



# A Global Leader in Healthcare Innovation

Solution Areas & Our Capabilities



# Agenda

#### 1. About Us

- Overview of Genisys Group
- Our Journey Introduction to Bandhan Group

#### 2. Introduction: Who We Are

- The Forge–Foundry–Factory Model: Translating Business Value into Al-Driven Outcomes
- Software Services Aligned to the Forge–Foundry–Factory Model

### 3. Our Solutions and Capabilities for NHS

- Factory Enterprise Solutions
- Foundry Middleware for NHS APIs
- Example Use Cases Prescription & Patient Data Integration, Imaging & Unified Patient view Integration

### 4. Proven Impact

Portfolio of Work - Selected Case Studies

### 5. Engagement Model

- BV-DES: Our Proprietary Approach to Business Value Design and Execution
- How We Collaborate with Clients



# Genisys Group: Transforming Customer Imagination to Customer Experience

Genisys Group is wholly owned subsidiary of Bandhan Group - a \$2.5 Bn Organization





# Genisys Group: A Bandhan Company - A \$2.5 Bn Organization



2001

**Bandhan** was conceptualized and founded by **Mr. Chandra Shekhar Ghosh**. Bandhan Started as a Society that stood for poverty alleviation and women empowerment through sustainable livelihood creation. Started microfinance operations in rural Bengal and the northeast

Bandhan Financial Services Ltd (BFSL)

Investment is the main business of BFSL



Bandhan Financial Holdings Limited BFHL was set up to **establish Bandhan Bank after carving it out of BFSL a**nd invest in entities in the financial services sector.

#### **Bandhan Bank**

Bandhan Bank is India's youngest universal bank. It has a strong focus on providing financial services to the unbanked and under-banked segments of Indian population with >70% branches in rural and semi urban areas. Serves more than 3cr. customers, through >6k banking outlets

#### **Bandhan AMC**

BFHL has acquired IDFC AMC and IDFC AMC Trustee Company towards end of FY23. FY24 will be the first year of the merged entity

#### Bandhan Life

BFHL has acquired Aegon Life during FY23. Aegon Life (now branded as Bandhan Life) is actively building the insurance team and cutting edge B2C Insurance organization. **Genisys Group** 

Genisys empowers customers with cutting edge technology services, and solutions, enabling them to achieve their strategic objectives and enhance their operational efficiency.



### We make Business Value (BV) an Al accelerated reality



Fuel transformed business value @ intersection of Business, Ops & Al

BV - Platform: AI Core - customized & accelerated

**Factory** 

Domain led integrated solutions using foundry & forge

**Foundry** 

Modular Accelerators across layers of Al Core

**Forge** 

3

Al assisted foundational Engineering Life Cycle

**HumAln Ops: Al Assisted Operations** 

Humanized AI: Better Productivity & improved business KPIs

## **Our Software Service Offerings across Forge - Foundry - Factory**



### Patient Facing **Applications**

Digital Health Tracker

**Smart Patient Portal** 

**Emergency Support** 

**Prescription Assistant** 

& Scheduling

- []<sub>⊙</sub> Care Delivery **U** Organizations
  - AI & Data driven decision systems
  - Footfall Prediction Models
  - Discharge Summary Generation

### Diagnostics & Support Services **Diagnostics &**

- Cancer Prediction
- Al Radiology Interpretation
- Emergency Response Optimization

#### Social & Social & Community Care

- Mental Health Risk Prediction
- Community Care Coordination Platform
- Remote Patient Monitoring

### Medication Services Pharmacy &

- Drug Interaction Alerts
- · Repeat Prescription Management
- Medication Adherence Monitoringring

#### System Enablers & **Governance Bodies**

- **Population Health Analytics**
- Dementia Risk Modelling
- Cybersecurity & **Compliance Monitoring**
- Innovation Sandboxes

**Digital Experience** 

**Enterprise** 

Solutions

across

**Value Chain** 

- Patient Centric Apps
- UI/UX Design for Clinical & Patient portals
- Mobile-first & Accessibility-first Apps
- **GP** Apps
- Clinical Workflow Automation

