

Data Systems Integration Group, Inc. at a Glance

DSIG provides professional Information Technology consulting services and software solutions to Fortune 500 corporations and government agencies to enable clients to utilize technology to improve operational goals.

Our Healthcare solutions bring additional value to our customers and have been implemented in multiple organizations to meet the needs for managing Electronic Health Records (EHR) as well as Laboratory Information Management Systems (LIMS).

AdvantaChart EHR Software Solution

DSIG's EHR software, AdvantaChart, is a Cloud-based, HIPAA-compliant, Meaningful Use 2 certified solution that was developed specifically for Mental and Behavioral Health.

The AdvantaChart solution allows business users to customize data gathering needs for health encounters and treatment plans by reducing paper-based forms and utilizing electronic forms and signatures to document all aspects of care.

The solution includes insurance claim processing, pharmacy management, a patient and provider portal, and fiscal management tools. Our solution allows clients to streamline workflows, document services and manage billing utilizing a comprehensive suite of integrated modules.

AdvantaChart EHR Capabilities at a Glance

- Customizable EHR data collection to suit client workflows.
- Drag/Drop workflow engine to enable business users to build clinical workflows.
- Dynamic Form builder and Business Rules-driven forms.
- Tablet-enabled to facilitate easy intake and encounter processes.
- Ability to utilize voice dictation for case notes.
- Easily track clients by treatment programs, treatment dates, case history and service locations.
- Electronic Signatures for Treatment Consents and Service Documentation.
- Patient Profile Summary Sheets & Preventative care alerts.
- Dashboards that enable early intervention.
- Service providers have an easy-to-use single-screen client dashboard.
- The Care-Coordinate module enables identifying treatment barriers and assists with planning for housing, employment, and transportation to connect individuals with their communities.
- Integrated Telehealth with secure video, audio & text capabilities.
- Ability to manage individualized care plans with ease and efficiency, through configurable service plans that track personalized outcomes.
- e-Prescribe with 2-factor authentication.
- Medication Administration Records (MAR).
- Nutrition & Diet Plans.
- Appointment Scheduler, Caseload & Workflow tracking with dashboard viewing.
- Ability to create checklists.
- Real-Time Notification of Service Delivery Logs & Incident Reports Submission.
- Audit & Compliance Tracking and Enforcement.
- Predefined reports and the ability to build custom reports.
- Ability to create reports to meet regulatory standards.
- Analytics and Insights reporting and dashboards.
- Integrated Billing Module for electronic claims submission and remittance processing.
- Billing Scrubs and intelligent denial management module to ensure claims pass with minimal denials.
- Detailed financial and billing reporting with customizable reporting capabilities.

AdvantaChart EHR Module Descriptions

Provider Module

- Customizable dashboards provide access to your daily case load, notes and documentation, and matters requiring immediate attention.
- The completely customizable screen views provide you with the information you need, when you need to easily track client treatment dates, case history & progress.
- Create, manage, and assign tasks to colleagues and co-workers.
- Efficient and secure communications portal for staff, colleagues, and patients.
- Integrated workflow engine & forms engine to customize the EHR to meet your clinical workflow needs and optimize care delivery.
- Build dynamic forms for your data-gathering needs or use pre-defined forms to support your clinical assessments and encounter review.

Telehealth Module

- Secure, HIPAA-compliant Telehealth module that supports Video, Audio and Text Messaging.
- Appointment messaging for clients and providers with links to start the Telehealth session.

Mobility

- Supports Mobile tablets with a provider application to streamline data gathering and electronic signatures.
- Patient & Care team application uses secure communication with AdvantaChart.
- Offline data sync to enable providers to manager client encounters on the go.
- Simplified data collection menu and processes allow the provider to concentrate on the client.
- Ability to use voice translation into textual notes for attachment to the patient information.

Administrative Module

- Workflow tracking enabling the practice administrators a comprehensive view of all clients/providers and locations.
- Provider Portal for appointment and scheduling management.
- Appointment reminders using email and text messaging to reduce no-shows.
- Standard reporting for caseloads and tracking.
- Ability to build custom reporting and analysis of caseloads and financials.

