Technology Services

UPMC Enterprises

Transforming ideas into thriving businesses and Life Changing Medicine.

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AHAVI™

Enabling Scientific Advancements in Health Care through Real-World Data and Analytics

Ahavi™ provides **primary source-verified**, de-identified, real-world health care data to researchers, scientists, and developers. Derived from **more than 80 UPMC data sources**, this **real-world data** platform enables the creation of curated datasets that are available to **accelerate research**, **clinical trial design**, and **AI development**. Our customized environments offer industry-leading analytical tools to analyze your cohorts.

ACCESS TO DATA FROM

5M+
PATIENTS

24+
HOSPITALS

STRUCTURED DATA

📅 Historic data since 2019

156M+ PATIENT ENCOUNTER RECORDS

- ✓ Allergies & Intolerances
- ✓ Results
- ✓ Plan of Treatment
- ✓ Labs

- ✓ Medications
- ✓ Procedures
- ✓ Social History

- ✓ Problems
- ✓ Immunizations
- ✓ Vital Signs

UNSTRUCTURED DATA

📅 Historic data since 2012

154M+ AMBULATORY DOCUMENTS

123M+ ADULT ED & INPATIENT DOCUMENTS

42M+ LEGAL & TREATMENT DOCUMENTS

41M+ RADIOLOGY DOCUMENTS

25M+ CARDIOVASCULAR MONITORING & IMAGING DOCUMENTS

23M+ TRANSCRIPTION (INPATIENT, OUTPATIENT, & ED) DOCUMENTS

MORE THAN

80%
LINKAGE RATE BETWEEN STRUCTURED AND UNSTRUCTURED DATA

AHAVI™

Who we serve

Pharma & Clinical Trial Enablement Partners

Work with confidence knowing that our scalable infrastructure is available to meet your needs. Our platform is tailor-made for the scientific and clinical researcher.

- Optimize cohort selection.
- Protocol iteration.
- End-to-end analytics support.
- Facilitate regulatory approval.

AI Developers

Our services cater to AI developers and researchers, offering expert guidance in defining and generating de-identified real-world data cohorts.

- Train and validate models leveraging real-world data in a customized environment.
- Accelerate your go-to-market.
- Fast-track your funding life-cycle through investments & partnerships.

What we offer

✓ **Customized Data Cohorts**
Receive a specially curated, de-identified cohort, customized to your research needs.

✓ **Dedicated Environment**
Secure, comprehensive access to your specific cohort for an extended 12-month research period.

Your research, supercharged with UPMC Enterprises' expertise.

Academic Research Partners

Embark on a journey of discovery with Ahavi™, where accessing pivotal health care data is a streamlined, intuitive process.

- Faster access to reliable, complete, de-identified cohorts.
- Garner deeper insights from longitudinal data.
- Access to secure computing environments.

Hospital Systems

Improve quality of care and bolster research partnerships through superior health care data and technology infrastructure.

- Access to UPMC's extensive, diverse real-world data in a secure, personalized environment.
- Analytics expertise across rural, community, and specialty hospitals.

✓ **Analytics Tools & Data Analysis**
Leverage advanced, industry-leading analysis tools to perform in-depth investigations and drive impactful outcomes.

✓ **Expert Technical Collaboration**
Benefit from dedicated time with our technology experts to identify key descriptors of your targeted cohort(s).

AHAVI™

How it works

Data Acquisition & Storage

EMR data is available within 30 days following an encounter, derived from multiple locations and a variety of care settings. Historic data is sourced since 2019 for structured data and 2012 for unstructured data. Third-party certified data ensures primary source validation and normalization for reliable, repeatable processes.

Cohort Definition
STRUCTURED DATA

Guided by structured EMR data, this white-glove service enables a seamless, collaborative process working closely with the expert Data Analytics and Informatics team to help refine criteria and optimize cohort selection for precise, high-quality datasets.

Cohort Augmentation
UNSTRUCTURED DATA

Powered by Alexandria Charts®, structured data is enriched with aggregated and normalized unstructured data, seamlessly linked through patient identifiers (MRNs), with meticulous oversight of storage and compute costs.

What sets us apart

Third-Party Certified Data Pipelines

Regulatory-grade, publication-ready, primary source-verified data.

Longitudinal Patient Health Care Journeys

Access to complete structured and unstructured data that can be linked back as far as 2019 and 2012, respectively.

Unlock the Power of Health Care Data for Transformative Research.

De-Identification

In partnership with an industry leader trusted by major health care and pharmaceutical companies, we utilize high-accuracy, secure NLP solutions for PHI removal.

Honest Broker Validation

Certified honest brokers ensure compliance, data integrity, and accurate cohort validation. This one-stop shop streamlines verification, minimizing discrepancies while maintaining regulatory standards.

