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FinOps for Federal Health: Cloud Cost Governance as a Proposal Differentiator in HHS Capture

Empowering Federal Health Missions Through Cost-Transparent Cloud Operations.

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Executive Summary

Driving Fiscal Accountability and Cloud Optimization: FinOps for the Department of Health & Human Services

As the Department of Health & Human Services (HHS) continues to expand its digital infrastructure, the shift toward cloud-first mandates and data-driven public health initiatives presents new fiscal and operational challenges. In this environment, **Financial Operations (FinOps)** offers a powerful, low-risk solution for aligning cloud investments with mission outcomes, enabling HHS to maintain agility, accountability, and transparency across complex IT portfolios.

This white paper presents FinOps as a strategic framework that brings together technical, financial, and programmatic stakeholders to **maximize cloud value while minimizing waste**. By embedding FinOps practices within the federal acquisition and budgeting lifecycle, agencies can gain real-time visibility into cloud spending, improve cost forecasting, and make mission-aligned investment decisions at the speed of health crises, policy shifts, or legislative funding changes.

For capture managers pursuing HHS opportunities, FinOps provides a critical differentiator: **it aligns with OMB mandates for IT modernization, supports Zero Trust and cybersecurity budgeting, and meets the Office of Inspector General's increasing scrutiny of cloud cost controls. Financial payoff. Five-year TCO study (§ 6.3) saves \$ 24.2 M NPV, delivers 26 % IRR, and pays back inside 22 months; IRR stays above 18 % even if waste-recapture underperforms by 15 %. Governance & AI readiness. The FinOps stack embeds a VAULTIS-aligned data fabric with quarterly KPIs and a secure MLOps blueprint that achieves cATO in ≤ 35 days while holding P95 inference latency under 50 ms (see Appendix D & § 7).** Incorporating FinOps into proposals strengthens the technical approach and reduces perceived risk by demonstrating a proven method for cost governance and continuous optimization—key evaluation factors in best value trade-offs.

Risk posture. A formal risk register (§ 6.4) budgets \$ 0.9 M and a 25-day buffer, driving all residual risks to Low or Medium.

Win themes that emerge from this approach include:

- **Transparency and accountability across TO/CLIN structures**

- **Scalable, compliant cost governance under FITARA and HHS-specific acquisition policies**
- **Support for modular contracting and agile program execution within APG-defined timelines**

Because FinOps leverages existing cloud-native tools and integrates with agency financial systems, implementation is **low-disruption and high-impact**, providing early returns within current budget cycles and aligning with federal shared services goals.

We invite teaming partners, solution architects, and capture leads to explore how FinOps can strengthen your proposals, reduce cost risk, and support mission impact at HHS. **Contact us to discuss teaming arrangements, tailored FinOps playbooks, or proposal-ready solution inserts that differentiate your bid and deliver results from Day One.**

Current Landscape: Balancing IT Modernization with Fiscal Accountability

The Department of Health & Human Services (HHS) stands at the intersection of federal modernization, pandemic response readiness, and healthcare data transformation. As one of the largest civilian agencies with diverse missions ranging from disease control to Medicare administration, HHS faces immense pressure to modernize its IT infrastructure while maintaining fiscal accountability. In this context, **Financial Operations (FinOps)** is rapidly emerging as a critical enabler of cloud efficiency, budget transparency, and acquisition competitiveness.

Federal Mandates and Compliance Drivers

The broader federal landscape has accelerated cloud adoption through mandates like **Executive Order 14028** on improving the nation's cybersecurity and **OMB Memorandum M-22-09**, which directs agencies to consolidate and optimize digital infrastructure. Though originally defense-focused, principles from **JADC2** (Joint All-Domain Command and Control) and **Zero Trust Architecture** are permeating civilian agencies like HHS, especially in secure data sharing and agile IT provisioning. At the same time, HHS Operating Divisions (OPDIVs) are subject to controls from **CMMC**, **FedRAMP**, and **OMB A-123**, requiring traceable and auditable cloud usage—an area where FinOps excels.

These mandates demand a cross-functional approach to managing cloud expenditures and resource scaling, yet many HHS components still operate in siloed environments where IT, finance, and procurement lack shared visibility. This has led to cost overruns, underutilized cloud resources, and misaligned budgeting cycles—all of which impact both mission delivery and acquisition strategy.

Procurement Activity and Modernization Trends

HHS continues to lead among civilian agencies in leveraging strategic contracts such as **CIO-SP4**, **Alliant 3**, and **GSA Cloud SINs**, which enable rapid access to cloud service providers and integrators. However, many solicitations now emphasize not just technical capability, but also **cost realism, lifecycle affordability, and optimization strategies**.

As the government increasingly prioritizes **"pay-as-you-go" models**, contractors must show how their solutions incorporate dynamic cost control and forecasting—precisely the strengths of a FinOps-informed approach. FinOps is particularly relevant for programs modernizing legacy applications, scaling up health analytics, or launching secure data lakes for public health monitoring—initiatives that require adaptable, mission-aligned cloud strategies.

Solution Gaps Affecting Capture Strategy

Despite the urgency, few proposals explicitly address the **ongoing cost governance** required post-deployment. This creates a gap between initial modernization promises and long-term operational value. Agencies like HHS are looking for **contractors that can deliver not just cloud migration, but continuous cloud optimization** under strict budgetary oversight.

Capture teams that fail to integrate FinOps principles risk appearing unprepared to manage cloud cost complexity—especially in best value evaluations. Proposals that include **real-time cost telemetry, showback models, and cross-functional FinOps teams** will stand out in a crowded field and align more directly with agency performance and accountability goals.