Billing Module

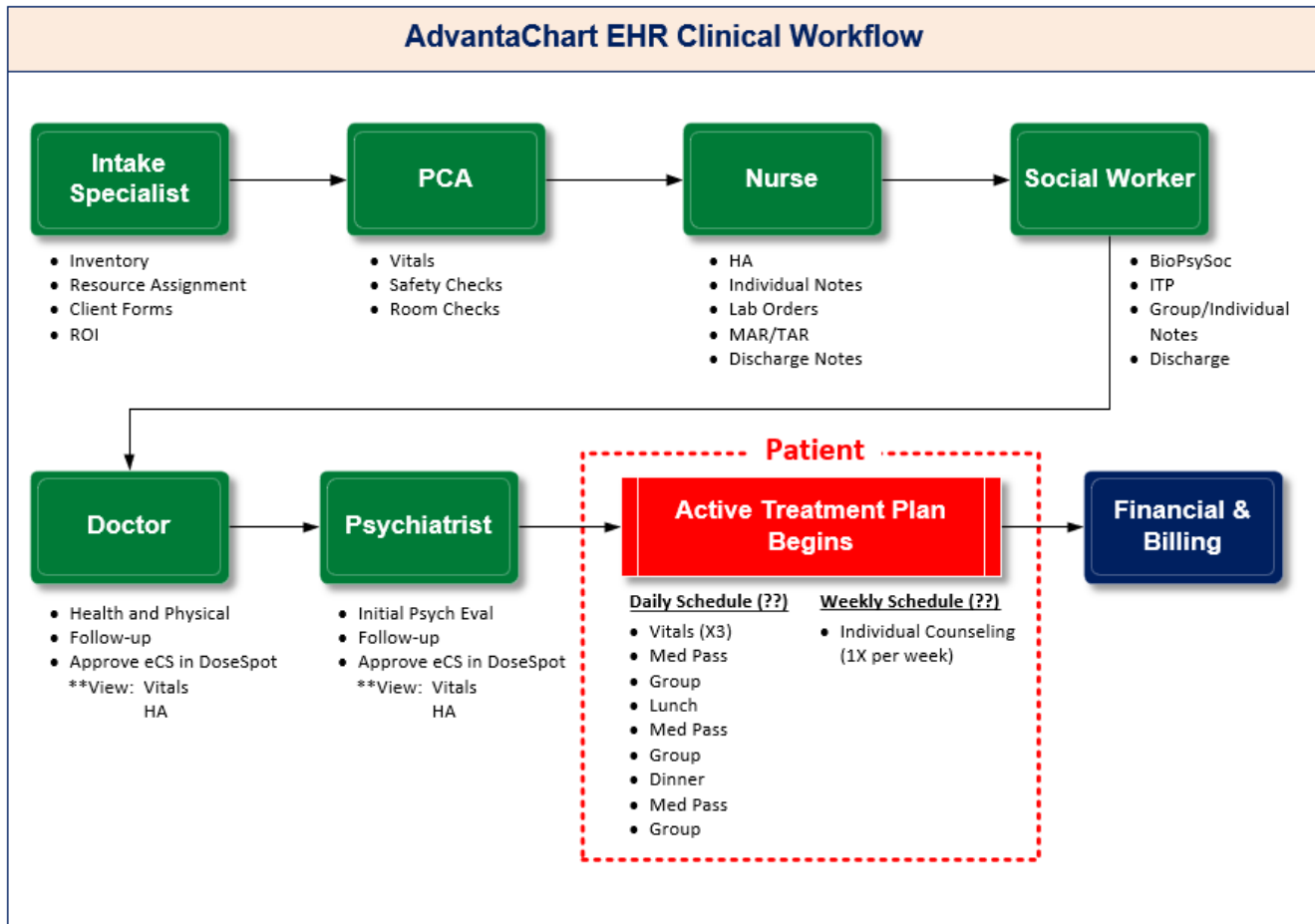
- **Electronic Claims** – Bill direct to Medicaid, Medicare and many major commercial payers, reducing denials and improving financial management.
- **Remittance** – Increase productivity and accuracy posting payments, denials, and adjustments with Electronic Payment Posting; automatically transfer claim balance to secondary payors.
- **Eligibility** – Verify health benefits directly, in real-time during intake or patient registration to ensure services are covered.
- **Authorizations** – Referrals and provider services authorizations electronically transmitted and tracked.
- **Denial Management** – Highly effective scrubbing engine to ensure claims are correct and on time while reducing denials and payment issues.
- **Billing and Financial Reporting** – Detailed billing reports providing comprehensive revenue breakdowns and custom reporting to assist in meeting audit requirements and regulations.

Integration

- Integration with Laboratory and diagnostic providers using our HL7/ FHIR capabilities for electronic lab orders and results.
- Capabilities to integrate with external EHR and Health service providers using industry standard EHR transaction formats.