Ahavi™ Researcher Portal

Access to a project-specific collaborative workspace where multiple members of the research team can work with the same dataset for advanced analytics and iterative model development.

Diversity in Patient Populations

Access to high-quality data from all types of care settings across Pennsylvania.

E2E Access & Professional Services

Data access, expert cohort identification, and end-to-end analytics support.

AHAVI ™

Real-World Data Analytics Services

Transform Real-World Data into Actionable Insights

Ahavi's™ Real-World Data Analytics Services provide scalable, cost-effective solutions that harness both structured and unstructured data for deep exploratory data analyses and retrospective studies. By leveraging advanced analytics, we help uncover meaningful real-world evidence to enable clinical trials, optimize treatment pathways, and inform data-driven decision making. Whether you're conducting epidemiological research, assessing treatment effectiveness, or identifying emerging trends, our powerful analytics capabilities turn complex data into impactful insights.

Service Highlights

Cohort Requirements Development
Define and refine data needs to help ensure alignment with objectives.

Environment Creation and Provisioning
Deploy secure, compliant infrastructure to host and manage real-world data for your study.

Study Design Iteration
Refine and optimize study methodologies using real-world data insights to enhance reliability and validity of study findings.

Study Execution
Efficiently implement and manage studies with real-world data analytics to generate meaningful, high-quality evidence for informed decision making.

Customer Impact

Pharma and clinical trial leaders can harness our data analytics service leveraging structured and unstructured data to gain actionable insights to drive innovation in drug development and clinical research.

Hospital systems can leverage real-world data analytics to enhance patient care, optimize treatment pathways, and support evidence-based decision making, leading to improved clinical and financial outcomes.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Deliverables may include:

- **Actionable insights** that inform decision making, optimize strategies, and drive meaningful outcomes.

- **White papers** and in-depth research documents that analyze key trends, methodologies, and real-world data applications.

Get Started

Tap into the power of real-world data to drive impactful research and better outcomes.
Email **technologyservices@upmc.edu** to connect with our experts today!

Research and Development Infrastructure Services

Fuel Innovation with Rapid, Secure Access to Top-Rated Data

Ahavi's™ Research and Development Infrastructure Services provide AI companies with access to high-quality, de-identified data in a secure and compliant environment. Designed to accelerate innovation, our streamlined workflow enables delivery of comprehensive datasets in as little as four weeks — eliminating common data accessibility barriers. Whether you're training, validating, or fine-tuning AI models, our solution empowers your team with the data they need, when they need it, without compromising security or compliance.

Service Highlights

Cohort Requirements Development
Define and refine data needs to help ensure alignment with objectives.

Environment Creation and Provisioning
Deploy secure, compliant infrastructure to host and manage real-world data for seamless access.

Cohort Creation
Curate high-quality, de-identified datasets tailored to specific research and development needs.

Custom Engagement
Provide tailored solutions and expert support to meet unique project requirements and accelerate AI innovation.

Customer Impact

AI development companies seeking to train and validate their models can get access to a complete data cohort within a dedicated and secure environment, that can help them develop high-quality datasets, accelerate model iteration, and maintain compliance with industry regulations.

Academic research institutions can access comprehensive, de-identified data cohorts within their own compliant environment, empowering researchers to drive groundbreaking discoveries, enhance study reproducibility, and accelerate advancements across various fields of study.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Deliverables may include:

• **Comprehensive de-Identified data** within your own secure environment available for 12 months.

Get Started

Unlock the potential of high-quality data and accelerate AI innovation with Ahavi™.
Email **technologyservices@upmc.edu** to connect with our experts today!

Data and Analytics Services

In the ever-expanding world of health care data, we provide the expertise you need to aggregate, integrate, validate, manage, and analyze data in a way that is accessible, high-performing, and cost-effective.

Our **Data Advisory Services** offer you the know-how to create a robust and scalable infrastructure, **enabling your data to become an asset** rather than an overwhelming burden.

Demonstrating outcomes is paramount to success in health care. With UPMC Enterprises' **Outcomes Analysis Services**, you can **unlock your organization's full potential**.

Summary

Data driven insights can enable strategic decisions to drive your organization's growth and success. Service offerings include:

- Exploratory Data Analytics
- Outcomes Analysis
- Data Advisory

From retrospective analyses to strategic decision-making and commercialization efforts, we empower you to optimize clinical workflows, improve care delivery, and enhance patient satisfaction.

For investment firms seeking clinical and health system insights, our **Exploratory Data Analytics Services** are available. We specialize in **cohort identification and analysis** of discrete electronic medical record (EMR) fields, enabling us to help you assess potential business impact and guide investment decisions.

Choose UPMC Enterprises as your partner in **harnessing the power of health care data**. Our comprehensive services and solutions are tailored to meet the unique needs of the industry, enabling you to drive innovation, make informed decisions, and unlock the full potential of your organization's data.

