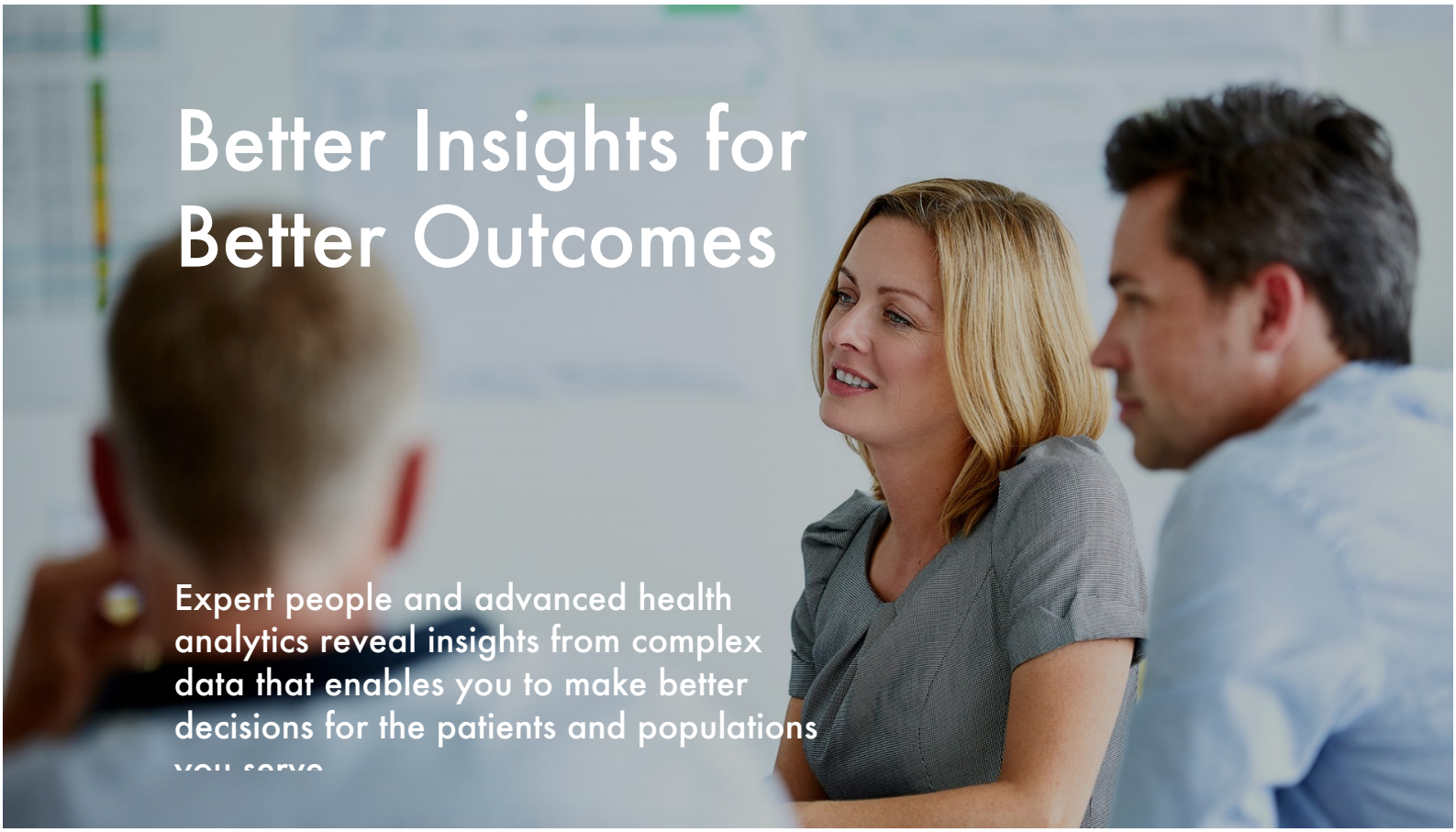


G-Cloud 12 Framework

Service Definition

Sollis Clarity™
Population Health Management (PHM)

Sollis Clarity | Health Analytics

Lot 2 Cloud Software

Better Insights for Better Outcomes

Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.

Better Insights for Better Outcomes

Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.

Service Description

Company Details

Sollis is a health analytics company that delivers insights from data.

Our expert people and advanced health analytics reveal insights from complex data that enables health and care professionals to make the very best decisions for the patients and populations they serve.

We have been working with the NHS since 1994 and since then we have supported a wide range of healthcare organisations and health and care economies. These include Sustainability and Transformation Partnerships (STPs), Integrated Care Systems (ICS), Clinical Commissioning Groups (CCGs), GP Practices, GP Federations, Primary Care Networks (PCNs) and NHS Trusts. In all cases our health analytics software and professional services expertise has provided support for healthcare service transformation.