- Self serve BI & Insights to Action
- **Next Gen SaaS Products**
- **Application Maintenance & Support**

Decision **Intelligence** 

#### Traditional AI/ ML

(CDSS)

- Predictive Intelligence
- **Demand Forecasting & Cold-chain** Monitoring
- Computer Vision for Medical Imaging

**Clinical Decision Support Systems** 

#### Generative AI

- **Summary Generation**
- Multi modal RAG systems
- Text to SQL Implementation

#### Agentic Al

- **Context aware Master Agents**
- Reflex & Goal Based Agents
- Hierarchical & Multi Agents

#### Al Governance

- Responsible AI
- Cost Monitor, Fin-ops

**Modern Info Platform** 

- **EHR/PMR Platforms** 
  - Cloud & Hybrid Architectures

- **Domain-specific Data Products**
- Unified Global & Patient Data Models
- LIMS/PACS integration with EHR/GP Systems

- Metadata Management and Data Lineage
- Data Quality Management & Governance
- Information Security & Compliance

Gen Al

- **Efficient legacy Modernization**
- **Accelerated New Development**

- Scenario generation Testing & QA
- **Dev Ops Management**

- **Data & Application Migration**
- **Automated Support & Self-healing**



# **Genisys NHS Interoperability: Powering Patient-Centric Healthcare Solutions**

### Enable Use Cases across the Ecosystem







Diagnostics & Support Services







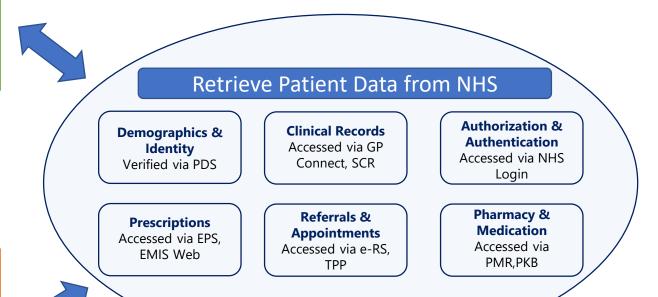
### Connect with NHS Digital Services

#### **Authentication & Access**

- NHS Login Secure user authentication
- SPINE Central NHS infrastructure
- PDS Patient identity and demographics
- SCR Essential patient information
- GP Connect Access to GP records

#### Integration & Interoperability

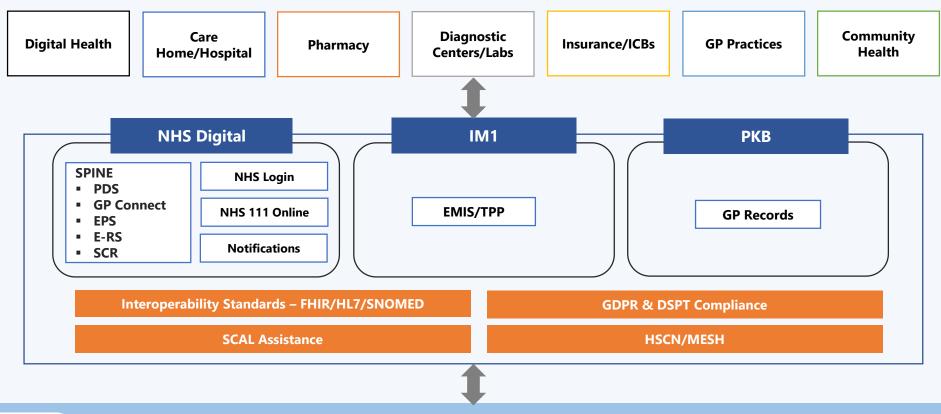
- IM1 Adaptor Third-party system integration
- PKB Patient-controlled health records
- FHIR/HL7/SNOMED/STU3 Data Standards
- MESH Secure messaging





# **Foundry – Genisys Interoperability Framework**

Genisys multi-tenant based API framework accelerates seamless integration with NHS Digital Services, enabling a host of Solutions





- GP Practices
- Hospitals & NHS Trusts
- Community & Mental Health Services
- Integrated Care Systems (ICSs)



- NHS England / NHS Digital
- Health Data Research UK
- Secure Data Environments
- Local Health & Care Records