Exploratory Data Analytics

Unlock the Full Potential of Your Products and Investments

Maximize your impact on digital health and life sciences by partnering with UPMC Enterprises. Our expertise in data analytics transforms complex EMR data into actionable intelligence, guiding your business decisions and due diligence processes.

Service Highlights

Identify Trends
Discover trends, patterns, and relationships within EMR data to uncover hidden opportunities and make informed business decisions.

Mitigate Risk
Enhance your due diligence with in-depth analyses that help you make more informed and lower-risk decisions.

Inform Strategy
Gain insights to optimize product features, operational workflows, pricing, and reimbursement strategies, boosting revenue and profitability.

Future-Proof Decisions
Make strategic, data-driven choices that maximize your return on investment and support long-term success.

Scope Your Pilot
Ensure your investment and project strategies are grounded in data-driven insights with our pilot scoping and protocol development services.

Customer Impact

A durable medical equipment (DME) e-prescription company faced challenges gaining traction as a vendor with large health care systems.

The Data Analytics and Informatics team identified the opportunity by analyzing inpatient and outpatient DME order volumes across UPMC, uncovering inefficiencies in procurement processes and assessing the financial impact of improvements. Within 18 months of its Exploratory Data Analytics engagement, the company secured a position as UPMC's primary DME vendor.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Data strategy insights** that outline high-level recommendations for data use and potential business opportunities informed by findings.

- **Exploratory Data Analysis (EDA) report** that identifies patterns, trends, anomalies, and correlations between variables. This report typically includes data visualization, segmentation analysis, and hypotheses based on data exploration.

Get Started

Partner with UPMC Enterprises to turn complex data into actionable insights and secure the success of your products, companies, and investments. Email **technologyservices@upmc.edu** to connect with our experts today!

Outcomes Analysis

Drive Strategic Decisions with Data-Driven Outcomes Analysis

In today's fast-paced health care environment, proving impactful outcomes is crucial for optimizing clinical workflows, enhancing care delivery, improving patient satisfaction, and staying ahead of your competition. Leverage UPMC Enterprises' Outcomes Analysis Services in combination with UPMC's broad and deep pool of structured and unstructured data to drive strategic decisions.

Service Highlights

Comprehensive Analysis
Conduct in-depth retrospective analysis and prospective observational studies encompassing clinical, operational, and financial outcomes to showcase the effectiveness of interventions and pinpoint areas for improvement.

Evidence-Based Decision Making
Use data-driven insights to make informed decisions, uncover patterns, and optimize resource allocation.

Demonstrate Value
Generate robust evidence to highlight clinical improvements, operational efficiency, and financial impacts, driving stakeholder engagement and market differentiation.

Operational Efficiency Assessment
Pinpoint workflow bottlenecks and inefficiencies to streamline processes and maximize productivity.

Customer Impact

A large health care system partnered with our analytics experts to design a pilot for a prospective product. Following the pilot, our team delivered a comprehensive analysis, recommending implementation based on positive clinical, operational, and financial outcomes.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Study design development** that collaboratively design and develop studies, defining data sources, KPIs, and outcome measures.

- **Clinical effectiveness evaluation** of the impact of clinical interventions through detailed analysis of outcomes, quality of care, and cost-effectiveness.

- **Cost-benefit analysis** to assess financial impacts and return on investment by examining cost savings, revenue generation, and efficiency gains from operational and clinical improvements.

Get Started

Maximize the value of your data and gain a competitive edge with our expert-driven Outcomes Analysis Services. Email **technologyservices@upmc.edu** to connect with our experts today!

Data Advisory

Maximize Strategic Value through Data and Expert Recommendations

Harness the power of health care data with UPMC Enterprises' Data Advisory Services focusing on data engineering and data analysis. Our team specializes in designing robust, scalable, and efficient data infrastructure, helping ensure that your data is aggregated, validated, and managed effectively for optimal performance and cost-efficiency. We provide tailored strategies to streamline your data integration processes, enabling better decision-making and organizational growth.

Service Highlights

Data Strategy Advisory
Develop a comprehensive data integration strategy aligned with your business goals.

Integration & ETL Development
Implement efficient data extraction, transformation, and loading processes.

Data Engineering Advisory
Design and automate end-to-end data pipelines for seamless data flow across systems.

Data Analysis Advisory
Expert guidance on leveraging data analytics to optimize decision making, improve business strategies, and drive actionable insights.