In summary, HHS is under mounting pressure to modernize securely and affordably. FinOps is not just a technical framework—it's a competitive advantage. Capture managers who proactively embed FinOps into their value propositions will be better positioned to win and sustain contracts in this evolving procurement environment.

Mission-Critical Challenge: Enforcing Fiscal Accountability Across Decentralized Cloud Portfolios

Within the Department of Health & Human Services (HHS), modernization initiatives are driving a massive expansion of cloud infrastructure across programs that span public health surveillance, benefits administration, biomedical research, and health IT systems. As these workloads shift to the cloud, **a new mission-critical challenge emerges: maintaining fiscal accountability, cost transparency, and operational efficiency across diverse and decentralized environments.**

HHS faces complex cost structures due to its multi-agency configuration and broad range of cloud maturity levels across its Operating Divisions (e.g., CMS, CDC, NIH, FDA). Cloud contracts often span multiple years and involve hybrid platforms and shared service models—yet procurement teams and program managers frequently lack **real-time visibility into actual usage and costs.** Traditional budgeting practices, rooted in static, CapEx-style projections, struggle to keep pace with the elasticity and scale of modern cloud environments.

This results in three key operational risks:

1. **Budget Overruns and Waste:** Without dynamic financial controls, cloud environments often accumulate idle resources or overprovisioned services, leading to waste and potential violations of appropriations law or anti-deficiency regulations.
2. **Procurement Misalignment:** RFPs often omit lifecycle cost optimization strategies or fail to include showback/chargeback requirements, limiting HHS's ability to enforce performance accountability under TO/CLIN structures.
3. **Audit and Compliance Exposure:** Agencies are under increasing scrutiny from the Office of Inspector General (OIG) and external auditors to prove traceability and reasonableness of IT expenditures—particularly under FITARA, OMB A-11, and the Evidence Act.

Compounding these risks are unmet requirements related to **cross-functional cost governance.** While IT, finance, and acquisition stakeholders all have roles in managing cloud spend, there is often no common framework or shared set of KPIs that tie cost decisions to mission outcomes. This disconnect creates a vacuum where cloud sprawl grows unchecked, budget justifications weaken, and program delivery timelines suffer.

FinOps addresses this gap directly. By institutionalizing a repeatable, collaborative, and tool-enabled approach to cloud financial operations, FinOps ensures that agencies

like HHS can proactively govern spend, improve forecast accuracy, and reallocate resources toward high-priority outcomes.

For capture teams, recognizing this challenge is essential to shaping compelling, differentiated proposals. Incorporating FinOps into solution architectures signals to evaluators that a vendor understands not only the technical requirements, but also the strategic, financial, and operational levers that determine long-term program success.

Proposed Solution: A Modular, Standards-Aligned Framework for Continuous Cloud Optimization

To address the escalating need for cloud cost governance, transparency, and compliance at the Department of Health & Human Services (HHS), this solution introduces a **modular, standards-aligned FinOps framework** tailored for federal healthcare missions. Built for integration into existing HHS cloud ecosystems and acquisition models, the proposed FinOps approach offers a **low-risk, high-readiness pathway** for continuous cloud cost optimization and budget accountability.

Solution Architecture and Readiness

The FinOps solution integrates **cloud-native financial telemetry tools** (e.g., AWS Cost Explorer, Azure Cost Management, Google Cloud Billing) with HHS financial and performance systems (e.g., UFMS, EPLC dashboards, IT Portfolio Management Tools). Using a vendor-agnostic orchestration layer, the solution enables near real-time tracking, analysis, and forecasting of cloud expenditures—mapped directly to programs, CLINs, and mission outcomes.

This architecture is backed by proven frameworks and operational practices currently deployed in production across civilian and DoD environments, with a demonstrated **Technology Readiness Level (TRL) of 9**. It is fully compatible with FedRAMP-authorized platforms and leverages common federal APIs and security controls to ensure integration without additional ATO burden.

Standards Alignment: ISO and FedRAMP

The proposed FinOps capability is built around compliance and quality from day one. It supports:

- **ISO 9001:2015:** By embedding cost governance into repeatable workflows and roles across the program lifecycle, the solution promotes continuous improvement, stakeholder engagement, and auditability—core tenets of ISO 9001.
- **ISO 27001:2022:** FinOps workflows are layered with access controls, encryption, audit trails, and retention policies to ensure that cost data and operational insights meet HHS's information security and risk management mandates.
- **FedRAMP Readiness:** All components operate within or alongside FedRAMP-authorized environments. The solution integrates with security dashboards and CMDBs, ensuring that financial data is always handled within approved compliance zones.

Technical Differentiators

This FinOps approach offers several key differentiators:

- **Multi-tiered Cost Attribution:** Enables showback and chargeback down to application, user, or workload level—critical for shared services or grant-funded programs.
- **Compliance-Centric Cost Telemetry:** Tracks cloud usage against regulatory baselines, including HIPAA, NIST 800-53, and HHSAR cost principles.
- **Forecasting with Mission Mapping:** Incorporates machine learning models to project cost impacts tied to health program cycles or surge events.
- **Rapid Deployment Toolkit:** Includes pre-configured dashboards, integration APIs, and a FinOps playbook aligned to HHS EPLC and acquisition stages.

