IBM Consulting

G-Cloud 15
IBM - System Integration Services for Electronic Patient - EHR and Clinical Systems

Service Definition Document

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IBM System Integration Services for Electronic Patient/Electronic Health Record and Clinical Systems

Service Overview

IBM provides end-to-end system integration services for Electronic Patient Records (EPR), Electronic Health Records (EHR), and Clinical Systems. Our services are designed to ensure seamless interoperability, robust security, and efficient delivery across healthcare environments.

Features

1. **Programme Management**
   Including stakeholder governance and vendor management.
   Example: Coordinating multiple vendors during a national EHR rollout to ensure alignment with NHS standards.
2. **Architecture Leadership and Assurance**
   Covering security and data architectures.
   Example: Designing a secure architecture for patient data exchange between regional hospitals and national systems.
3. **Environment Design, Build and Management**
   For non-production, production, and cloud environments.
   Example: Building a hybrid cloud environment for a large teaching hospital to support clinical applications.
4. **Technical Integration**
   Connecting departmental, regional, and national systems/services.
   Example: Integrating a new oncology system with existing EHR platforms and national cancer registries.
5. **End User Device, Printing and Medical Device Strategy**
   Design and implementation.
   Example: Deploying secure printing solutions for clinical documentation across multiple wards.
6. **Configuration Based on Patient and Caregiver Journeys**
   Example: Customising workflows for maternity care pathways within the EPR system.
7. **Quality Assurance and Testing**
   Functional, non-functional, performance, and penetration testing.
   Example: Conducting penetration tests on a new telehealth platform before go-live.
8. **End User Training and Adoption Strategy**
   Example: Delivering tailored training for clinicians transitioning from paper-based records to EHR.

9. **Service Management and Operating Model Review**
   For transition to service.
   Example: Designing an ITIL-based operating model for ongoing EHR support.
10. **Post Go-Live Support and Management**
    Including upgrades and enhancements.
    Example: Providing 24/7 support for a regional EHR system and managing version upgrades.

Benefits

1. Co-design services leveraging existing capabilities.
2. Reduce implementation risk by supplementing capability / capacity.
3. Leverage IBM's proven integration methods and tooling.
4. Increase delivery predictability with additional resources.
5. Seamless collaboration between technical, operational, and clinical experts.
6. Build internal capability by working alongside IBM specialists.
7. Vendor-agnostic services focused on organisational benefits.
8. Support for on-prem, private cloud, and public cloud deployments.

Example: A UK Trust accelerated its EPR implementation by partnering with IBM for architecture assurance and integration testing, reducing delays by 30%.

Key Differentiators

1. Vendor-agnostic guidance for procurement and integration of systems from Epic, Cerner/Oracle Health, Allscripts, IMS Maxims, Graphnet, SystemC, Meditech, Dedalus, Intersystems, Agfa Healthcare, and Philips Healthcare.
2. Global experience with healthcare clients in the US, Europe, and beyond.

IBM System Integration Services for Electronic Patient/Electronic Health Record and Clinical Systems Addressing Business Needs

We work in partnership with you to address your business needs, leveraging our deep industry and technical expertise, tools, and approach to deliver Digital ready solutions for a range of business needs.

Certainty of Delivery

Projects are often delayed or cost more due to unexpected problems late in the delivery cycle. Examples drivers of such delays are:

- Performance challenges
- Integration issues
- Data mismatches

Our structured approach to integration services combined with methods and processes reduces technical risk and tackles issues earlier in the delivery lifecycle to reduce the risk of costly time overruns.

Example: Identifying and resolving HL7 interface mismatches during early testing phases to prevent go-live delays.

Time to market

At IBM we apply a pragmatic approach to system delivery. We don't slavishly follow agile or waterfall delivery methods to the detriment of the project. We have standard enterprise delivery methods that we tailor for each engagement – most often blending agile and waterfall delivery to achieve an optimum delivery lifecycle depending on project needs. This pragmatic approach to method adoption plus our global experience of complex systems engineering reduces the overall time to delivery.
Example: Using agile sprints for configuration while applying waterfall for regulatory compliance documentation.

Cost effective operations

The best solutions to build, are not always the best solutions to own and operate, for potentially many years. We construct solutions that are, from the start, built for run. This means that we are focussing on the ownership and run experience as part of the solution design and build phase.
This focus builds confidence that the solutions we build have longevity and provide flexibility even in later years.
Example: Implementing scalable cloud-based EHR solutions reducing infrastructure costs over five years.

IBM System Integration Services for Electronic Patient/Electronic Health Record and Clinical Systems

Service Definition

The implementation and integration of Electronic Patient Record/Electronic Health Record and Clinical Systems underpins the creation of Intelligent Workflows across applications and across care settings.

IBM System Integration Services for Electronic Patient Record/Electronic Health Record (EPR/EHR) and Clinical Systems provide a tailored set of services to support the implementation of digital solutions within your organisation.

The planning phase focusses on co-designing and agreeing the scope of services, associated resources and timeline of activities which IBM and your organisation will jointly own and manage throughout the implementation lifecycle of the digital solution.