Led by directors with decades of NHS experience, Sollis has hundreds of person years' experience in the development of health analytics software. Our analytics solutions have been used to analyse data on nearly half the population of England.

Everything we do as a company is driven by a philosophy that we need to be part of something that makes things better; better for our customers and better for the citizens and patients that our customers serve.

We exist to help our customers deliver better patient outcomes, better patient experiences at an affordable cost.

Our offer is clear and unambiguous. We deliver better insights for better outcomes.

Value Proposition

Expert people and advanced health analytics reveal insights from complex data that enable you to make better decisions for the patients and populations you serve.

An Overview of the G-Cloud Service (Functional and Non-functional)

Our offer is crafted around a fully developed and mature Population Health Analytics platform – Sollis Clarity™ – together with a dedicated, expert training, mentoring, support and analytics consultancy offering. Sollis Clarity™ is proven across a wide range of different health economies in England and Wales.

Sollis Clarity™ is provided over the secure NHS Health and Social Care Network (HSCN) / N3 network using web browser technologies. The Sollis analytics portal provides role-based security, supporting managers and clinicians from a wide range of healthcare settings.

The Sollis Clarity™ population health analytics platform provides an integrated and fully-functional Population Health Management (PHM), predictive modelling, actuarial, population segmentation and risk stratification solution.

Opportunity insights – actual v benchmark expected, practice level quartile comparisons, ACS/ AEC shape change analysis

Demand drivers analysis – risk, frailty & morbidity based cohorts, practice level correlation & ACS / AEC analysis

Practice level grouping – linking to geographical data at practice level and actuarial benchmarking across GPs

Pop health benchmarking – clinically matched actuarial comparisons to reference data

Pop health analysis – powered by Johns Hopkins ACG® System & supporting individual case management

Data preparation – cleansing, curation & presentation

Data ingestion – linked patient level data

Better Insights for Better Outcomes

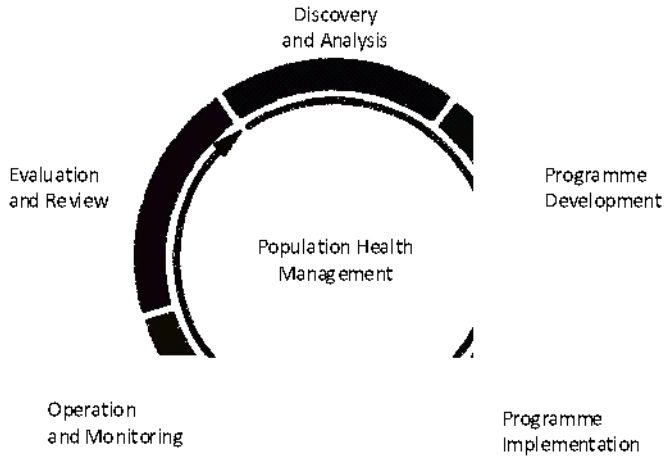
Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.

The following represent typical applications of the Sollis Clarity™ population health analytics platform in a healthcare context:

Applications of Sollis Clarity™ in a UK Healthcare Setting

Case Finding	• Support the management of individual patients • Find patients who may be suitable for care management programmes (patient enrolment) such as those targeted at avoiding unplanned admissions. • Identify patients at a) any level of the Kaiser Risk pyramid b) within segmented populations.
Population Health Needs Assessment	• What are the health needs of the population as a whole? • What is the prevalence of certain diseases? • How is this prevalence distributed and are services in the right places? • If risks are associated with multi-morbidity or combinations of long term conditions (LTCs), do we need to start providing care in a way less focused on single diseases?
Managing Resources	• Financial Management • Benchmarking & Comparative Analysis • Demand Management
Fair Shares Budgeting	• Equitable distribution of limited healthcare resources • Budget setting based on risk-adjustment

Sollis Clarity™ delivers a range of key benefits, supporting all stages of Population Health Management (PHM).



Sollis Clarity | Health Analytics

- The Sollis Clarity™ platform and Sollis advisory team provide rich support for the exploration of local health and care needs and the analysis of the effectiveness of current delivery. This enables the better development of new care programmes and interventions, and supports the identification of opportunities for improvement, for example, using casemix-adjusted actuarial analyses to identify outliers. These capabilities can also provide evidence where less effective programmes may need to be closed.

Better Insights for Better Outcomes

Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.

Exceptionally flexible population segmentation tools are provided. These include – but are not restricted to - the National Association of Primary Care (NAPC) 3x3 population segmentation matrix[1], Bridges to Health[2] and Johns Hopkins University Patient Needs Group (PNG).