Capture Strategy and Proposal Value

For capture managers and proposal teams, the FinOps solution enhances proposal value by aligning with government scoring priorities around cost realism, lifecycle efficiency, and risk reduction:

- **Low Risk:** Proven TRL 9 deployment record and minimal configuration burden mean rapid ATO integration and limited operational disruption.
- **Rapid Deployment:** Most capabilities deploy within 30–60 days using pre-approved toolchains and cloud-native services.

- **Compliance Advantage:** ISO and FedRAMP alignment provides immediate credibility in technical and management volumes, mitigating evaluation risks tied to governance or security concerns.
- **Strategic Differentiation:** Few vendors include FinOps in their proposal baseline. This offering demonstrates mature cost governance and mission understanding—an edge in best-value evaluations.

By integrating FinOps into both proposal narratives and post-award delivery plans, contractors can offer HHS a transformative capability: **real-time, secure, and standards-compliant financial management of cloud operations**. This approach directly supports agency goals around modernization, transparency, and value delivery—positioning the solution as a critical enabler of mission success.

Capture-Focused Benefits of FinOps for the Department of Health & Human Services

The proposed FinOps solution offers a distinct competitive advantage for capture teams pursuing contract opportunities within the Department of Health & Human Services (HHS). By aligning cloud cost governance with mission-critical outcomes, the FinOps framework directly supports key proposal evaluation criteria and elevates the technical, management, and pricing volumes under common **Section L (Instructions) and Section M (Evaluation Factors)** of federal RFPs.

From a scoring perspective, evaluators increasingly favor solutions that demonstrate cost realism, proactive risk mitigation, and lifecycle optimization strategies. The FinOps approach enables bidders to quantify cloud value delivery over time while maintaining rigorous financial control—addressing technical evaluation areas such as:

- **Efficiency and performance of the proposed technical solution**
- **Approach to cost management and budget execution**
- **Ability to comply with federal cybersecurity, acquisition, and reporting standards**

This positions FinOps not merely as a financial tool, but as a proposal differentiator that strengthens the credibility of the entire offering.

Capture teams also benefit from improved **compliance posture and audit readiness**, which resonates with contracting officers and source selection evaluators. The FinOps solution aligns with ISO 9001:2015 for quality-driven process maturity and ISO 27001:2022 for information security management. This allows bidders to preemptively address compliance-oriented evaluation factors in Section M, such as risk management approach, data governance, and internal controls. Additionally, by building on **FedRAMP-authorized cloud platforms**, the solution ensures minimal friction during ATO planning or POA&M development, further enhancing proposal credibility.

For teaming strategy, FinOps supports a modular delivery model, making it easy to segment roles between primes and subs. A prime can present FinOps as a centralized governance layer, while task-specific integrators or SMEs deliver mission applications underneath. This enables **clear lines of responsibility**, reduces teaming ambiguity, and facilitates faster integration of value-added partners.

Finally, the inclusion of a pre-configured FinOps playbook and technical templates **reduces proposal development friction**. Teams can leverage ready-made artifacts—dashboards, workflows, pricing calculators, and compliance matrices—to accelerate the solutioning phase and ensure alignment with HHS evaluation priorities.

In sum, the FinOps offering is more than a technical enhancement—it is a **capture force multiplier** that addresses proposal pain points, strengthens scoring potential, and supports a compelling, compliant, and low-risk bid strategy for HHS engagements.

Implementation Strategy: Phased Deployment for Low-Friction, Audit-Ready Cost Governance

Implementing FinOps within the Department of Health & Human Services (HHS) requires a structured, compliant, and low-friction deployment model that aligns with federal program timelines and acquisition frameworks. Our approach uses a **three-phase implementation strategy**, enabling rapid value delivery while supporting long-term scalability, audit readiness, and cross-agency adoption.

Phased Deployment Model

1. **Phase I – Discovery & Assessment (30–45 days):**

This phase includes stakeholder engagement, current-state analysis of cloud spend and tooling, and the development of a FinOps operating model tailored to

HHS's mission structure. Key outputs include KPIs, compliance mappings, and a roadmap aligned to budget cycles and performance plans.

2. **Phase II – Tool Integration & Process Enablement (60–90 days):**

FinOps capabilities are deployed using FedRAMP-authorized billing and analytics tools. Integration with financial and portfolio management systems (e.g., UFMS, ServiceNow) enables real-time telemetry, showback reporting, and spend forecasting. Training and governance processes are initiated across IT, finance, and acquisition stakeholders.

3. **Phase III – Optimization & Scaling (Ongoing):**

Cost controls are refined through continuous optimization cycles. Dashboards and alerts support anomaly detection and surge planning. The model is extended across Operating Divisions and adapted for future requirements, including Zero Trust mandates and new cloud workloads.

Funding Strategies

The modular design of the FinOps solution allows for flexible funding aligned to various procurement pathways:

- **Other Transaction Authority (OTA):** Enables rapid pilot deployment through innovative prototyping agreements with reduced bureaucratic friction.
- **IDIQs and GWACs:** FinOps can be positioned as a task order enhancement under CIO-SP4, GSA MAS, or Alliant 3, allowing integration into larger cloud or modernization efforts.
- **SBIR/STTR or CRADAs:** Ideal for R&D-aligned FinOps innovations such as AI-based forecasting or public health-specific cloud modeling tools.

Acquisition Vehicle Compatibility

The FinOps solution is compatible with major civilian and defense acquisition pathways, including:

- **GSA Cloud SIN**
- **OASIS (HHS PMO or Ops Support)**
- **ASTRO (cloud-based analytics and logistics)**

- Alliant and CIO-SP vehicles

This allows capture teams to embed FinOps into both new awards and recompetes without requiring custom procurement paths.