#### **Technology Vendors** & Integrators

- FHR vendors
- Digital Health Platforms
- Interoperability Enablers



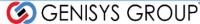
#### **Researchers & Academics**

- Universities
- Clinical Research Organizations
- HDR UK-affiliated Research Groups

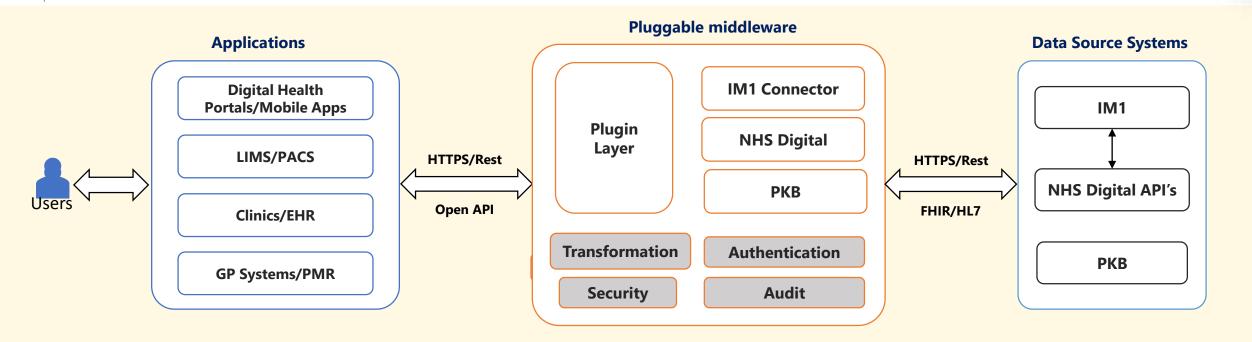


#### **Governance & Regulatory Bodies**

- Health Research Authority
- Information Commissioner's Office
- Professional Record Standards Body



# **Foundry** – Genisys Interoperability - Middleware Solution Architecture



#### **Capabilities**

- A modular middleware component designed to be embedded into existing healthcare application or platforms.
- Provides secure, seamless connectivity to key UK healthcare system such as NHS Digital API's, IM1, and Patients Know Best (PKB).
- The plugin operates as a **middleware component** that abstracts the integration complexities with **NHS Digital, IM1 and PKB** allowing rapid development, data exchange, and compliance.

#### **Benefits of the Framework**

- Faster Time to Market (Faster onboarding with the NHS and quicker integration with NHS Digital services lead to accelerated project completion, resulting in significant cost savings)
- Dedicated NHS Liaison, along with support for DSPT and SCAL processes.
- Built on NHS architectural principles with full support for open standards, API First, FHIR and interoperability,
- Pre-tested for Vulnerability scanning, PEN compliance and clinical safety with trusted vendor recommendations provided for penetration testing.
- Vendor Netural, No ARR



# **Foundry - Genisys Middleware - NHS Interoperability**

### **Primary Care**

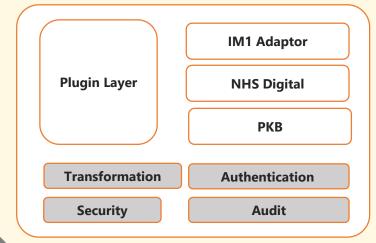




- **Systems:** EMIS, TPP (SystmOne)
- Data: Patient demographics, prescriptions, referrals, consultations

**Challenge:** Often siloed, limited interoperability with secondary/social care

### **Middleware Layer**



- Interoperability: Connects disparate systems using FHIR, HL7, or custom APIs
- **Data Orchestration:** Normalizes and routes data across care settings
  - Security & Governance: Ensures compliance with NHS IG, GDPR
  - Audit & Logging: Tracks data flows for accountability

**Value:** Enables real-time data exchange, facilitates shared care records, bridges clinical and social care data

### **Secondary Care**







- •Systems: Oracle Cerner, SystemC, Epic
- •Data: Admissions, diagnostics, procedures, discharge summaries
- •Integration Need: Seamless access to GP records and shared care data

