

## Better support to health commissioners

### Deeper insight. Smarter decisions. Better care.

Delivering affordable and improved healthcare services challenges the National Health Services (NHS) commissioners in the UK to make informed decisions that allocate scarce resources in the most effective manner. To achieve this, commissioners need access to accurate, timely and relevant data presented in a manner that provides an integrated and holistic view of a patient's healthcare interactions. Hitachi Consulting has developed an approach that enables the collection of complex patient data from a variety of disparate provider sources and delivers it to commissioners - safely and securely.

### The challenge

The NHS is focused on improving the health and well-being of a growing, aging population who - by definition - are likely to have increasingly complex health conditions. Accelerating advances in medicine and technology further increase the cost of care and exacerbate these financial challenges. Therefore, it is vital for commissioners to address:

- How to best manage care for the 5% of patients who account for 50% of all healthcare spend.
- What care pathways and programs have the best health outcomes.

Addressing these and related issues is central to the role of clinical commissioning under the reforms set out in the Health and Social Care Act 2012.

High-quality commissioning means anticipating, identifying and understanding the health and care needs of local populations, enabling the planning, procuring and delivery of appropriate, affordable services. Excellence in commissioning is increasingly measured according to the delivered outcomes. Identifying those at high risk of contracting long-term conditions such as diabetes and designing early interventions - delivered in the community - helps avoid unnecessary admissions and costlier hospital treatment.

### Our solution

Technology is a key enabler for securing desired outcomes. Hitachi Consulting can transform commissioning capability by integrating the collection, processing and presentation of reliable, relevant health data. Our vision puts patient information at the center of the solution to drive a more connected idea of individual and community wellness. This patient-centered approach can also help target treatment, ensuring connected care and engaging the individual in prevention and self-care.

At the heart of this approach is a business intelligence solution that delivers secure, pseudonymised patient data that can be analyzed with purpose-built health informatics applications. This allows intelligent commissioning assessments and informed contracting. Ultimately these can drive better clinical decisions.

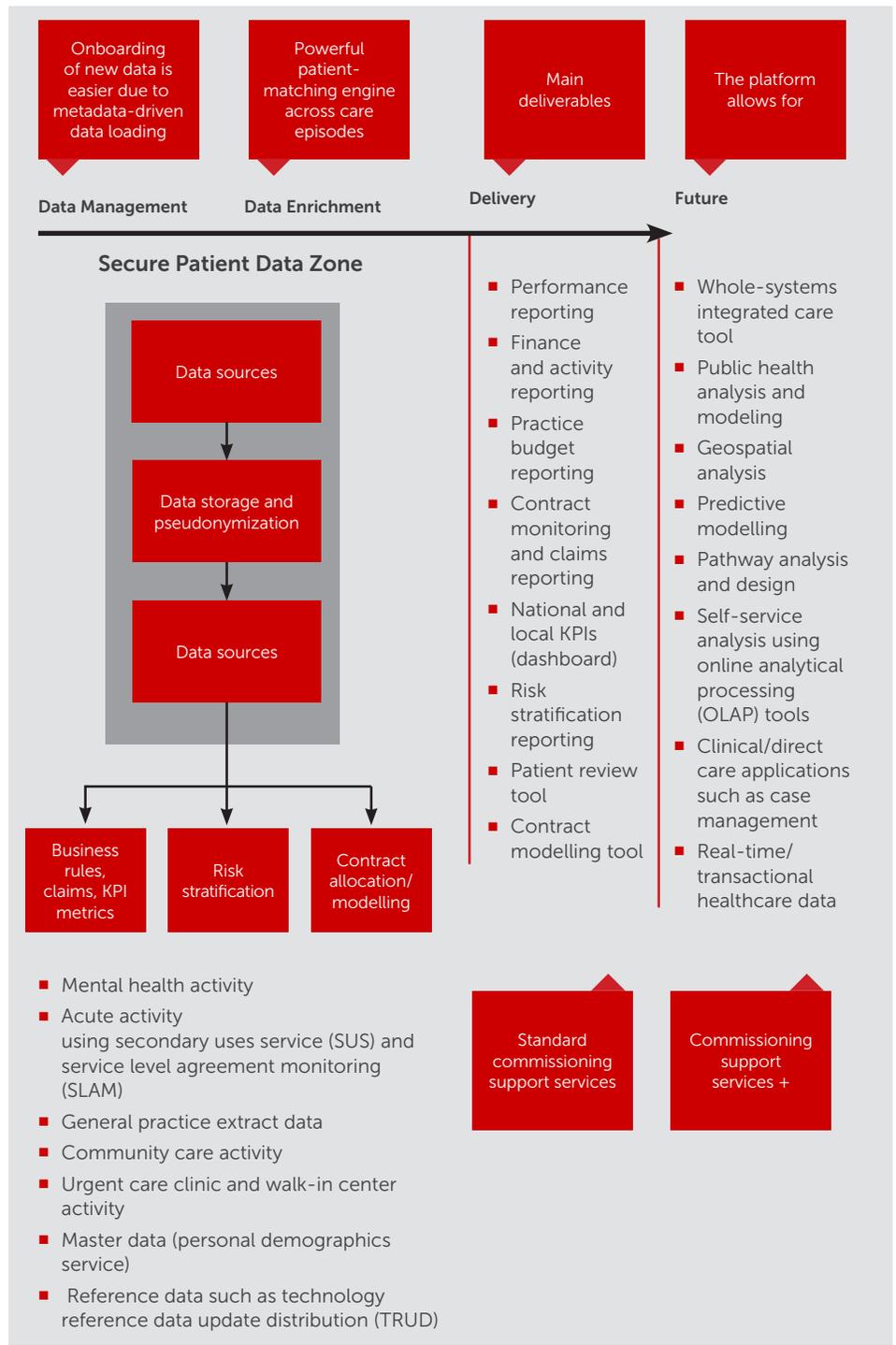
The solution was developed by close cooperation and consultation with commissioners and clinicians across a number of commissioning support units (CSUs) and clinical commissioning groups (CCGs). The diagram on page two shows the overall architecture of our solution which provides commissioners with:

- The capability to collect patient data from disparate provider sources.
- A facility to store, manage and process data in a manner fully compliant with HSCIC Information Governance (IG) requirements - a highly secure regional processing center enabling the safe storage and management of personal, confidential data within an accredited safe haven managed and hosted over the N3 network.
- Appropriate pseudonymization in accordance with IG requirements.
- A master patient index capability that links data relating to multiple care settings, providing a complete view of connected events in the patient's care history within a single environment and user-interface.
- Enrichment of data, using commissioner-defined business rules, to support core business intelligence functions such as contract management and risk stratification.
- A platform for further innovative/ sophisticated applications such as whole systems integrated care and real-time health monitoring.

# Improve patient outcomes with deeper insights and smarter decisions

- A comprehensive disaster recovery, system availability and business continuity provision.
- An open-architecture environment that can be integrated with existing solutions and remain configurable and customizable by the client.
- A solution that is built upon an industrial strength, proven Microsoft® technology platform.

**“The Hitachi Consulting approach places the individual patient at the heart of the business intelligence arena. This enables risk stratification and targeting of individuals and cohorts which in turn facilitates the effective use of scarce after resources.”**



## Key business benefits

The Hitachi approach provides a robust, highly secure, compliant and flexible business intelligence platform.

Commissioners can make evidence-based decisions that focus effort, target resources and redesign care pathways to improve the health and well-being of the communities they serve. Compliant and innovative pseudonymization processes, and creation of a master patient index (the heart of the approach) provides the commissioner with a single view of a patient's care history and activity across multiple settings.

Application of the solution's risk stratification capability then enables the commissioner to identify high-risk patients most likely to access emergency services and develop early intervention programs of care, provided in the community to help prevent unnecessary and costly acute admissions.

The solution is equally effective in supporting the provision of core-commissioning business intelligence capability such as contract management, claims management and invoice validation. This enables commissioners to define business rules and KPIs according to specific provider contracts.

The approach has been built with a view to being future proof. It will support and enable the introduction of sophisticated applications such as whole pathway commissioning, real-time monitoring and integrated care management.

Other key benefits include:

- Enabling commissioners to focus time and effort on analyzing health needs rather than be distracted by having to manipulate complex data.

- Providing finance and contract monitoring tools to determine achievement against target outputs and outcomes.
- Dashboards for monitoring national and local KPIs on financial and non-financial issues.
- Visibility of key performance metrics such as readmissions, outpatient first to follow-up ratios and high-cost procedures.
- Provision of tools to administer progressive loading of data by clients, ensuring the highest possible quality of data is used in the appropriate format.

## Conclusion

Better health outcomes come from more informed commissioning decisions driven by access to integrated, accurate, timely and relevant data.

Hitachi Consulting builds solutions that deliver secure and accurate patient data. We provide a single view of patient healthcare needs, enabling improved commissioning decision to help you deliver better care in your community.

## Why Hitachi Consulting

Hitachi Consulting is the business and technology services company of Hitachi Limited. Hitachi, Ltd., has a long and distinguished track record of improving healthcare across the globe by building advanced healthcare products and solutions and working with our clients to improve day-to-day health management. Research into new technologies and approaches is at the heart of what we do as a business and we spend approximately \$4 billion annually in research and development.

Hitachi healthcare credentials are unmatched. As well as owning and

managing a number of hospitals in Japan, Hitachi, Ltd., expertise includes developing the latest in scanning and imaging technology, new approaches to optical topography, developments in elastography, high-volume data storage and innovating new ways of delivering treatment such as proton beam therapy machines.

Hitachi Consulting global turnover is in excess of \$700 million and within Europe we are a \$150 million business. We specialize in delivering advanced solutions that drive business improvement. We do this by providing our customers with the ability to identify business problems of their business problems and track performance improvement through insightful data analysis. Our approach is built on working with our customers, combining our drive for quality and reliability with our clients' deep understanding of their own businesses.

## About Hitachi Consulting

Hitachi Consulting is the global solutions and professional services organization within Hitachi Ltd., a global innovation leader in industrial and information technology solutions and an early pioneer of the Internet of Things. Hitachi Consulting is a business integrator for the IoT era and a catalyst for digital transformation. Using our deep domain knowledge, we strategically collaborate with our clients to help them innovate faster, maximize operational efficiency and realize measurable, sustainable business and societal value. As a consulting-led solutions company, we can help you leverage data as a strategic asset to drive competitive differentiation, customer loyalty and growth. To learn more, visit [www.hitachiconsulting.com](http://www.hitachiconsulting.com).