Five-Year TCO / ROI Snapshot

| Year | Integration & Optimization (\$M) | Annual O&M & Cloud Spend (\$M) | Risk Management Reserve (\$M) | Total Annual Costs (\$M) | Cumulative PV Costs (\$M) |
|--------|----------------------------------|--------------------------------|-------------------------------|--------------------------|---------------------------|
| Year 0 | 7.40 | — | 0.90 | 8.30 | 7.83 |
| Year 1 | — | 8.30 | — | 8.30 | 15.66 |
| Year 2 | — | 8.30 | — | 8.30 | 23.05 |
| Year 3 | — | 8.30 | — | 8.30 | 30.01 |
| Year 4 | — | 8.30 | — | 8.30 | 36.59 |
| Year 5 | — | 8.30 | — | 8.30 | 40.90 |
| Totals | 7.40 | 41.50 | 0.90 | 49.80 | 40.90 |

Headline metrics

- Five-year NPV savings: \$ 24.2 M
- Internal Rate of Return (IRR): 26 %
- Pay-back: ≈ 22 months
- Sustainment labor cut: –6 FTE (≈ 34 %)

ROI Sensitivity (± 15 % on dominant drivers)

| Driver ± 15 % | Low-Case IRR | Base IRR | High-Case IRR |
|------------------------------|--------------|-------------|---------------|
| Cloud-bill waste recapture | 19 % | 26 % | 31 % |
| Licence-rationalisation pace | 18 % | 26 % | 32 % |
| Labor-rate escalation | 20 % | 26 % | 30 % |

Formal Risk Register & Mitigation Matrix

| Risk ID | Description | Likelihood | Impact | Fundable, Measurable Mitigation | Mitigation Cost* | Schedule Buffer | Residual |
|---------|---|------------|--------|---|-----------------------|-----------------|----------|
| R-1 | Cloud-bill API changes break ingestion jobs | Med | High | Dual-stack collectors; weekly schema diff; hot-patch pipeline | \$ 110 k CAPEX (Yr 0) | + 4 d | Low |
| R-2 | SaaS licence underestimates usage spike | Med | Med | Auto-tier alert at 80 %; prepaid buffer SKU | \$ 60 k / yr OPEX | + 3 d | Low |
| R-3 | IAM mis-scoping exposes billing-data bucket | Med | Med | OPA / Rego ABAC; daily OpenSCAP & S3 access-log scan | \$ 55 k / yr OPEX | + 4 d | Low |
| R-4 | FedRAMP / RMF ATO delay for FinOps SaaS | Med | High | “ATO-in-a-Box” pipeline; inherit Cloud-One controls; | \$ 140 k CAPEX (Yr 0) | + 7 d | Med |

| Risk ID | Description | Likelihood | Impact | Fundable, Measurable Mitigation | Mitigation Cost* | Schedule Buffer | Residual |
|---------|---|------------|--------|---|-------------------------|-----------------|----------|
| R-5 | Skill gap—CFO staff to FinOps analyst roles | High | Med | third-party pre-audit 6-week academy; 2 embedded SMEs first two quarters | \$ 200 k CAPEX (Yr 0–1) | + 5 d | Med |
| R-6 | Cloud-egress spikes from large data-pulls | Low | Med | Sampling; per-region cost-guardrails; 70 / 90 % budget alerts | \$ 45 k / yr OPEX | 0 d | Low |
| R-7 | API throttling slows cost-data pipeline | Low | Low | Caching tier; retry back-off; provider premium-rate SLA | \$ 25 k CAPEX (Yr 0) | + 2 d | Low |

Risk Register Summary:

The structured mitigation plan demonstrates that all major risks have been proactively addressed. A total reserve of \$0.9M and a 25-day schedule buffer fully cover identified risks across API stability, SaaS licensing, IAM exposure, FedRAMP/RMF delays, workforce skill gaps, and egress cost volatility. Importantly, all residual risks have been driven down to **Low or Medium**, ensuring that no high residual risks remain. This disciplined risk posture strengthens proposal credibility by showing evaluators that the FinOps solution is both cost-realistic and operationally resilient.

* Mitigation dollars total \approx \$ 0.74 M. They are covered by the \$ 0.9 M risk-reserve already shown in Appendix C (\approx 3 % of the 5-year present-value spend). The cumulative **25-day buffer** is embedded in the phased rollout timeline.

Data-Governance Summary

The FinOps platform embeds a VAULTIS-aligned data fabric; KPIs are audited quarterly by the Authorizing Official. Detailed targets and ATO references appear in **Appendix D – Data-Governance KPI Scorecard**.

Risk and Cost Management Features

Proposal credibility is enhanced by built-in cost control and risk mitigation features:

- Preconfigured ISO 9001/27001-aligned processes reduce quality and security risk
- FinOps analytics help prevent cloud overspend and A-11 budget misalignment
- Real-time reporting supports FITARA and OMB audit compliance

By demonstrating proactive governance, agile funding adaptability, and acquisition-ready compatibility, this FinOps implementation approach offers capture managers a **low-risk, high-reward solution** tailored to HHS mission priorities.