Population segmentation enables patient cohorts to be defined using a wide range of clinical and non-clinical information, allowing interventions to be more accurately targeted. Further detail of this is found in the Sollis *Guide to Population Segmentation*, published in November 2018 and available from our website. https://www.sollis.co.uk/population-segmentation/

Combined clinical, activity and financial analyses are provided, enabling proposed new programmes and interventions to be clinically assessed and costed and robust investment analysis undertaken.

- Sollis Clarity™ also supports ad hoc reporting and more tactical analyses and initiatives. Recent examples from our implementations have included looking at the effectiveness of local palliative care services, reviewing take-up of flu vaccinations in more deprived areas and identifying patients with COPD and other comorbidities who may benefit from additional support, to help ease winter pressures on urgent care services. New analyses and reports can be developed, saved and shared locally to promote shared learning.
- Sollis Clarity™ also provides in-depth support for the delivery of care interventions and programmes, both local schemes and those defined nationally. This includes:
  - Highly-tailorable case-finding tools, for use by GPs and local clinical teams (e.g. Multi-Disciplinary Teams). These have been co-designed with clinicians, to ensure rapid access to patient lists by clinical teams with limited time.
  - Comprehensive patient, cohort and programme tracking. This supports clinical teams reviewing the effectiveness of interventions with specific patients and can help also to improve practice development; while commissioners and managers are able to look at the effectiveness of each programme as a whole, ensuring it is being operated as expected and tracking benefits on a month-by-month basis. It also enables the early adjustment and

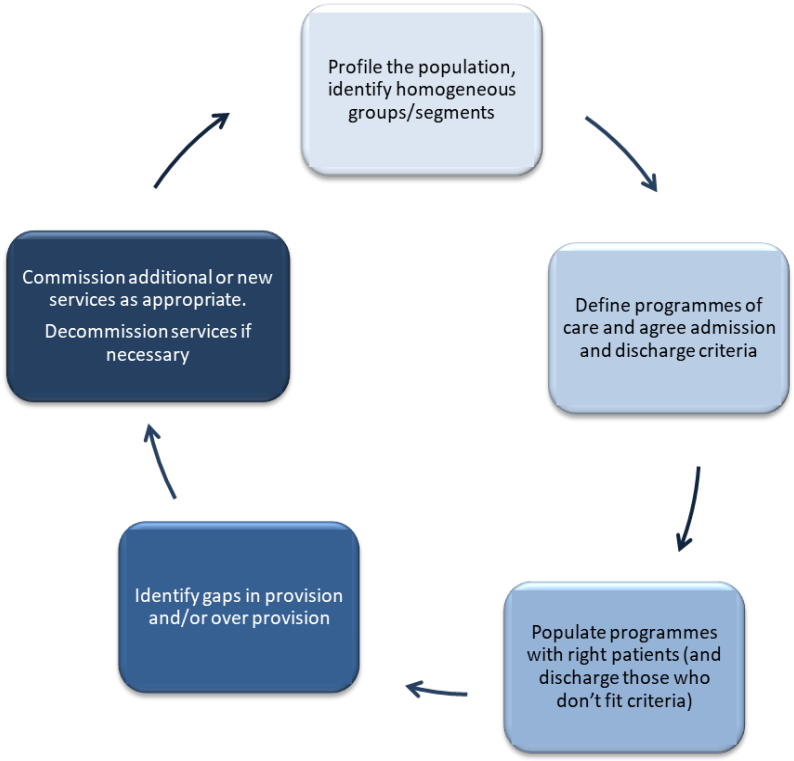
[1] NAPC https://napc.co.uk/primary-care-home/ (Segmentation matrix designed by Dr Mark Davies and Dr Steve Laitner)

[2] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690331/

improvement of programmes, should this prove necessary, as well as supporting the 'fast fail' of less successful schemes.

- Sollis Clarity™ also provides support for care coordination at both an individual patient and system level, supporting integrated teams, enabling care gaps and overdue events to be identified and underperformance to be addressed.

Matching the Right Patients to the Right Care Programme(s)



- While the reasons for the relatively limited success of risk stratification tools as a solution for admission avoidance, and for the reduction of unplanned care, have been well-rehearsed, Sollis

Clarity™ provides a range of calibrated and validated risk models for use in conjunction with segmentation and care programme delivery. This supports improved case finding and the identification of patients with rising risks and the avoidance of unexpected events. These tools align well with the requirements of the new GP contract.[3]

- The Sollis Clarity™ population health analytics platform fully integrates the Johns Hopkins HealthCare ACG® System[4]. This integration is the result of a 10 (ten) year collaboration with the world renowned Johns Hopkins University in Baltimore.
- Our offer also includes the rich experience of the Sollis team, who have been providing these services to health economies across the country for many years and can tap into a wide range of knowledge and skills from previous work carried out elsewhere. This is supplemented by the expert team at Johns Hopkins HealthCare in the UK, as well as other colleagues including health economists and statistical analysts and data scientists available through the Sollis partner network.