Customer Impact

UPMC Enterprises recently partnered with a growth-stage population health company to integrate disparate data sources into a proprietary application. Our standardization and integration methodology provided the client flexibility, simplicity, improved workflows, and significantly reduced the amount of time and effort needed for subsequent integrations.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Data profiling** documentation to enhance decision making by providing a clearer understanding of data integrity.
- **Data pipeline development** enabling the seamless, secure, and efficient flow of data from various sources.
- **Data strategy** document outlining a structured approach to managing, analyzing, and utilizing data to support business objectives, drive innovation, and help to ensure data governance and compliance.

Get Started

UPMC Enterprises can help you harness the power of data and drive your business forward.
Email **technologyservices@upmc.edu** to connect with our experts today!

Strategic Services

Understanding prospective products or companies thoroughly before committing capital and resources is essential.

With decades of technical and health care expertise, our Strategic Services provide extensive evaluations, delivering detailed reports and mitigation plans that address critical areas such as scalability, stability, and reliability. This approach equips you with the insights needed to effectively mitigate risks and position yourself optimally in the market.

Summary

We provide recommendations and plans to help you leverage technology to meet your business goals. Service offerings include:

- Technical Evaluation and Due Diligence
- Technical Data Room Creation
- Product Strategy and Roadmaps
- CTO Support

Assistance with completing and enhancing your **technical data room** is offered to **showcase strengths** to potential investors and partners, emphasizing the importance of this essential component.

Crafting a compelling narrative and long-term planning are vital for instilling confidence in decision-makers. Our team collaborates to help you **develop a roadmap** and narrative that aligns with investor and partner expectations, **fostering trust in your organization**.

Executive-level **CTO support** and interim leadership are available to **navigate complex technical challenges**.

Our services also include assistance in **developing investment theses**, providing guidance on **due diligence**, helping you to prioritize product features driven by data insights, creating pilot protocols, and crafting strategic plans for commercialization and pricing.

Technical Evaluation and Due Diligence

Accelerate Your Investment and Innovation

Before committing significant resources to a new investment, gain a comprehensive understanding of the target product and technology. UPMC Enterprises' Technical Evaluation and Due Diligence Services identify potential risks and opportunities, providing actionable insights to help ensure that your investment aligns with strategic goals.

Service Highlights

Comprehensive Technology Assessment
Evaluate the entire technology stack, identifying strengths, weaknesses, and growth opportunities.

Security Assessment
Full review of security systems, including firewalls, intrusion detection, and access controls.

Code Review
Analyze code quality, maintainability, and scalability.

Data Architecture Analysis
Help to ensure data integrity, security, and compliance.

Customer Impact

"Best tech diligence report we have ever received. The Technical Evaluation and Due Diligence team allowed us to budget accordingly, invest with the right amount of runway, and plan for fixes. They provided assurance that we were buying what we thought we were buying."

— MANAGING DIRECTOR OF A VENTURE CAPITAL FIRM

Through rigorous assessment and validation of prospective health care technology assets, the Technical Evaluation and Due Diligence process assists with crisp investment decision making, fostering impactful, data-driven, and future-focused health care solutions.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Comprehensive report** detailing observations, risks, and recommendations across the full infrastructure and architecture of an acquisition target, empowering more informed and strategic acquisition decisions.

- **Technical & feature three-year roadmap** accompanied by a comprehensive report out that enabled a customer to get full asking prices for their asset.

Get Started

Understand strengths, weaknesses, and prospective paths to growth via a comprehensive evaluation and report out from industry experts. Email **technologyservices@upmc.edu** to connect with our experts today!

Technical Data Room Creation

Streamline Due Diligence with Expertly Crafted Data Rooms

Prepare for successful negotiations with UPMC Enterprises' Technical Data Room Creation Services. Our deep industry expertise helps to ensure that your data room is organized, comprehensive, and optimized to meet the highest due diligence standards, helping you secure premium valuations and favorable outcomes.

Service Highlights

Comprehensive Evaluation
Collect, refine, and organize technical assets to meet rigorous due diligence standards.

Artifact Creation
Fill documentation gaps with tailored artifact templates for a complete data room.

Optimized Data Room
Streamlined, easy-to-navigate data rooms that enhance clarity and efficiency.

Expert Advisory
Ongoing consultation to position your data room for success.

Customer Impact

Acquisitions are never easy processes, but not having Technology Services in my corner would have made it 1,000 times worse. The acquisition was successful because of our partnership with Technology Services."

— CHIEF TECHNOLOGY OFFICER

A technology company preparing for the sale of the company turned to UPMC Enterprises for assistance in creating a highly impactful Technical Data Room for due diligence. The resulting materials were so impressive and comprehensive that the acquiring company had limited follow-up requests, resulting in a successful acquisition.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Comprehensive technical data room** creation effectively positioned the company to attract and engage potential acquisition partners.

- **Technical due diligence,** accompanied by a detailed report and gap-closure roadmap, enabled the company to showcase deep expertise and strategic plans for their product's growth.