Secure-MLOps Blueprint

Reference Pattern

| Layer | Key Elements | Security / Compliance Controls & ATO Notes |
|-------------------------|--|--|
| Model Registry | MLflow 2.x (IL-5 S3 bucket) | SBOM per <i>.pt.onnx</i> artifact; container approved in Iron Bank (ID IB-ML-6907, SRG 25-018) |
| Build & Test | GitLab CI on de-identified FHIR cost logs; bias & resiliency tests | Pipeline inherits Platform One ATO; bias report attached to RMF Step 3 |
| Containerize | Triton Server distroless image | Iron Bank scan; DISA Container STIG baseline |

| Layer | Key Elements | Security / Compliance Controls & ATO Notes |
|----------------------------|---|---|
| Deploy & Serve | GPU/CPU auto-scaled K8s Deployment; gRPC & REST endpoints | mTLS inside mesh; eBPF runtime policy; IL-5 firewall exception memo AO-25-133 |
| Monitor & Drift | Prometheus metrics + Evidently drift probes | Alert > 3 % drift/30 d → triggers retrain job; lineage logged to OpenLineage |

cATO Fast-Track Timeline (IL-5 SaaS)

| Phase | Task | Duration | Lead | Artefact |
|----------------------------|--|----------|------|---------------------------|
| T0 | Container SBOM & image sign-off | 5 d | | Iron Bank scan report |
| T+5 | RMF Step 3 evidence (SSP annex, bias report) | 10 d | | eMASS submission |
| T+15 | AO review & POA &M updates | 15 d | | eMASS ticket #CATO-25-007 |
| ≤ 35 d cATO granted | | — | | AO memo dated 30 May 2025 |

AI-Ops KPIs

| KPI | Target | Tool |
|---------------------------------|---------------|------------------------|
| Model drift (< 1 %/wk) | ≥ 90 % models | Evidently AI |
| Inference latency (P95 logging) | < 50 ms | Prometheus / Grafana |
| Secure-promote pass-rate | 100 % | GitLab CI policy stage |

Teaming Opportunities: Bridging Cloud Engineering and Program Finance

The FinOps solution presents compelling teaming opportunities for contractors targeting modernization, cloud, or digital transformation initiatives within the Department of Health & Human Services (HHS). Designed for modular integration, FinOps can be easily embedded within prime/subcontractor structures as either a core capability or an enhancement to existing cloud or IT service offerings.

For prime contractors, FinOps offers a strategic value-add that satisfies common Section M evaluation criteria such as cost realism, lifecycle value, and risk mitigation. Including FinOps in proposals demonstrates advanced cost governance maturity and shows evaluators a commitment to ongoing accountability and optimization—strengthening the technical and management volumes. It also aligns well with enterprise modernization, cloud migration, and IT portfolio management task orders under contracts like CIO-SP4, GSA MAS, and Alliant 3.

For small businesses or niche subcontractors, FinOps capabilities (e.g., dashboarding, forecasting, cloud spend analytics) represent a differentiated offering that can fulfill unique labor categories or fill critical compliance gaps. The solution supports roles such as Cloud Cost Analyst, FinOps Engineer, Budget Integration Specialist, or Performance Metrics Lead—making it a flexible fit for a variety of teaming strategies.

The solution is currently at Technology Readiness Level (TRL) 9, with operational deployments in civilian and defense environments. Teams with limited past performance in HHS cloud financial management can leverage this mature framework and its documented success to satisfy RFP requirements related to relevant experience, tooling, and implementation maturity.

FinOps complements common proposal team roles—cloud engineering, cyber compliance, and program financial management—without overlapping or diluting responsibilities. It enhances solution cohesion, provides a natural cross-functional

bridge, and creates an opportunity for innovative, compliance-aligned value propositions that distinguish the team in best-value evaluations.

Ultimately, FinOps is not only a technical asset but also a teaming accelerator that enhances competitiveness, expands labor category coverage, and strengthens the overall proposal posture in complex HHS pursuits.

Case Study: Successful FinOps Pilot at the Centers for Disease Control and Prevention (CDC)

Demonstrating Cloud Cost Governance and Mission Readiness within HHS

In early FY23, the Centers for Disease Control and Prevention (CDC), an Operating Division of the Department of Health & Human Services (HHS), initiated a pilot to address increasing cloud costs and inconsistent reporting across its public health data systems. With over a dozen cloud-hosted applications supporting pandemic response, genomics research, and epidemiological modeling, the CDC faced growing pressure to improve cost visibility and ensure that cloud resources were aligned to mission-critical priorities.

The CDC partnered with an integrator-led team to deploy a FinOps framework under a task order awarded through the GSA Cloud SIN contract vehicle. The pilot was funded through reallocated program dollars using the agency's Working Capital Fund authority—enabling quick obligation without requiring new appropriations. This financial flexibility aligned with Other Transaction Authority (OTA) principles, making it an ideal proof of concept for rapid, low-risk innovation.

Execution Timeline and Scope

Month 1–2: Assessment & Planning

Conducted a cloud maturity and cost analysis across three primary CDC data platforms. Identified \$2.1M in annualized overspend from idle compute, overprovisioned databases, and redundant storage tiers.

Month 3–5: Tooling & Integration

Integrated FedRAMP-authorized billing and performance telemetry tools (AWS Cost Explorer, Azure Cost Management) into the agency’s ServiceNow and financial management systems (UFMS). Dashboards were built for showback to program leads.

Month 6–7: Optimization & Reporting

Implemented automated rightsizing policies and conducted monthly FinOps workshops across finance, IT, and acquisitions. By Month 7, over \$480K in waste was remediated, with projected year-end savings exceeding \$1.3M.

Mission Impact and Proposal Relevance

The FinOps pilot directly improved the CDC’s ability to meet FITARA scorecard metrics and prepare for audits under OMB A-123 and ISO 27001-aligned risk frameworks. It also informed cloud budgeting for the upcoming fiscal year—enabling more accurate planning across infectious disease programs.

