

Clinical Decision Support



Optimizing Clinical Workflows through Evidence-based, AI/ML-driven Decision Support

The increasing volume of clinical data available and the focus on value-based care have made clinical decision support systems a necessity for healthcare providers. Clinical decision support systems are evolving from traditional passive and reactive methods to predictive and proactive models supported by AI and machine learning technologies.

CitiusTech accelerates clients' CDSS journey by building unified cloud-based platforms, integrating siloed data sources, creating AI/ML pipelines for decision support models, and optimizing clinical workflows through intelligent automation while adhering to SaMD and FDA guidelines.

Our multi-disciplinary teams across cloud, interoperability, data engineering, AI, and UX have proven expertise in designing and implementing end-to-end clinical decision support platforms and applications, AI/ML models, and analytics pipelines with evidence-based clinical information and predictive interventions

Key Offerings

- *Cloud-based decision support platforms*
- *AI / ML driven insights*
- *Predictive interventions*
- *Intelligent automation*
- *CDS Model development*
- *MLOps framework*
- *SaMD & FDA compliance*
- *Virtual assistants*
- *Workflow-optimized alerts*
- *Clinical workflow integration*
- *Handheld & mobile device applications*
- *SMART on FHIR decision support apps*

Accelerating CDSS Adoption

Cloud Strategy

- **Reusable, scalable cloud architecture** to accelerate CDS application development
- **Cloud-based UI/UX** development, application framework for standardized look & feel across CDS applications
- Design & develop CDS applications for **handheld & mobile devices**

Physician Empowerment

- **CDS model** development, training, validation, monitoring & management
- **MLOps pipeline** / framework on cloud for accelerated deployment of CDSS algorithms
- **Intelligent Automation** framework for automating clinical actions based on CDSS outcomes



Patient Access

- **Real-time, bi-directional** clinical data integration using HL7 / FHIR
- **SMART on FHIR** CDS applications for EHR platforms
- End-to-end **data pipeline** development, data harmonization to enable & train AI/ML CDS models

Value-based Care

- **Cybersecurity** risk & vulnerability assessment, penetration testing etc.
- **Regulatory compliance** for CDS applications & algorithms, adherence to **SaMD & FDA** traceability guidelines

Customer Value

- **Increase quality of care** by preventing adverse events, avoiding errors
- **Improve physician satisfaction** by reducing clinical bottlenecks
- **Greater adherence to clinical guidelines** for selected care pathways
- **Cost savings** due to reductions in duplicated or unnecessary tests
- **Enhanced health outcomes** through predictive interventions

About CitiusTech

With 8,000+ healthcare technology professionals worldwide, CitiusTech helps leading healthcare and life sciences organizations reinvent themselves by accelerating digital innovation, leveraging next-gen technologies and driving data convergence across the healthcare ecosystem. We provide strategic consulting, digital engineering, data, analytics & AI, specialized platforms and end-to-end solutions to over 130 organizations across the payer, provider, medtech and life sciences industries. Our key focus areas include healthcare interoperability data management, quality performance analytics, value-based care, omni channel member experience, connected health, virtual care delivery, real-world data solutions, clinical development, personalized medicine and population health management.

Our cutting-edge technology expertise, deep healthcare domain expertise and a strong focus on digital transformation enables healthcare and life sciences organizations to deliver better outcomes, accelerate growth, drive efficiencies, and ultimately make a meaningful impact to patients

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