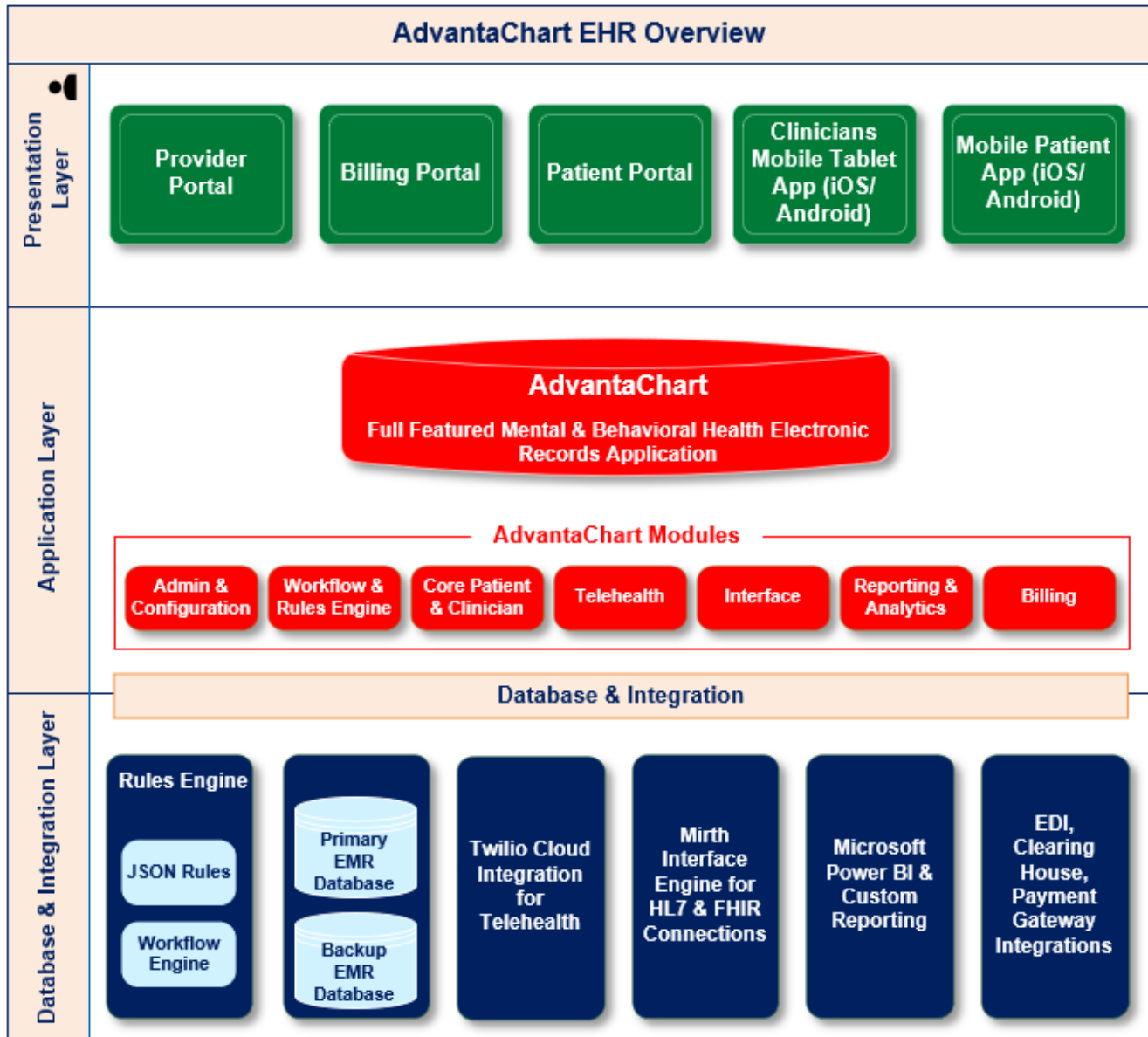
Clinical Workflow Capabilities

The diagram below provides a high-level example of AdvantaChart's Clinical workflow capabilities.



Technical Overview

The diagram and additional details below provide a high-level view of the AdvantaChart solution.



- Amazon Web Services (AWS) is our recommended cloud hosting solution.
- Users navigate to the secure website where, based on traffic and how “busy” the servers are (EC2), the Elastic Load Balancer decides which will provide the best experience to the user.
- The servers sit behind a Virtual Private Cloud (VPC) which is dedicated to the client account to configure security to be HIPAA compliant.

- The application utilizes a master database (DB) and in the event of an issue, there is a secondary DB for failover (RDS DB Standby).
- The architecture utilizes High Availability RDS (Availability Zones). Each zone maintains a synchronous standby replica to provide redundancy to protect against failures.
- Administrators securely access the Bastion server to maintain and configure the system.
- Additional AWS resources utilized but not displayed are: IAM, AWSKMS, S3, CloudTrail, Lambda, Simple Notification, and Amazon CloudWatch.
- CloudWatch provides for actionable insights on performance and application operational processing, provides management to system-wide performance changes, optimizes resource utilization, and provides a unified view of operational health.
- AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing. CloudTrail is used to detect unusual activity and security analysis and provides detailed event logging and history.
- AWS SNS is a messaging service to send notifications while monitoring high availability, performance changes & downtime.
- AWS Identity and Access Management (IAM) provides secure access management to application and system resources. Access control leverages permissions based on groups and roles to ensure secure access and controls for regulatory requirements.
- AWS KMS (Key Management Service) is integrated with the AWS Encryption SDK to enable for data encryption & protection at rest and transmission.
- The Elastic Load balances with Autoscaling enable the application to scale as the user load grows to ensure performance is optimized.