Get Started

Be prepared for investors and buyers or simply get an objective evaluation and report for gap closure and strategizing. Email **technologyservices@upmc.edu** to connect with our experts today!

Product Strategy and Roadmaps

Guide Your Health Care Technology to Success with Strategic Roadmaps

UPMC Enterprises' Product Strategy and Roadmap Services help you craft a clear and compelling narrative for your health care technology. We provide tailored, efficient guidance to shape your short- and long-term goals, helping you stand out in a competitive market — whether preparing for funding or attracting potential buyers.

Service Highlights

Tailored Product Strategy
Customizable, health care-focused strategic plans to align with your technology and business goals.

Comprehensive Market Analysis
In-depth analysis of the competitive landscape and customer segmentation to refine product positioning.

Actionable Roadmaps
Short- and long-term roadmaps with clear prioritizations to guide your product's growth.

Go-to-Market Excellence
Expert guidance on pricing, revenue models, and go-to-market strategies for maximum impact.

Investor-Ready Pitch Prep
Professional pitch coaching, collateral preparation, and investor presentation support to help you stand out.

Customer Impact

A leading health care supply chain solutions company underwent a strategy assessment conducted by the UPMC Enterprises team, revealing gaps in its narrative, roadmap, and go-to-market materials for potential buyers. Recognizing the need for improvement, the company engaged our team to address the identified gaps, resulting in a more compelling package which attracted potential investors and led to a successful acquisition.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Roadmap prioritization** of your existing backlog and strategic vision using best practices and established frameworks to provide a foundation and north star for your team.

- **Three-year strategic roadmap** outlining customer-centric features, security requirements, and technical debt management to present comprehensive growth plans to potential investors.

Get Started

Harness the power of technology and drive your business forward with UPMC Enterprises.
Email **technologyservices@upmc.edu** to connect with our experts today!

CTO Support

Expert Technical Leadership When You Need It Most

At UPMC Enterprises, we provide executive-level support and interim leadership to help health care companies navigate complex technical challenges. With deep health care IT expertise, we tailor our solutions to your specific needs, helping ensure that you make the right strategic decisions.

Service Highlights

Expert Advisory Services
Access seasoned health care IT professionals for strategic guidance..

Vendor Negotiations
Secure critical vendor partnerships that align with your business goals.

Technology Purchases
Leverage our expertise to help you make informed, strategic tech investments.

Build a Technology Team
We assist in recruiting, interviewing, and hiring the right talent for your objectives.

Optimized Processes
Implement best practices from day one to set your tech team up for success as you scale.

Customer Impact

For a resource-constrained startup facing critical decisions, our interim CTO successfully negotiated the acquisition of their former vendor's entire codebase and transitioned the platform to a self-hosted AWS environment. This approach avoided a $250,000 expenditure on an incomplete solution, established an in-house tech team, and positioned the company for long-term success.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Technology strategy and roadmap** provides a clear, scalable technology strategy aligned with business goals, including a detailed roadmap for implementation.

- **Architecture and infrastructure planning,** featuring recommendations for scalable and secure technology solutions, encompassing architecture design, platform selection, and seamless integration with existing systems.

Get Started

Let UPMC Enterprises help you drive efficiency, reduce costs, and build a solid foundation for long-term growth. Email **technologyservices@upmc.edu** to connect with our experts today!

Infrastructure and Security Services

Data breaches in health care organizations can have severe consequences. UPMC Enterprises offers services that enable health care businesses to unleash their full potential while addressing the security and reliability of their data in the cloud, without the burden of excessive overhead.

For organizations handling Electronic Protected Health Information (ePHI), privacy and security are of utmost importance. However, not all cloud services comply with HIPAA regulations, making it challenging to navigate the complexities of **scalable, secure, and reliable cloud infrastructure**.

Summary

We offer services that provide security, data integrity, and compliance for institutional activities. Service offerings include:

- Security and Vulnerability Assessment
- Managed Cloud Services
- Cloud Architecture Advisory

By leveraging UPMC Enterprises' **Security and Vulnerability Assessment Services**, you can **mitigate the risks** associated with mishandling ePHI and protect your organization's finances and reputation. Our expertise in secure **cloud architecture** allows you to **harness the power of the cloud** while helping you comply with regulatory requirements.

Creating a secure solution in-house requires significant resources, which may not be feasible for most startups. UPMC Enterprises provides a **cost-effective and efficient alternative**, enabling you to focus on your core business while we assist you with the complexities of **cloud security and compliance**.

Trust UPMC Enterprises to help your organization thrive in the health care industry. With our **Managed Cloud Services**, you can confidently embrace the cloud and drive innovation while maintaining **high standards of privacy and security** for your patients and your business.