Sollis Clarity | Health Analytics

- Our analytics and professional services offering provides a complete solution, supporting service management and change.
- Population health analytics including:
  - Population health management (PHM)
  - Disease and multimorbidity prevalence
  - Population segmentation and patient cohort identification using multiple markers (including conditions, age/gender, deprivation, prior utilisation of health and care service, cost, drugs, local schemes, and many others)

[3] https://www.england.nhs.uk/gp/gpfv/investment/gp-contract/

[4] https://www.hopkinsacg.org/

Better Insights for Better Outcomes

Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.

- Local care registers
- Casemix-adjusted care variation and actuarial analyses, providing advanced benchmarking and detection of care outliers
- Costed opportunities for improvement
- Polypharmacy
- Advanced, flexible risk stratification[5] (multiple risk models, including emergency hospitalisation, long length of stay, high cost, mortality risk), calibrated against UK populations

Predictive Risk Models in Sollis Clarity™

Type	Description
Predicting risk of high cost	• Predicted relative total cost in the forthcoming year • Probability of a patient being in the top 5% of high cost patients in the coming year. • Predicted relative pharmacy cost in the forthcoming year • Probability of a patient being in the top 5% of high-cost pharmacy in the coming year

[5] The following risk models are available from within the Sollis Clarity™ Population Analytics Platform: Probability of emergency admission, Probability of inpatient hospitalisation in the next 6-12 months, probability of extended hospitalisation, Current cost weight, Predicted cost weight, Probability of high total cost, Probability of high pharmacy cost, Mortality risk score, Electronic Frailty Index (eFI), Risk of Falls (University of Surrey)

	• Probability of being in top 20% of high cost patients for next three 6-month (persistent high user)
Predicting risk of hospitalisation	• Probability of an emergency admission within the next 12 months • Probability of hospital admission in 6 months • Probability of hospital admission in 12 months • Probability of more than 12 days in hospital in the next 12 months. • Mortality risk score

- Fully integrated Bradford Electronic Frailty Index (EFI) – others can be added flexibly on request
- Social prescribing

- Programme design:
  - Business case development and supporting analytics
  - Benefits case analysis and development
  - Evaluation schemes

- Support, monitoring and evaluation of programmes and locally commissioned services:

  - Advanced, locally-defined case finding for clinical teams, aligned to local programme needs. Identifies candidates for local care programmes and supports clinical decision-making.
  - Support for GPs and MDTs (multi-disciplinary teams and squads, including care navigators, community nursing and social care professionals amongst others)
  - Take-up and enrolment monitoring
  - Programme adjustments
  - Benefits and impact analyses
- A range of self-service tools for local analytical teams:
  - Self-service business intelligence (BI)

Our professional service (Advisory/Consultancy) offerings include:

- Population health needs assessment (discovery)
- Opportunity analysis
- Impact assessment
- Evaluation & feedback
- Local system tailoring
- Health analytics, supporting service redesign and transformation
- Coaching, training & mentoring
- Bespoke application development services
- Information Governance (IG) advice and support through third parties

Seven Quick Wins to implementing data driven Population Health Management (PHM) Strategies

1. Match the right patients to the right care programmes
2. Focus on the very small number of patients with the highest degree of polypharmacy
3. Focus on the very small number of patients with the highest number of GP visits
4. Address multimorbidity
5. Ensure all those who would benefit from palliative/end of life care have been identified
6. Use casemix-adjusted comparisons to identify new opportunities
7. Address variation within groups with similar degrees of morbidity burden