This includes an analysis of current capabilities and capacity constraints within your team; identifying where IBM can provide resources, methods and tooling to compliment your organisation's capability; and agreeing how roles and responsibilities will be shared between IBM and your organisation.

The outcome is an implementation approach which capitalises on your existing capability, supplementing and strengthening this capability where needed to ensure the digital solution can be implemented within agreed time lines.

Positioned within the wider landscape of IBM GCloud offerings, the services are complemented by offerings for Enterprise Engineering and Architecture, and Electronic Health Record procurement services supporting the journey to the Hybrid Cloud and the implementation of Smarter Building technologies.

IBM System Integration Services for Electronic Patient/Electronic Health Record and Clinical Systems

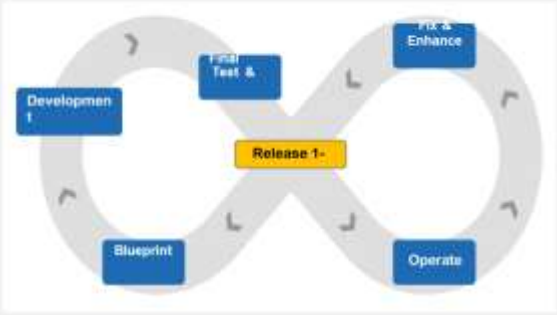
IBM Approach

We bring you the benefit of having worked with some of the world's largest health and care organisations, supporting the transformation of complex care delivery pathways, critical services and information technology landscapes

The methodology that we use to deliver the IBM System Integration Services for Electronic Patient Record/Electronic Health Record and Clinical Systems is the IBM Services Mosaic Method.

The IBM Services Mosaic Method for Complex System Integration (SI) is a robust and standardised method for the architecture, design, planning and delivery of complex system integration projects like Electronic Patient Record/Electronic Health Record and Clinical Systems.

The Mosaic Method includes a range of processes and tools. It provides a complete solution framework with appropriate technical and project management controls and touchpoints. Within the method, delivery is approached as a continuous development and operations life cycle based on the use of planned releases.



Continuous development and operations life cycle employed by the IBM Services Mosaic Method for Complex System Integration (SI)

IBM brings decades of experience in healthcare system integration, combining technical expertise with clinical understanding to deliver solutions that improve patient outcomes and operational efficiency.

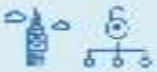
About IBM

Supporting Government

We help government organisations in the UK and worldwide deliver and transform essential public services – our teams are passionate and proud about helping you to make a real difference to people's lives.

Government Services Supported by IBM


Defence and Intelligence


Public Safety and Policing


Healthcare


Life Sciences


Tax and Revenue


National Infrastructure


Social Care


Education


Work and Pensions

The problems we solve for clients are complex and cannot be satisfied with technology alone. They require a partner that can also offer deep industry expertise and a relationship of trust.
IBM combines the portfolio, people and sense of purpose necessary to meet today's enterprise demands.

Every day, we support and manage complex delivery for government clients where the impact of delivery has wide-reaching impact on citizens and national services.
We bring access to the industry experience, insight and technology capability to deliver and operate secure, scalable, optimised and available services for government.

We support you by bringing:

- Industry expertise – Professionals who understand and are passionate about delivering quality public services and can bring industry insights and apply innovation to your business processes
- Trust and security capabilities – Protecting valuable data and insights and deploying new innovations responsibly
- Innovative technology – Expertise in areas such as AI, blockchain, 5G, Automation, IoT, cybersecurity and quantum, delivered in a Hybrid Cloud environment
- Experienced Services professionals to support strategy, innovation and deliver transformation and change to processes, ap plications, and cloud infrastructure
- Global alliances – valuable partnerships with the world's leading vendors

About IBM

We have worked together with organisations in the UK for over 100 years, with a rich history of joint innovation and achievements, built on trusted relationships.

Quantum

IBM Q, **the world's most advanced quantum computing initiative for commercial use**, is being used by CERN

Environment

IBM's **focus on sustainability** began in 1971 with our first environmental policy

Cloud

Together, IBM and Red Hat are working to deliver the world's only **next-generation hybrid multicloud platform**

Economy

IBM has been **integral to the UK economy for >100 years**, and is one of its largest tech employers

R&D

In the UK alone, IBM **invests £170 million in R&D** each year

Changing the world

IBM was awarded **World Changing Company of the Year** 2019 by Fast Company

Royal recognition

29 UK IBMers received **honours from the Queen** for contributions to tech and society

Diversity

IBM **won the Global Diversity Award** 2019 and the ENEI's **Gold Standard**

Graduates

IBM is committed to developing future talent – we are Target Jobs' **Graduate Employer of the Year** 2019

Volunteering

IBM dedicates **>20,000 volunteering hours every year** for a better society

Tech talent

IBM runs P-TECH schools in 18 countries, helping **>100,000 students build skills for careers of the future**

Inventors

IBM UK is home to many Master Inventors, with **>250 patents filed last year** alone