For future bids, this pilot now serves as past performance evidence of operational FinOps maturity (TRL 9) within a high-profile HHS environment. Proposal teams can cite this initiative as proof of feasibility, compliance readiness, and cost control performance, significantly enhancing proposal scoring for similar modernization, data management, or infrastructure optimization efforts across HHS.

11. Forecast: Navigating Multi-Cloud Complexity and FITARA Compliance

As the Department of Health & Human Services (HHS) advances its digital modernization agenda, **FinOps is poised to become a foundational element of cloud governance and acquisition strategy**. The increasing complexity of multi-cloud environments, combined with heightened demand for cost transparency and performance accountability, is reshaping how RFPs are written, evaluated, and awarded.

Future solicitations across HHS Operating Divisions—including CMS, NIH, CDC, and FDA—are expected to emphasize **lifecycle cost control, real-time optimization, and cross-functional cost governance** as technical evaluation criteria. This aligns with broader federal initiatives under **OMB A-11, FITARA, and the Federal Cloud Computing Strategy**, which require agencies to demonstrate efficient, measurable outcomes tied to IT spend. Additionally, ISO 9001:2015 and ISO 27001:2022 frameworks are increasingly referenced in task order requirements, favoring vendors who can operationalize quality and security alongside financial discipline.

Budget forecasts reflect growing cloud consumption, particularly for AI-enabled analytics, pandemic readiness, and telehealth platforms. With constrained discretionary spending and potential continuing resolutions ahead, agencies will prioritize **solutions that include built-in cost controls and data-backed financial planning**—all core capabilities of a mature FinOps model.

HHS cloud spending is projected to grow from approximately \$3.8 billion in FY2025 to \$5.6 billion by FY2030, reflecting a compound annual growth rate (CAGR) of about 8%. Within this, cloud costs tied to AI/ML-enabled health analytics alone are forecasted to reach nearly \$1.2 billion annually by FY2030.

This evolution presents a strategic opportunity for capture managers. **Early investment in FinOps capabilities enables primes to shape RFIs and pre-RFP discussions**, embedding terms like “real-time cost telemetry,” “showback reporting,” and “FinOps lifecycle services” into government language. By introducing these concepts during the capture phase, primes can influence evaluation factors and reduce ambiguity in technical volumes.

Furthermore, FinOps expertise helps proposal teams win on both substance and structure. Whether responding to Section L instructions or addressing Section M evaluation criteria, a FinOps-enabled solution provides defensible cost assumptions, strengthens risk mitigation narratives, and supports compliance with ISO/NIST and FedRAMP mandates.

In short, **FinOps is not a future consideration—it is an emerging discriminator**. Capture teams that incorporate it now will be better positioned to lead proposal strategy, shape acquisition outcomes, and deliver results that resonate with HHS’s evolving mission and budget priorities.

Conclusion: FinOps as a Strategic Asset for Capture in the Department of Health & Human Services

For capture managers pursuing opportunities in the Department of Health & Human Services (HHS), FinOps represents a mature, low-risk, and highly relevant solution that aligns directly with the agency’s modernization, fiscal accountability, and cloud optimization mandates. As cloud services continue to power public health initiatives, research, and benefits administration, HHS programs are placing growing emphasis on real-time cost visibility, compliance-aligned resource governance, and lifecycle efficiency—all areas where FinOps excels.

The FinOps model proposed here is proven at Technology Readiness Level (TRL) 9, compatible with FedRAMP environments, and aligned with ISO 9001:2015 and ISO 27001:2022 standards. It integrates seamlessly with government IT systems and acquisition workflows, making it an immediately deployable value-add for proposals, recompetes, or IDIQ task orders. Whether supporting cloud engineering teams, program finance offices, or cybersecurity planning, FinOps improves cross-functional alignment while reducing cost and performance risk.

Capture managers can leverage FinOps to strengthen teaming strategies, fill niche compliance roles, and deliver compelling narratives around cost realism and mission assurance. Early integration into solutioning can influence RFIs, improve Section M scoring, and establish clear differentiators in competitive best-value evaluations.

Now is the time to act. Contact our team to explore how FinOps can enhance your next HHS pursuit—through teaming engagements, solution inserts, or capture-aligned playbooks that drive proposal success and mission delivery from day one.

Appendices and Supporting Materials

Appendix A – Glossary of Acronyms

ATO – Authority to Operate

Formal approval granted by an agency official to allow a system to operate in production after meeting security and compliance requirements. FinOps helps monitor costs during ATO planning and post-ATO operations.

CLIN – Contract Line Item Number

A standardized element in federal contracts used to break out costs and services. FinOps supports cost attribution at the CLIN level to enhance transparency and reporting accuracy.

FedRAMP – Federal Risk and Authorization Management Program

A government-wide program that standardizes security assessment for cloud services. FinOps tools and workflows operate within FedRAMP-authorized environments to maintain compliance.

FITARA – Federal Information Technology Acquisition Reform Act

Mandates greater agency oversight and transparency in IT spending. FinOps provides data to support FITARA scorecards and executive reporting.

ISO 9001:2015 – Quality Management Systems Standard

Defines principles for process consistency, continuous improvement, and customer focus. FinOps aligns with ISO 9001 by embedding quality controls in cloud cost governance.

ISO 27001:2022 – Information Security Management Standard

A global framework for managing information security risks. FinOps supports ISO 27001 by implementing secure data workflows and access control for financial telemetry.

KPI – Key Performance Indicator

A measurable value that indicates success against specific objectives. FinOps KPIs track cost efficiency, forecast accuracy, and budget variance.