Ref	Area of Focus	Rationale	Intervention	Benefit
1	Match the right patients to the right care programmes (see 4th slide)	• Lots of care programmes already funded • Need to make sure they are seeing the right type of people to ensure efficiency and effectiveness • Need to make sure we understand the benefits and return on investment of funded programmes	• Create list of existing care programmes and list the criteria for admission to them and discharge from them • Translate admission criteria to a case finding search • Identify suitable people for the programme and compare to list of those currently enrolled to evaluate whether the right people are enrolled	• Increased efficiency and effectiveness of care programmes that are already funded
2	Polypharmacy	• Primary care prescription costs account for about 12% of spend • About 1% of patients account for about 25% of prescription costs • Medicines management tends to focus on use of generic rather than named drugs to achieve cost savings • There are multiple pieces of evidence that addressing polypharmacy increases safety and releases cash	• Use the active ingredient count in the ACG System to identify polypharmacy • Identify everyone with a count of >14 • Provide lists of those patients to GP surgeries • Use clinical pharmacists to support GPs to undertake person-level medication reviews	• Improved safety • Reduced costs
3	Focus on the very small number of patients with the highest number of GP visits	• About 1% of patients account for about 9% of GP appointments • Need to separate out the 'needy' from the 'noisy' • The noisy patients may not need support from a clinician – they might benefit from intervention from a social prescriber for example	• Undertake segmentation analysis using GP visit count as one dimension and RUB as the second dimension • GP visit count can aggregate into 5 or 6 groups based on number of visits – 0, 1-2, 3-9, 10-19, 20-29, >30 for example • Review the 1-2% of patients who are in the highest visit groups but who are in RUB 0 or RUB 1	• Potential reduction in multiple visits from small number of patients • Release of ~5% of GP capacity • Increase patients and staff satisfaction
4	Address multimorbidity	• Multimorbidity (MM) more than any other variable drives cost and resource utilisation • There are often care programmes aimed at EOLC, cancer or management of individual diseases but not often care programmes aimed specifically at supporting people living with multiple LTCs and other issues related to SDOH	• Undertake segmentation analysis to understand impact of multimorbidity • Undertake gap analysis to see whether people with MM are having their needs met or their care adequately coordinated • Design intervention programme that could be delivered within primary care based on an existing case study	• Up to 20% reduction in emergency admission in targeted group • Reduction in polypharmacy and therefore cost savings

Ref	Area of Focus	Rationale	Intervention	Benefit
5	Palliative and end of life care	• The mortality rate nationally is about 1% • Typically palliative care registers have less than 0.5% of the local population listed on them • The use of the Mortality Risk Score (MRS) algorithm has been used in various parts of the UK to identify patients who may be nearing the end of their life but are not on the palliative care register	• Use the MRS marker to identify the 1-1.5% of people with the highest MRS • Compare this list to those already on a palliative care register • Undertake clinical review of those on MRS not on palliative care register • Make appropriate intervention with those identified who may benefit from a DNR discussion of the creation of an anticipatory care programmes	• Patient and families wishes more likely to be respected and associate improvements in quality • Reduction in unnecessary admissions to hospital
6	Use casemix-adjusted comparisons to identify new opportunities	• Traditional benchmarking techniques compare 'performance' in primary care to a CCG average • This technique does not consider differences in casemix that exist between different GP practices • Data produced by the ACG System facilitates casemix-adjusted comparisons • Casemix-adjusted comparisons seem to resonate more with GP practices than the traditional benchmarking approaches	• Casemix-adjusted comparisons between GP Practices, PCNs or even CCGs can be undertaken across a variety of measures such as emergency admission rates, ED visit rate, pharmacy costs and outpatient referrals • These measures can be used to identify opportunities that had previously not been identified using other methods and to inform discussions around service improvement	• Case-mix adjustment facilitates a much fairer method of analysing variation in activity • Highlights opportunities for reducing activity that are not apparent through traditional benchmarking approaches
7	Address variation within groups with similar degrees of morbidity burden	• ACGs are actuarial cells in which you would expect patients to have similar expected healthcare needs and therefore utilise similar amounts of resource • The reality is that there is often a four-fold variation of prior costs of patients within one of the ACGs • Some of this difference may be being driven by natural variation but some	• Analyse patients within an ACG associated with a moderate level of complexity • Look at the range of prior costs across patients assigned to that ACG or whether differences in cost are associated with a particular service – ED, emergency admissions etc • Examine whether there are other non-morbidity related factors that could be associated with the observed variation (unmet need, over-provision, deprivation, patient behaviour)	• Linked to schemes #2 and #3 but considers secondary care costs • Intervention with a small number of people may result in significant costs savings

		of it may be being driven by the healthcare system not functioning effectively or need being affected by social determinants of health	• Consider how any identified issue might be addressed in those that are costing more than twice the average cost for patients within that ACG	

The Sollis Clarity™ Population Health Analytics Platform

Available Modules

Core Modules	
Sollis Clarity™ Population Health Management (PHM) Analytics Platform	Sollis advanced population health analytics, combining GP Practice (primary care) and acute care data (SUS). Includes integrated ACG® System from Johns Hopkins HealthCare. Analytics includes: • Risk stratification • Predictive modelling • Population segmentation • Complex case management • Casemix-adjustment (actuarial analysis) • Variation analysis (case-mix adjusted) • Benchmarking & comparative analysis • Polypharmacy • High cost pharmacy • Care gaps • Over utilisation / under utilisation • Fair shares budgeting • Case Finding Population health analytics that supports the service transformation activities of a wide range of health and care organisations to include: • Sustainability and Transformation Partnerships (STPs) • Integrated Care Systems (ICS) • Integrated Care Networks (ICN) • Clinical Commissioning Groups (CCGs) • Primary Care Networks (PCN) • Primary Care Home (PCH) • GP Practices • NHS Trusts • Local Government (Public Health)

