

OBJECTIVES

- Schedule review of possible points of failure and verify that all possible points have redundant solutions.
- Ensure redundant solutions are in place, tested and functional for all critical systems and services.
- Perform periodic review of backup strategy and schedule regular tests of backup and restoration procedures.
- Develop and maintain comprehensive set of documentation, and ensure that all information is available to the staff.
- Fully define and test procedures for recovery from catastrophic failures of equipment and/or applications.

- Systematically monitor all network equipment, network services and core applications.
- Expand and improve security-related initiatives and activities (vulnerability scanning, patch management, data classification, endpoint management, etc.).

ACTIVITIES

- Continue to utilize industry standard monitoring tools to assist with downtime avoidance.
- Implement redundancy and failover where reasonably and financially possible.
- Review and conduct tests of backup strategy to minimize downtime.
- Continue to update and document infrastructure configuration files, network mappings, VLAN tunnels etc.
- Keep an up-to-date IT continuity, contingency, and disaster recovery plan.
- Keep up-to-date security related to endpoints and servers’ operating system patches necessary to industry secure standards.
- Monitor sensitive data transmissions through Data Loss Prevention and notify stakeholders when identified.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Redundancy coverage	Percent of critical systems with tested redundancy	15 % 32/119 VMs critical	30%	60%	DR documentation	Network manager
Backup and restore success rate	Percent of successful backup/restore tests	85%	90%	99%	Backup Logs	Network manager
Documentation completeness	Percent of systems with updated documentation	50%	75%	85%	Documentation repository	IT Leadership
Patch compliance	Percent of servers/endpoints fully patched	80%	85%	90%	Patch management tools	IT Leadership

STRATEGY 5

Digital Infrastructure

The Information Technology department’s goal is to provide a secure, interoperable and high-performance digital foundation. This foundation will support seamless data exchange across academic, clinical and research environments while ensuring compliance, scalability and resilience.

OBJECTIVES

- Continue to integrate systems for consistency and data fluidity.
- Deploy API and HL7 interfaces to integrate EHR’s, telehealth systems and other patient care driven systems.
- Enable AI decision supports integration directly into clinical workflows (EHR’s AI modules).
- Develop a plan to implement a centralized data warehouse to integrate data from student information system, ERP, EHR, etc.
- Use AI-driven diagnostic tools to monitor network.
- Continue to deploy on telehealth infrastructure as it enables OSU-CHS to expand services for rural clinics, virtual care and distributed training throughout rural Oklahoma and to underserved populations.

ACTIVITIES

- Initiate an AI Governance committee that will oversee all AI initiatives (academic and clinical). This group will review proposed AI tools and ensure they meet compliance and monitor ongoing AI projects across OSU-CHS for equity, transparency, safety, privacy and bias.
- When approved, IT will assist with the implementation, appropriate use and training of AI-driven tools.
- Conduct an assessment and strategy to implement a data warehouse, this will include budgetary numbers as well as resources and tools needed to implement.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
System integrations completed	Number of systems integrated via API/HL7	2 Labs, US, echo, x-ray, holter monitor	+3	+5	Integration logs	HIT Asst Director
AI decision support deployment	Number of AI modules deployed in clinical workflows	2	5	7	AI governance reports	HIT Asst Director
Data warehouse implementation	Percent completion of data warehouse project	0%	50%	100%	Project plan	TBD

STRATEGY 6

Cybersecurity

Cybersecurity is the protection of information systems from theft or damage to hardware, software and to the information on them, as well as from disruption or misdirection of the services they provide. As intrusions have increased in recent years, the potential to expose sensitive data with the intent to disrupt the operations of the University increases. The Information Technology department's goal is to provide secure systems and networks that can only be accessed by authorized individuals.

OBJECTIVES

- Protect OSU-CHS and Cherokee Nation campuses and OSU Medicine clinics information through the implementation of security tools and development and enforcement of policies and procedures.
- Detect, protect and respond to potential malicious activity before it affects the University's network.
- Access to internet and information technology systems resources is based upon a defined access requirement with appropriate denial of services provisions.
- The ability to audit transactions and processes impacting the University's systems, databases and operational outputs.
- Traditional physical security controls and accountability with manual as well as automated processes.
- Systems development review procedures and testing to ensure security in all internet and information technology systems designs and procurements.
- Appropriate contingency and disaster recovery plan.