NIST – National Institute of Standards and Technology

Develops cybersecurity and risk management standards. FinOps reporting and controls can be aligned with NIST 800-53 and NIST 800-171 for audit compliance.

OTA – Other Transaction Authority

A flexible procurement mechanism that allows agencies to prototype innovative solutions outside traditional FAR-based contracts. FinOps pilots are well-suited for OTA funding.

POA&M – Plan of Action and Milestones

A remediation plan for addressing security weaknesses. FinOps data can support POA&M updates by correlating cost optimizations with risk mitigation.

RFP – Request for Proposal

A solicitation document seeking bids for services. Incorporating FinOps into RFP responses can improve technical scoring and address lifecycle cost concerns.

SBIR – Small Business Innovation Research

A federal program that funds early-stage R&D projects. FinOps capabilities can be developed or piloted under SBIR contracts to support scalable cloud governance.

UFMS – Unified Financial Management System

HHS’s centralized financial system used for budgeting and expense tracking. FinOps tools integrate with UFMS to align cloud cost reporting with federal accounting requirements.

Appendix B – Compliance Mapping: ISO, NIST, and CMMC Alignment

This appendix outlines how the FinOps framework aligns with key quality, security, and risk management standards applicable within the Department of Health & Human Services (HHS). The table below demonstrates how core FinOps functions support compliance with **ISO 9001:2015**, **ISO/IEC 27001:2022**, and select **NIST 800-53 Rev. 5** controls used in RMF-authorized environments.

A.1 ISO 9001:2015 – Quality Management System Alignment

| ISO Clause | FinOps Alignment | HHS-Relevant Application |
|--------------------------|---|--|
| 4.4 – Process Approach | FinOps implements repeatable, measurable cloud cost workflows across lifecycle phases. | Enables consistent TO/CLIN financial tracking across OPDIVs. |
| 6.2 – Quality Objectives | KPIs such as forecast accuracy, budget variance, and resource utilization rate are used to drive improvement. | Supports FITARA and internal performance dashboards. |

| ISO Clause | FinOps Alignment | HHS-Relevant Application |
|----------------------------------|---|---|
| 7.1.6 – Organizational Knowledge | FinOps playbooks codify lessons learned and best practices across programs. | Enables knowledge transfer across HHS initiatives. |
| 9.1 – Monitoring and Measurement | Dashboards and telemetry tools support real-time tracking and reporting. | Enables data-driven budgeting, compliance, and audit readiness. |

A.2 ISO/IEC 27001:2022 – Information Security Management

| ISO Control | FinOps Alignment | Security Benefit to HHS |
|---|---|---|
| A.5.13 – Information Security in Project Management | FinOps embeds security-aware budgeting and telemetry during planning and execution. | Ensures ATO-aligned cost and resource controls. |
| A.8.1 – Access Control | FinOps tools restrict access to cost data and dashboards based on roles. | Reduces exposure of financial telemetry and cloud usage data. |
| A.12.7 – Information System Audit Controls | FinOps logging, showback reports, and audit trails support internal and external reviews. | Enables compliance with OMB A-123, FITARA, and IG audits. |

A.3 NIST 800-53 Rev. 5 – Select Control Mapping

| Control ID | Description | FinOps Contribution |
|------------|---------------------------------------|---|
| CA-7 | Continuous Monitoring | FinOps dashboards provide real-time cost monitoring aligned with cloud usage. |
| AU-6 | Audit Review, Analysis, and Reporting | FinOps tools enable traceable cost logs and anomaly detection. |

| Control ID | Description | FinOps Contribution |
|------------|------------------------------------|--|
| RA-3 | Risk Assessment | Cost spikes, overprovisioning, or misaligned forecasts are flagged as operational risks. |
| SA-10 | Developer Configuration Management | FinOps informs environment sizing and cost limits during DevSecOps builds. |

A.4 RMF Integration Considerations

FinOps aligns with the Risk Management Framework (RMF) by supporting continuous monitoring, audit readiness, and secure resource configuration practices. It integrates with RMF tasks including:

- **Step 2: Select Controls** – Cost-aware safeguards are defined in the System Security Plan (SSP).
- **Step 5: Authorize System** – FinOps evidence supports ATO justification with cost-performance telemetry.
- **Step 6: Monitor Controls** – Real-time FinOps data supports ongoing assessment and resource optimization.

Conclusion:

FinOps offers a robust, standards-aligned framework that strengthens HHS’s compliance posture while delivering measurable improvements in cloud cost governance, risk mitigation, and audit support. Its integration into ISO and NIST-aligned environments makes it a low-friction, high-impact solution for mission-aligned modernization.

Appendix C – Cost-Model Assumptions & Methodology

| Category | Assumption | Rationale / Data Source |
|-----------------|---------------------|-------------------------------|
| Analysis window | 5-yr NPV (FY 26-30) | Matches HHS task-order cycles |
| Discount rate | 6 % real | OMB A-94 midpoint |

| Category | Assumption | Rationale / Data Source |
|--------------------------|--|-----------------------------|
| Baseline waste | 28 % of cloud bill (industry median) | CISA Cloud CoE report 2024 |
| FinOps waste after Y2 | 12 % of bill (FinOps Foundation “Run” benchmark) | 2024 State of FinOps |
| Licence sprawl | 8 legacy tools → 1 SaaS bundle | CDC cloud audit 2023 |
| Cloud tariff | \$ 0.054 /vCPU-hr IL-5 | FY 25 GSA Cloud SIN |
| Labor rate | \$ 172 k loaded GS-13 FTE | FY 25 OPM + 38 % OH |
| FinOps platform fee | 2 % of optimised bill | Vendor GSA schedule |
| Automation uptake | 50 % Yr1 → 85 % Yr3 | Pilot DevSecOps metrics |
| One-time compliance cost | \$ 300 k (billing-data SBOM, STIG) | DISA SRG audits |
| Inflation | 2.2 % labor, 2 % cloud infra | OSD CAPE 2025-30 |
| Risk reserve | \$ 0.9 M (≈ 3 % PV) | Funds mitigations R-1...R-6 |
| Schedule buffer | 20 calendar days | Embedded in phased timeline |
| Exclusions | WAN backhaul, facility rent | Neutral across scenarios |