Security and Vulnerability Assessment

Protect Your Product with Expert Security and Vulnerability Solutions

UPMC Enterprises' Security and Vulnerability Assessment Services help development teams identify, prioritize, and remediate security vulnerabilities to help ensure products and systems are protected. Our comprehensive approach includes scanning, testing, and ongoing monitoring, providing you with a detailed plan to address security risks and compliance with privacy regulations.

Service Highlights

Security Assessment Report
Detailed analysis of your security posture, vulnerabilities, and recommended remediations.

Remediation Plan
Actionable steps to address identified risks and vulnerabilities.

Vulnerability Analysis Report
Insights into the severity and impact of each vulnerability with tailored remediation actions.

Remediation Verification Report
Confirmation that security fixes have been successfully implemented.

Training & Support
Recommendations for best practices on embedding security into your team's everyday processes.

Customer Impact

UPMC Enterprises supported a portfolio company following the acquisition of new software during a merger. A thorough assessment uncovered several issues, prompting the rapid deployment of a team to address multiple SQL injection and other security vulnerabilities without impacting product delivery timelines.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Risk prioritization and threat modeling** documentation based on potential impact and likelihood of exploitation in a health care setting.

- **Compliance and regulatory alignment** assurance that security measures align with health care-specific regulations (e.g., HIPAA) and frameworks (e.g., HITRUST).

Get Started

Our experts can assist you with ensuring that your technology is secure, compliant, and protected against potential risks, while providing actionable plans and ongoing support. Email **technologyservices@upmc.edu** to connect with our experts today!

Managed Cloud Services

Secure, Scalable Cloud Solutions with 24/7 Expert Support

Benefit from secure, scalable cloud infrastructure without the burden of managing it yourself. UPMC Enterprises specializes in building and maintaining HIPAA-compliant AWS environments, helping health care organizations handle ePHI securely while optimizing performance and reducing overhead costs.

Service Highlights

Identity Management
Managed account creation and identity access management (IAM) to secure your cloud environment.

Infrastructure Maintenance
Regular security patches, vulnerability updates, and ongoing infrastructure maintenance.

Backups
Customized backup solutions to protect against data loss, ensuring business continuity.

Cost Optimization
Expert guidance on cloud spend, usage, and cost saving opportunities.

24/7 Support
Around-the-clock infrastructure management and remediation from cloud experts.

Customer Impact

A health care startup approached UPMC Enterprises with an idea to deliver health coaching to patients throughout the surgical journey. Leveraging UPMC Enterprises' Managed Cloud Services, the startup brought its product to market in less than four months. UPMC Enterprises addressed gaps in cloud and security expertise, rapidly building a secure, cloud-native architecture. Ongoing optimizations, including patching, vulnerability remediation, version upgrades, SecOps, 24/7 support, and identity management, significantly reduced the total cost of ownership (TCO).

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **HIPAA-compliant infrastructure** designed to meet stringent health care compliance requirements.
- **Scalable storage and compute resources** to meet fluctuating health care demands.

Get Started

Effortlessly manage ePHI with our HIPAA-compliant AWS solutions — secure, scalable, and optimized for health care organizations. Email **technologyservices@upmc.edu** to connect with our experts today!

Cloud Architecture

Scalable Cloud Solutions that Drive Health Care Compliance and Growth

Unlock the full potential of the cloud with UPMC Enterprises' Cloud Architecture Services. We design and implement secure, scalable cloud infrastructures tailored to the unique needs of health care organizations. Our team helps ensure compliance with health care regulations such as HIPAA and HITRUST, while providing robust performance, reliability, and cost efficiency.

Service Highlights

Custom Cloud Solutions
Tailored architectures designed for scalability, security, and compliance, leveraging AWS.

HIPAA & HITRUST Compliance
Expert guidance to help ensure your cloud environment meets strict health care regulations, safeguarding patient data.

Seamless Migration
Smooth transition to cloud environments with zero downtime and minimal business disruption.

Cost Optimization
Strategic cost-saving solutions to optimize cloud usage while maintaining high performance.

Ongoing Support
24/7 monitoring, infrastructure management, and troubleshooting by health care IT experts.

Customer Impact

Our Cloud Architecture Services have enabled health care startups and established organizations to rapidly scale operations, reduce costs, and achieve compliance with industry standards. By leveraging our expertise, numerous companies have delivered solutions faster, with enhanced security, positioning themselves for long-term success in the health care market.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Comprehensive documentation and knowledge transfer** of cloud architecture, workflows, and processes to empower internal teams and ensure long-term self-sufficiency.

- **Cost optimization and scalability planning** to efficiently manage cloud expenses and dynamically scale resources based on demand, helping to ensure cost-effectiveness without sacrificing performance or availability.

Get Started

Let us help you build secure, scalable cloud solutions that meet health care's unique needs.
Email **technologyservices@upmc.edu** to connect with our experts today!