ACTIVITIES

- Promote and support implementation of the University security policies, identification of sensitive information assets, mitigation of associated risks and easy to use methods and tools.
- Improve information security awareness across the campuses and clinics with a focus on educating University users on most frequent methods used for attacking networks and how to prevent them.
- Implement tools and protocols to allow the sharing of information securely within and outside the University on any device.
- Implement consistent identity and access management, including single sign-on and multifactor authentication across the portfolio of University systems where necessary.
- Improve detection of, response to and reporting of information security incidents across the University.
- Ensure appropriate network switch and firewall operating systems and configurations are applied to ensure the highest level of protection.
- Monitor threat activity through our Intrusion Detection System, endpoint protection systems and security information event management systems.
- Optimize reporting from the Security Event Management system and ingest logs from other systems used to be able to proactively identify potential security issues and be able to perform forensic analysis.
- Implement and use AI-driven threat detection and anomaly monitoring tools that will assist our security staff to continue protecting our network and systems.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Incident response time, non-critical	Average time to detect/respond	8 hours	4 hours	1 hour	SIEM togs, EDR, other	IT Security team
MFA adoption	Percent of systems using MFA	80%	90%	100%	IAM Reports	IT Security team
Timely security awareness training completion	Percent of employees completing training early	85%	90%	100%	Training system	IT Security team
Threat detection coverage	Percent of systems monitored by endpoint tools	85%	95%	100%	Security tools	IT Security team

STRATEGY 7

Data Analytics

The Information Technology department's goal is to support the infrastructure and resources to allow faculty, staff and students to make use of large datasets to be able to conduct data analysis through research.

OBJECTIVES

- Deployment of hardware infrastructure that supports large amounts of hot storage that can be queried against.
- Deploy and support analytics software tools to our faculty, staff and students.
- Encourage, facilitate and leverage fundamental research initiatives and work.

ACTIVITIES

- Identification of hardware and software platforms that can support analysis of large data sets. The IT department will collaborate with vendors and members of OSU-CHS to find the best platform to support data analysis efforts.
- Provide recommendations and support to OSU-CHS users during evaluation, acquisition, implementation and deployment of systems that store data that will need to be used for the analysis of operations and/or research activities.
- Provide timely and reliable means to access datasets through infrastructure in-house and/or through the cloud. IT management will review tickets daily to ensure these requests are acknowledged and completed.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Hot storage capacity	TB of high performance storage available	170 TB available — but has charges	TBD depending on needs	TBD depending on needs	Storage monitoring	IT Network Manager
Research support SLA	Percent of analytics support tickets resolved on time	70%	85%	95%	Ticketing system	IT Leadership

STRATEGY 8

Customer Care

Customer care delivers high quality services and support in a way that provides faculty, staff and students with the technological service needed to be successful in the most efficient, fair and cost-effective manner possible. Understanding, managing and delivering high quality customer care and meeting expectations are key to creating successful outcomes and satisfying customers.

OBJECTIVES

- Commitment to excellent and responsive customer service.
- Continue to work on advancing and designing a user-centered approach to technology services delivery for our customers.
- Respect for colleagues and customers.
- Commitment to fairness, consistency and trust.
- Accountability and integrity.
- Fostering cooperation and collaboration.
- Adaptability.
- Effective and efficient use of resources and time.
- Innovation and leadership.
- Proactively leverage external insights and best practices to better understand and anticipate user technology needs.

ACTIVITIES

- Audit and review process and responsiveness to customer requests ensure they are completed on time and correctly.
- Deliver the highest quality of customer service by developing the department team through training, coaching and meeting opportunities.
- Improve response times to customer requests through monitoring of the ticketing system and customer after service calls/follow-up emails.
- Act as role models and leaders in customer service.
- Remembering what is important: ‘the satisfaction of the customer’.
- Providing accurate and relevant information for the University family and surrounding community.
- Provide various methods for University users to report issues or get assistance.