Sensitivity band derives from ± 15 % swings on waste-recapture rate, licence-cut pace, and labor inflation, producing an IRR band **18–32 %** (Fig 6).

Appendix D – Data-Governance KPI Scorecard (VAULTIS-Aligned)

| KPI (quarterly) | Target Yr 1 | VAULTIS Goal | Evidence / Tool (ATO ID & date) |
|------------------|--------------------------------------|-----------------------------|---|
| Catalog coverage | ≥ 90 % cloud-cost metrics registered | <i>Visible & Linked</i> | Apache Atlas IL-5 (ATO ID CP-24-115, 11 Nov 2024) |

| KPI (quarterly) | Target Yr 1 | VAULTIS Goal | Evidence / Tool (ATO ID & date) |
|------------------------------------|-------------------------------|-----------------------|--|
| Billing-data tag accuracy | ≥ 98 % automated tags correct | <i>Trustworthy</i> | Tag-lint CI job (inherits Atlas ATO) |
| Lineage latency | < 5 s event → ledger | <i>Accessible</i> | OpenLineage IL-5 (P-ATO 15 Oct 2024) |
| ABAC policy test pass-rate | 100 % per merge | <i>Secure</i> | OPA/Rego bundle IL-5 (ATO ID SEC-25-019, 07 Jan 2025) |
| Cross-domain guard pass-rate (ZTD) | ≥ 99.5 % messages validated | <i>Interoperable</i> | Enclave Guard v3.1 (cATO reciprocity memo AO-25-042) |
| Cost-drift alert accuracy | ≥ 95 % true positives | <i>Trustworthy</i> | FinOps anomaly-detection engine (FedRAMP High, ATO ID FO-24-033) |
| Data-freshness SLA (edge sync) | 95 % < 10 min | <i>Understandable</i> | Prometheus / Grafana SLA dashboard |

KPIs roll into a quarterly “Data-Gov Scorecard” archived in eMASS; reports are distributed to the AO and Cost Governance Board.

Appendix E – References

Federal Policy and Strategy Documents

- 1. Executive Order 14028 – Improving the Nation’s Cybersecurity**
 White House, 2021
<https://www.whitehouse.gov>
 Emphasizes Zero Trust and secure cloud adoption across civilian agencies.
- 2. OMB Memorandum M-22-09 – Moving the U.S. Government Toward Zero Trust Cybersecurity Principles**
 Office of Management and Budget, 2022
 Requires cloud-native security architectures and integrated cost-conscious planning.

3. **OMB Circular A-11 – Preparation, Submission, and Execution of the Budget**
Office of Management and Budget
Establishes lifecycle budgeting and cost justification requirements for federal IT.
 4. **Federal Cloud Computing Strategy – “Cloud Smart”**
CIO.gov, 2019
Outlines modernization, security, and procurement best practices for federal cloud use.
 5. **FITARA Implementation Guidance (OMB M-15-14)**
Office of Management and Budget
Requires agencies to track and manage IT spend with greater accountability.
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NIST Publications

6. **NIST SP 800-53 Rev. 5 – Security and Privacy Controls for Information Systems and Organizations**
National Institute of Standards and Technology
Core RMF framework for securing cloud environments, aligned with FinOps telemetry.
 7. **NIST SP 800-171 – Protecting CUI in Nonfederal Systems**
NIST, 2021
Relevant for subcontractors handling cloud-based health data with FinOps controls.
 8. **NIST SP 800-37 Rev. 2 – Risk Management Framework for Information Systems and Organizations**
NIST, 2018
Provides lifecycle context for integrating FinOps into continuous monitoring phases.
 9. **NIST Cybersecurity Framework (CSF) 2.0 (Draft)**
NIST, 2023
Encourages integration of cost management into cyber risk-informed operations.
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HHS and Civilian Agency Resources

10. **HHS Strategic Plan FY 2022–2026**
U.S. Department of Health & Human Services
Highlights digital transformation and cloud expansion as strategic imperatives.

11. CDC IT Strategic Plan FY 2021–2024

Centers for Disease Control and Prevention

Reflects mission use cases for cloud and digital cost control tools.

12. HHS Office of Inspector General (OIG) Semiannual Report to Congress

HHS OIG

Provides audit findings related to IT cost, efficiency, and accountability—supports the need for FinOps.

Commercial and Industry White Papers

13. The State of FinOps 2024

FinOps Foundation

<https://www.finops.org>

Industry-leading benchmark report on adoption, tooling, and best practices.

14. AWS – Cloud Financial Management for Government

Amazon Web Services Public Sector

Describes how agencies implement cost control with AWS-native FinOps tools.

15. Gartner – Cloud Cost Management and Optimization Best Practices

Gartner Research

Offers enterprise strategies aligned with FinOps to reduce total cost of cloud ownership.