#### **Shared & Social Care**





- •Systems: Graphnet, Orion Health
- •Data: Mental health, social services, community care, care plans
- •Integration Need: Unified view of patient across health and social domain



# **Factory – Enterprise Solutions**

#### **NHS Onboarding Services**

#### Application onboarding to NHS Digital Services

- NHS digital API onboarding
- GP IT system integration
- Supplier confirmation accessibility list (SCAL) Assistance
- NHS SPINE
- Compliance & regulatory support
- Product/services technical evaluation & approval process

#### **NHS** care services

#### Primary care

- GP care practices
  - Patient management system
  - Appointment bookings
  - EHRs access

#### Pharmacy services

- White labeled pharmacy apps
- Prescription services

#### Secondary care

- In-patient/out-patient management system
- Emergency care management system

#### **NHS digital services**

#### Patient focused services

- NHS secure login
- NHS authentication & authorization
- EHRs management & access
- Provider focused services
- Patient portals
- Appointment booking systems
- Remote patient monitoring
- Clinical data insights
- EHRs & clinical system integration
- Data interoperability between platforms/services

# Partner/3<sup>rd</sup> party system integrations

#### IM1 integrations (EMIS, TPP)

#### EMIS/TPP

- Integration with GP Systems
- Pharmacy management
- Clinical decision support systems
- Mobile health (mhealth)
- Patient knows best (PKB)
- Health records access
- Interoperability & data sharing

#### **Data protection & security**

#### GDPR compliance services

- DSPT/DPIA/DTAC
- Data encryption
- Data access management & authentication
- Data anonymization
- GDPR compliance management
- Secure messaging platforms (MESH)



### **Our Solutions Portfolio**

# NHS Integrated App for Pharmacy Management

**Client:** Pharmacy Management Software Provider, UK

- Client POC: Platform Development team
- Engagement: Enhance client's app with NHS/IM1 integration that allows patients to view and order repeat prescriptions, book GP appointments and streamline medicine delivery through pharmacy integration

**Impact:** Enhanced patient care with efficient patient-centered services.

Digital Transformation, Data & Analytics, PharmaTech

#### **Healthcare SaaS Suite**

**Client:** Leading Pharma & Healthcare Organization **Client POC:** CTOs & Digital Transformation Leaders **Engagement:** Co-developed a suite of solutions.

- Bespoke software platforms for drug discovery
- Implementation of regulatory compliance and data security solutions
- Strategic consulting for digital transformation

**Impact:** Delivered scalable, secure, and impactful technology driving industry-wide transformation.

PharmaTech, Data & Analytics, Digital Transformation, Regulatory Compliance

# Nextgen Patient Administration System (PAS)

Client: Healthcare Technology Company, UK

- Client POC: Clinical Transformation & Workflow team
- **Engagement:** Built a comprehensive hospital information management system designed to streamline administrative processes and improve patient care in hospitals and health systems.

**Impact:** Streamlined healthcare operations and enhanced patient collaboration

Digital Transformation, Data & Analytics, Digital Experience

#### **Prescription Management App**

**Client:** Leading Digital Pharmacy Platform

- Client POC:
- Engagement: Provide patients with a seamless, secure, and user-friendly experience, enabling them to manage their prescriptions directly through the clients application.

**Impact:** Increased user adoption and improved patient experience

Application Modernisation, Data & Analytics, PharmaTech

#### **Revenue Growth for Hospital**

**Client:** Private Hospital Chain

- Client POC: CFO & Operations Team
- Engagement: Developed advanced business intelligence dashboards. These dashboards integrated data from various operational systems, providing a holistic view of financial performance.

**Impact:** Significant increase in financial performance.

Data & Analytics, BI Modernization, Operations Support

#### **NHS Dementia Analytics**

Client: Local Govt. Authority, UK

- Client POC: Public Health Policy Team & Clinical Research Division
- **Engagement:** Implemented robust data analytics solutions tailored to process and interpret complex dementia patient datasets.

**Impact:** Enhanced understanding of patient outcomes and informed policy decisions.

Data & Analytics, BI Modernization, Public Health Support



# **THANK YOU**



**AI-First. Value Accelerated** 