KEY PERFORMANCE INDICATORS

KPI	Definition	Baseline (2026)	Year 2-5 (2027-2031)	Year 6-10 (2032-2036)	Data Source	Owner
Ticket response time — non-emergency tickets	Average time to first response	4 hours	3 hours	2 hours	Ticketing System	Help Desk Manager
Customer satisfaction score	Average postservice rating	N/A	80%	90%	Survey System	IT Leadership
IT staff onboarding training completion	Percent of staff completing onboarding training	80%	90%	100%	HR/Training Logs	IT Leadership
IT staff continued ongoing training	Number of training opportunities provided	1	2	3	HR/Training Logs	IT Leadership

OSU-CHS Information Technology and Health Information Technology Staffing

JOB ROLES AND RESPONSIBILITIES

Associate VP of Information Technology — Responsible for the directing, planning and organizing activities and projects of the Information Technology and Health Information Technology departments at OSU-CHS.

Assistant Director of Information Technology — Responsible for managing the day-to-day operations of the Health Information Technology department, which provides application support to CHS/OSUMC clinics and other departments at CHS, day to day management of CHS-IT Helpdesk and Desktop support for clinical locations.

Network Manager — Responsible for managing day-to-day system administration/network/infrastructure and cyber security operations at CHS (all locations).

IT Academic Desktop Support Manager— Responsible for managing day-to-day operations of the academic campuses at OSU-CHS and Tahlequah — desktop support/classroom technology support teams.

Project Manager — Assists in the management of all IT/HIT related projects.

Technology Asset Procurement & Inventory Coordinator — Responsible for managing the procurement, tracking and lifecycle management of all the IT assets. Performs physical inventory and ensures that inventory is accurate.

Desktop Support Specialist — Provide desktop support to all CHS and clinical locations except for Tahlequah.

Helpdesk Support Specialist — Provides Helpdesk support to all CHS locations users.

Desktop Support Specialist — Provide desktop/classroom technology support to Tahlequah campus users.

Classroom Technology Support Specialist — Provide classroom technology support to CHS campus users.

AV Support Specialist — Provide AV support for events and internal meetings.

AV Support — Provides support, programming and deployment of AV equipment for all CHS locations.

Network Engineer — Responsible for design, deployment and maintenance of server infrastructure, backups, access control, surveillance systems.

Network Architect — Responsible for design, maintenance and deployment of network/switch infrastructure for all CHS locations.

Security Analyst — Responsible for various security responsibilities, SIEM monitoring, investigation of incidents, EDR support, policies and procedures documentation, etc.

Infrastructure Analyst — Responsible for various infrastructure tasks.

VoIP Engineer — Responsible for the proper management and administration of our Voice over IP system and other telephon systems.

HIT Analyst/Trainer — Provider EHR application support and primary EHR Trainer.

HIT Analyst — Provide application support for various systems, also responsible for report writing from different applications data sets.

OSU-CHS FACILITIES LOCATIONS

- **OSU Center for Health Sciences** — Tulsa campus
 - **OSU College of Osteopathic Medicine at Cherokee Nation** — Tahlequah campus
 - **Hardesty Center for Clinical Research and Neuroscience** — Biomedical Imaging Center — Tulsa clinic
 - **Eastgate** — Family Medicine clinic — Cleveland clinic
 - **Health Care Center** — Family Medicine, OMM, radiology clinics, women’s health clinics — Tulsa clinic
 - **Houston Center** — Internal Medicine, Internal Medicine Spec Services, OBGYN, Cardiology, Pulmonology clinics — Tulsa clinic/offices
 - **Holliman Building** — OSU Medicine Pediatrics — Tulsa clinic
 - **South Tulsa** — Neurology Clinic — Tulsa clinic
 - **Legacy Tower** — Family Medicine, Behavioral Health, Addiction, Health Access Network, Clinic Financial Services, CIHRP, OSU Medicine administration, OSU Virtual Medicine — Tulsa clinic/offices
 - **OSU Medical Center** — Graduate Medical Education — Tulsa offices
 - **OSU OKC** - Rural Health/Academic Affairs — Oklahoma City offices
 - **OSU Stillwater** - Athletics — Stillwater offices
 - **OSU Tulsa** - Ancillary departments — Tulsa offices
 - **Phoenix Building / Campus Security** — Tulsa offices
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STRATEGIC PLAN REVIEW COMMITTEE

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