	Professional services support including: • Data management services • System training • Dedicated help desk • Local system tailoring • Clinical code listener –allowing local programmes and other populations of interest (registers) to be identified and supported. • Ad-hoc health analytics Additional risk tools and medicines optimisation tools can be integrated depending on local requirements.
Optional Modules	
Additional / Alternative Risk Models	Disease-specific risk models, alternative frailty markers, can all be included depending upon local requirements.
Medicines Analytics	Specific medicines risk/ and medicines optimisation modules can be included depending upon local requirements.
GP Data Extraction	Provides a data management service extracting primary health care data from a variety of GP Practice systems, for importing into Sollis Clarity™.
Predefined Packages	
Comprehensive Population Health and Care Analytics and Management	Fully integrated and comprehensive analytics package incorporating a selection of the above modules as required locally.
Professional Services	Population health analytics support services (including set up of local costs, specialist rules engines and advanced contracts): • Advanced Analytics Consultancy • Local system tailoring • Health analytics, supporting service redesign and transformation • Coaching, training & mentoring

	• Bespoke application development services • Information Governance (IG) advice and support (via third parties)
'Snapshot' local population health analysis	This is a professional services engagement, usually of around four (4) months, supported by the full population health analysis service. Sollis specialist consultants using Sollis Clarity™ provide new insights and opportunities to a local health economy (Sustainability & Transformation Partnerships (STP), Integrated Care Systems (ICS) Integrated Care Networks (ICN), Primary Care Network (PCN), NHS Trusts, and Public Health). Includes Sollis health and care analytics professional services plus PHM for four months. Other data modules as required.

Data Protection

Backup and Restore

Sollis takes data security and integrity very seriously and has numerous measures in place to ensure that the service provided is resilient.

The data centres we use to host the data have been approved by NHS Digital and conform to all necessary security accreditation, such as ISO 27001. These data centres are all located within the UK.

Where customers wish to deploy Sollis Clarity™ in another data centre, Sollis can advise on the necessary standards and protocols.

Data Processing and Storage Location

All data is secured in NHS Digital approved UK data centres and we work with customers to provide them with their choice of data centres. Access to this data is strictly controlled and monitored. All access to the system is via secure HSCN/N3 connections with end-to-end encryption. No data is ever shared to parties other than those named on the data sharing agreements.

Data Restoration and Service Migration

All our hosting partners offer other facilities in the event of a material degradation in the service. Disaster recovery plans are also in place internally within Sollis and with the chosen hosting partner.

Privacy by Design

Robust Information Governance is crucial to our business, so we understand how important it is to be open and clear about our use of personal data, and to comply with general data protection regulations (GDPR). Sollis may collect customer data to allow us to deliver support and maintenance agreements but we only do this with consent. We never hold any patient data processed through our software. Where Sollis acts as a data processor, a processing agreement and relevant IG support is included in our service.

Using the Service

Ordering and Invoicing Process

Sollis requires a purchase order from the customer before implementation services can begin. A Sollis account manager will also work with the customer to ensure contractual arrangements are completed to mutual satisfaction.

Invoicing can be agreed on a per customer basis, but the following is typical:

- Year 1 licence and implementation fees are invoiced quarterly in arrears.
- Data extraction services can be invoiced on agreement with the customer either in advance or in arrears.
- Further years licence fees are paid in advance at the start of each licensing year.
- Standard terms for payment are within 30 days of date of invoice.

Sollis will provide assistance in completing the order form.

The minimum term of contract is 24 months. Notice period is 6 months.

Trial services and the Snapshot Local Population Health Analysis service have a minimum term of 4 months.

Termination must be notified to Sollis in writing and is subject to the terms and conditions in the contract.

Trial Service

A demonstration site is available on request, which uses test data, allowing the core analytical services to be trialled.

The Snapshot Local Population Health Analysis service can be used as a chargeable trial service, and extended into full operational service following review, if required.

It is also possible to offer a chargeable trial service looking at smaller populations.

On-boarding Processes/Scope

As part of any new implementation, Sollis provides an implementation specialist and project manager to ensure the effective planning and roll out of the Sollis Clarity™ solution.

The Sollis project manager works collaboratively with the organisation's project team to ensure smooth planning, deployment and training. We typically use Prince 2 methodology to manage implementations, but can use other methodologies as required. Our development team uses Agile techniques for bespoke software developments.

Timescales for implementation can vary depending on the size and complexity of the project, but we have implemented smaller customers onto the core Population Health Management (PHM) service in as little as six weeks.

Implementation dependencies:

- Implementation timetables for additional data modules depend heavily upon the local provider economy.
- Implementation of advanced costing depends upon the range and complexity of the local contracting arrangements to be configured.