Product Acceleration Services

Success in the health care industry requires a strategic approach that involves targeting the right market, addressing a significant problem, and delivering a high-quality product. UPMC Enterprises understands the complexities and regulations of the health care sector and offers a range of services to aid in your success.

Our **Technical Advisory Services** offer expert guidance in navigating the intricacies of the health care industry, helping **ensure that your product meets the necessary standards and regulations**.

Summary

We provide recommendations and plans to help you accelerate your product's acceptance, growth, stability, scalability, and more. Service offerings include:

- Product Design
- Technical Advisory
- Health System IT Standards & Compliance

With our **product design expertise**, we help you create solutions that are highly adaptable, scalable, high-performing, secure, and cost-effective.

At UPMC Enterprises, we understand the challenges of maneuvering within a large health care system. Our multidisciplinary team has an in-depth understanding of the interconnected landscape of clinical settings and IT infrastructure. We're here to provide the **guidance in standards and compliance** and support your team needs to navigate this intricate ecosystem with ease.

Our comprehensive suite of services equips you to successfully **navigate the complexities of the health care landscape** and achieve your objectives in this highly regulated industry.

By partnering with UPMC Enterprises, you gain access to our extensive network of experts who can provide valuable product acceleration insights and guidance.

Product Design

Elevate Your Ideas into Market-Leading Products

By leveraging UPMC Enterprises' expert product designers, you gain a partner dedicated to evolving your idea into a market-leading product. From initial design and user research to audits and refinements, we help ensure your offering meets your user needs and stays ahead of the competition.

Service Highlights

User Experience (UX) Research
Gain deep insights into user needs, workflows, and pain points to help ensure your product resonates and performs well. We help reduce uncertainty and enhance the quality of your product.

User Experience (UX) Audits
Conduct comprehensive audits to identify and address usability issues, improving the overall user journey and increasing product adoption and value.

Wireframes & Visualizations
Develop and validate essential features with initial wireframes and visualizations, focusing on achieving and refining business goals.

User Interface (UI) Design
Evolve your wireframes into sophisticated visual designs which enhance user interaction and satisfaction.

Customer Impact

A company partnered with UPMC Enterprises to develop a physician engagement application. With UPMC Enterprises' Product Design Support, it swiftly created and tested a prototype integrated with various EHR systems.

The prototype guided physicians at the point of care, helping them identify and document known or suspected gaps in HCC codes, improving coding accuracy and reimbursement outcomes. The prototype's success led to a formal integration into the company's product offering, establishing it as a leader in physician engagement, HCC coding, and reimbursement.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **UX audit and UI redesign**, complete with a style guide, to enhance the product and strengthen its appeal.

- **Discovery and user research**, including a detailed report articulating inefficiencies and workflow improvement opportunities.

Get Started

Whether you're starting with a concept or looking to refine an existing product, we are here to support every stage of your journey. Email **technologyservices@upmc.edu** to connect with our experts today!

Technical Advisory

Empower Your Business with Expert Health Care Tech Solutions

With a deep understanding of health care technology development, UPMC Enterprises can help reduce time-to-market by identifying technical risks, offering actionable recommendations, and providing expert guidance on building secure, performant systems. Our team supports you from idea inception to implementation, helping you navigate the complexities of health care tech.

Service Highlights

Technical Feasibility Assessment
A detailed evaluation of business goals, technical requirements, risks, and resource needs.

Technology Strategy Development
Create a clear, actionable strategy aligning with your business objectives.

Technology Implementation
Expert recommendations for integrating and deploying technology solutions.

Risk Assessment & Governance Planning
Identify potential risks, establish governance frameworks, and address HITRUST-specific security and privacy controls to maintain compliance.

Architectural Design
Develop robust architectures that support your technology needs and growth aspirations.

Customer Impact

UPMC Enterprises provided advisory services to a growing portfolio company looking to optimize integration of its application to a leading EMR system.

Through an exhaustive analysis of the client's workflow, we proposed a solution that leveraged industry-standard patterns and practices, offering substantial reusability across various health systems. The client team expressed immense satisfaction with the recommended solution, describing it as, "Spot on — very detailed and easy to follow."

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Operational efficiency and workflow optimization** for process improvements and automation opportunities, aiming to streamline workflows, and reduce administrative burdens.

- **Stakeholder education and executive reporting** summarizing strategic initiatives, technology performance, and compliance standing, helping ensure alignment with organizational goals.

Get Started

Partner with UPMC Enterprises to harness the power of technology and drive your business forward. Email **technologyservices@upmc.edu** to connect with our experts today!

Health System IT Standards & Compliance

Navigate Health System IT Compliance Standards with Confidence

A health system's rigorous IT compliance standards can overwhelm vendors and partners. UPMC Enterprises' Technology Services team simplifies this process, providing expert guidance to help you meet the necessary requirements and accelerate onboarding. Our hands-on support reduces the typical compliance timeline from 90+ days to less than 30 days.