Implementation specialists will ensure that the solution is tested and configured to meet the requirements of the organisation. We also train end users and can also supply specialists in information governance, data analysis and service transformation depending on the requirements of the project.

Initial implementation includes standard solution training which typically follows the 'train the trainer' format although we can design bespoke courses and also offer one-to-one training and mentoring.

After the implementation is complete, Sollis will allocate an account manager to the project. The account manager will be the main business contact for the customer, while the specialists on the Sollis service desk provide day-to-day support services (see below).

Travel expenses may apply depending on the distance to travel.

Off-boarding Processes/Scope

Once a customer has taken the decision to end the agreement all data associated with the customer (e.g. patient records, historic data) will be removed from the system. Certificates stating that this deletion has happened will also be made available. All user access accounts will also be removed from the system. An option will be offered to the customer to export certain historic data items from the system (a separately chargeable fee may apply for this).

Coaching, Training and Mentoring

Coaching and training is provided as part of the initial implementation, and can be provided subsequently, throughout the duration of the agreement, upon request (a fee may apply).

The format of this standard training is train-the-trainer format. It is usually delivered on-site within facilities provided by the customer (maximum five attendees).

We can also offer bespoke training and 1:1 coaching on using the solution.

The training service includes:

- Up to 8 hours coaching and training at implementation
- Further 1:1 coaching (fees apply)
- Webinars
- User manuals and guides

Additionally our product specialists are also available via our support desk.

Service Management Details

The service desk employs specialists dedicated to issue resolution and an experienced cadre of dedicated developers are available for problem resolution. All staff are employed full time and the service desk is available to log incidents calls between the core hours or 9am- 5pm.

To ensure continuous levels of high service, we ensure the following:

- All sites are checked daily to ensure that the product is working. SUS data, HRG Grouping, GP and other data set loading and risk stratification processing are validated.
- Product specialists resolve issues as quickly as possible; but where software problems arise the development team is mobilised. Product specialists communicate with the customer and provide workarounds where available.

We also adhere to the following standards:

- All incidents are recorded on service desk software and an incident is never closed until the user has agreed successful resolution.
- All contracts with third party suppliers include support agreements.
- We perform all support and data transfer via a secure HSCN/N3 connection.
- Incidents are logged and tracked in incident management software, allowing common issues to be tracked and incident resolutions to be recorded in a separate knowledge base. This knowledge base is used to update customers during user group meetings and inform the content of future releases.

Service Levels

- The Sollis service desk is available Monday – Friday between 9am – 5pm.
- All incidents and contacts are recorded on service desk software with agreed priorities.
- Software site checked regularly to ensure product performance.
- GP and SUS data loading and risk stratification data is validated during processing.
- All contracts with third party suppliers include support agreements.
- All product support and maintenance is undertaken using a secure HSCN/N3 connection.

Our service levels for logging incidents are as follows:

- Critical – resolved with 4 hours
- High – resolved within 1 day
- Medium – resolved within 3 days
- Low – resolved within 15 days
- Non-urgent — (information) – resolved and closed within 30 days

Provision of Service

Customer Responsibilities

Implementation of Sollis Clarity™ does assume that the customer will be able to agree and implement the following items:

- Obtain secondary care (SUS) data from a DSCRO.
- Facilitate the signing and agreement of data sharing agreements and data processing agreements (general practices and other data providers).
- Customers must satisfy IG requirements such as fair processing notices and privacy impact assessments.
- Data sharing agreements, IG sign-off DSCRO for SUS data (DARS).

Technical Requirements

This section refers to service dependencies and detailed technical interfaces, e.g. client side requirements, bandwidth/latency requirements and so on.

All consumers of the service must have connections to the HSCN/N3 network with appropriate bandwidth to allow all the users in each location access an interactive web application.

Sollis recommends:

- 5 Mbps for GP practices
- 10 Mbps for CCGs, PCNs, PCH, STPs, ICSs and equivalent

Web Browsers

To achieve some reporting functionality, Sollis Clarity™ requires either Internet Explorer v10 and above, or Chrome v21 and above.

Note that Sollis Clarity™ reports can be used with older browsers but the functionality and user experience will be limited.

Outcomes/Deliverables

Purchasing this service will provide the following deliverables:

- Access to the purchased software
- Training and coaching for users, providing the ability to case find and analyse their health and care data
- Access to Sollis professional services supporting transformation and health care improvement.

Access to the purchased software is available with users trained to analyse their health and care data. Access to Sollis professional services supporting transformation and health care improvement is also provided.

Termination Terms

Termination occurs at the end of a contracted service. If the customer does not opt to renew, then on the date of termination:

- All customer data is deleted from the service, and deletion from backup will commence.
- If the solution has been deployed at a specific hosting partner at the customer request, all copies of Sollis Clarity™ software are deleted from that environment and deletion from backups will begin.
- Certificates of destruction will be provided in both of the above cases.
- All data sharing agreements end and no additional data transfers occur.
- Outstanding support calls are closed.
- Ongoing consultancy assignments delivered through the contracted service are ended.

Our Experience

Case Studies

A wide range of case studies are available from the Sollis website www.sollis.co.uk

The following are a few examples of the type of work we are involved in.

A number of case studies are available for download from the Sollis website at https://www.sollis.co.uk. They include:

- Slough CCG
  https://www.sollis.co.uk/stories/population-profiling-slough-ccg/
- Wandsworth CCG
  https://www.sollis.co.uk/stories/wandsworth-pact-case-study/
- Surrey Heartlands CCG (East Surrey)
  - https://www.sollis.co.uk/sollis-insights/relationship-frailty-risk/
  - https://www.sollis.co.uk/sollis-insights/frailty-across-age-bands-cost-activity/
  - https://www.sollis.co.uk/sollis-insights/frailty-multimorbidity-patient-costs/
- Buckinghamshire, Oxfordshire and Berkshire (West) STP
  https://www.sollis.co.uk/stp-analysis/

Case Finding and Population Health Management

Sollis Clarity™ was used in Berkshire to perform population health analyses to identify disease groups and cohorts of patients that could benefit from the creation of a specialised multi-morbidity service. The insights were used by healthcare managers to design a new multimorbidity service which has delivered tangible reductions in non-elective admissions in the targeted cohort. Elsewhere in the South East and London, Sollis Clarity™ has been used to support practices in case finding activities for MDT initiatives, identifying impactible population cohorts for programmes of care as well as operationally supporting initiatives aimed at reducing the burden on urgent care.

Furthermore, population health analytics combined with our case finding application has been used to support a number of local commissioned services around dementia, high cost patients, asthma, COPD and frequent attenders, care homes, primary care variation, falls and bones health. CCGs have

also used the tools to monitor uptake of initiatives by practices, ensuring that any benefits of any programmes can be measured and reported.

Integrated Care Partnership (ICP) in Brent

Sollis provided evidence to make the business case for establishing an Integrated Care Partnership (ICP) to drive new integrated ways of working between Primary and Community Care in Brent. Whole systems data was cleaned, validated and analysed using the Sollis Clarity™ Analytics population health analytics platform which includes the Johns Hopkins ACG system. The actuarial basis of ACGs enabled case-mix adjusted benchmarking of Brent GP practices with each other and with peer care economies to identify opportunity based on variations in outcome and cost; combining insights from the data analysis with stakeholder interviews and cross-system redesign workshops allowed us to identify an opportunity to extend and enhance proactive community care services and reduce urgent and emergency care demand as a result.

The work helped move the clinical focus 'upstream' in the journey of need, highlighting patients in the middle tier of the Kaiser pyramid with indications of rising risk as the greatest opportunity. The analysis provided clear population health evidence for the opportunities identified and provided broad assessments of service need to shape reinvestment profiles. The business-case for establishment of an ICP and implementation of a Population Health Management (PHM) approach to governance and assurance in Brent was unanimously approved at CCG governing body.

Population Health Analytics in Medway

Sollis delivered a population health assessment to support GE Healthcare Partners work in Medway to understand the future demand and capacity requirements for the Medway care system. Data from the Kent Integrated Dataset (KID) was cleaned, validated and analysed using the Sollis Clarity™ population health analytics platform which includes the Johns Hopkins ACG system. The actuarial basis of ACGs enabled case-mix adjusted benchmarking of Medway GP practices with each other and with peer care economies to identify opportunity based on variations in outcome and cost. The analytical insights triangulated with stakeholder views to provide clear evidence that a cohort of younger, fitter multi-morbid patients living in deprived areas and close to the hospital were driving an 'overheat' in urgent and emergency care which had pushed the system and its acute provider out of balance.

The work helped evidence that the Medway system needed to be a different shape and needed to find an answer to the challenge of delivering preventive and proactive care services into

disadvantaged populations that routinely bypass primary care and enter the care system through urgent care and A&E access. The work set out a shared challenge and brought stakeholders together behind the need for a joint solution – moving the focus away from historical disputes and challenges and building greater trust between partners across the care system.

Clients

Client names and references can be provided upon request.

Contact Details

For further information on Sollis Clarity™ please call us on: 01372 847 525.

Or email us at: sollis@sollis.co.uk

www.sollis.co.uk

Better Insights for Better Outcomes

Expert people and advanced health analytics reveal insights from complex data that enables you to make better decisions for the patients and populations you serve.