Service Highlights

Evaluation
Assess preparedness for a health system's IT compliance standards.

Recommendations
Tailored advice to improve compliance and infrastructure alignment.

Preparation
Assistance with submitting paperwork and preparing for security and architectural reviews.

Remediation
Support with resolving any compliance gaps to meet a health system's standards.

Advisory Services
Continuous guidance throughout the entire process.

Customer Impact

When faced with the challenge of navigating UPMC's complex IT compliance requirements, multiple organizations have turned to our team for expert support.

We provided comprehensive assistance to streamline their path through the highly matrixed organization's process. With our guidance, these organizations successfully submitted all required paperwork and delivered compliance presentations, ensuring a seamless submission through UPMC's internal system.

Customize Your Deliverables

We tailor deliverables to match your specific requirements.

Past deliverables include:

- **Documentation toolkit** development and templates, such as policies, procedures, and evidence of compliance efforts, to meet auditing needs and regulatory obligations.

- **Gap Analysis** of your current IT and security practices against health care standards, identifying compliance gaps and providing a prioritized action plan for remediation.

Get Started

Our efforts significantly expedite organizations through the compliance process.
Email **technologyservices@upmc.edu** to connect with our experts today!

About
UPMC Enterprises

UPMC Enterprises is the innovation, commercialization, and venture capital arm of UPMC, a $28 billion health care provider and insurer based in Pittsburgh, PA. To deliver on our mission to transform ideas into thriving businesses and Life Changing Medicine, we leverage the clinical acumen of thousands of UPMC physicians and rely on payer perspectives from the UPMC Health Plan with more than four million members.

These relationships and resources allow us to monitor emerging trends in health care to identify, support, and commercialize scientific breakthroughs that translate into significant improvements in medical care and technology.

UPMC Enterprises Technology Services

UPMC Enterprises Technology Services offers a comprehensive suite of services to help your business solve problems, create innovative solutions, and deliver outcomes. We work closely with organizations to manage and accelerate their technology efforts by leveraging our knowledge and experience to expedite and optimize projects — while simultaneously reducing both their risk and cost. We support all stages of a health care technology venture's life cycle with strategic, implementation, and operational support services.

Focusing our efforts in two key areas, Digital Solutions and Translational Sciences, we invest financial and intellectual capital into developing solutions that benefit the entire health care industry. We have a diverse portfolio, supporting both early- and growth-stage companies with a wealth of expertise from across our health system. At UPMC Enterprises, we provide strategic, technical, and financial insights to build innovative products and launch novel technologies that solve health care's biggest challenges.

We support companies at all stages of the venture life cycle with a broad roster of services.

Our target audience

Experienced entrepreneurs with an idea looking to start a new venture.

Late-stage companies in need of targeted skill augmentation.

Early-stage companies attempting to further develop a business and product strategy.

Venture organizations seeking value-add investment partners.

Technical and Business Expertise

Gain immediate access to a network of highly skilled subject matter experts (SMEs), deeply knowledgeable in health care technology and state-of-the-art engineering practices. Our staff has years of experience supporting UPMC and has extensive industry knowledge. Our services span project management, data engineering, solutions architecture, product design, product road mapping, security, risk management, and cloud infrastructure.

UPMC Enterprises offers access to the "living lab" that is the broader UPMC Health System, comprised of more than 3,700 physicians. We draw upon this network of professionals who can help solve the unique problems of your organization. UPMC Enterprises possesses the institutional knowledge to help navigate health care's complex technical and business environments.

A Trusted Partner

As customer needs and market forces shift, we can scale up our services rapidly to accelerate your project delivery and reduce time-to-market. Our services are flexible and designed to help companies pursue their strategic objectives while maintaining a lean operation. We work closely with UPMC portfolio companies, investment partners, and affiliates. UPMC Enterprises understands the unique needs of your organization and are dedicated to helping you reach your goals.

Technology Services are structured to support the most important aspects of your project — from inception and oversight to implementation and management.

Leader in Data and Analytics

By partnering with UPMC Enterprises, you gain access to full suite of services and a vast de-identified secure data that will help you accelerate your clinical trials, academic research, and AI development.

Our team of data engineers and analysts are here to support you in every stage of your research through the Ahavi™ data platform and the exploratory data and outcome analysis capabilities.

Research Catalyst

UPMC Enterprises is here to help your organization validate and expand your research.

Go further, faster by leveraging Ahavi™ services and our experts who can navigate the intricacies and complexities of clinical trials, research compliance and institution processes.

UPMC Enterprises is dedicated to facilitating your study design, iterating on your trial protocol, and garnering insights from our real-world data.

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