Integrated Healthcare Properties

OPTIMISE

POWERED BY BI

DEVELOPED BY IHP

# Product Specification

# Index

## Core Optimise Software and Support Specification



### Part A – The Software Specification



### Part B – The Support Service Specification

## 1. Core Optimise Software and Support Specification

### 1.1 Overview

Core Optimise makes accessible, tailored data required to plan, make, manage and deliver evidenced estates decisions to client selected user groups in easy-to-use Dashboards.

The Core product offer comprises two elements specified here:

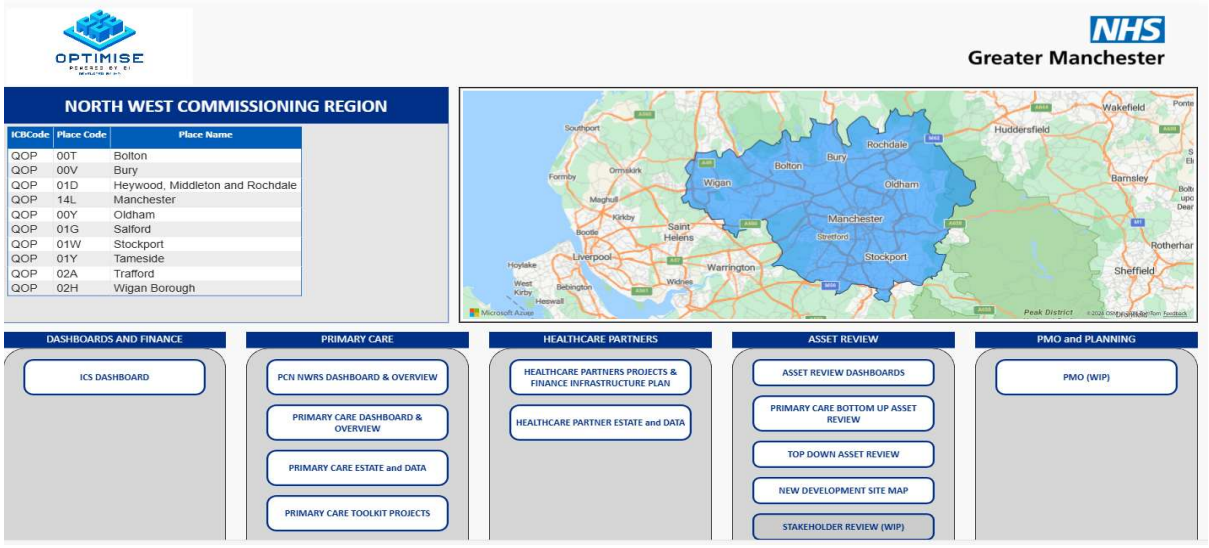
a. The actual software comprising data sources, dashboards and functionality
b. The support package to populate, establish, train and support the client to make it operational

The Core product offer is a national standard designed for all client to these principles:

a. The software and support package being delivered is at a level where IHP within contract will provide the client operationally with a maintained PCN Toolkit and related PCN projects-capacity model, support Clients-Places-SEGs with relevant decision-making data including non-PC site data where available, and give clients tools to identify opportunities to increase utilisation and co-ordinate forward planning
b. The Core software represents a very solid foundation base for the client through its design of structured data and functionality. That design allows seamless future additions and adaptations by the client, important as new data sources and VfM applications are recognised. Those future applications will benefit from the multiple sources already and accessible on Optimise.

To confirm, the contract being entered into is for these Core elements only, and for the ability for the client, at its discretion, to make it central to its estates information and process design it in the future. That work is out of scope within the current contract.

**Viewing the software**




*The above is the landing page. There are 52 dashboards in total within the sub-categories.*

### 1.2 The Software Specification

It is as presented in this specification. The software uses Microsoft Power BI, chosen as it can handle the data volumes, is visual and expandable, and currently in use within the client for any in-housing or interoperability applications with other client or external systems

#### 1.2.1 Data Sources

Optimise today accesses 8 different data sources as shown in table 1 below, which in turn feeds (section 1.3.1) 52 user Core Dashboards and (section 1.3.2) 8 administrative data quality control dashboards and reports.

Brining those sources into a single accessible visual and intuitive system represents a move from Siloed working and a situation where the client did not have ready access, and in many cases, to its own data when it was making decisions. This can be viewed across four areas, detailed in table 1:

a. *Improving useable access to client data currently held on national databases*

   There is substantive data held on PC activities and non-PC sites on NHS Digital and SHAPE/PCDG. Instead of having to go into those systems the relevant information is put onto Optimise. This data is being further enhanced by Optimise's DQP processes and location matching so that Places can have more confidence in the data they are reviewing.

b. *Improving access to client needed data held on/and for other organisation systems*

   The CHP data on Optimise around voids, bookable and underutilised assets is key to support a strategy of identifying space available, or that could be made available within LIFT buildings. In the longer term adding other sources such as NHSPS, LG and Atamis would yield VfM.

c. *Client 'own' data held on its own servers but siloed for applications*

   Client 'own data' is the largest winner allowing integrated access of this data with other sources to improve decision making efficiently. Immediate areas added were Toolkit ARRS-Capacity model, Projects and utilisation metrics of branch-main sites. It also reduces client data loss when staff take other roles creating void in corporate knowledge.

d. *Potential new 'own' client generated data from Optimise largely on pre-PID applications*

   Optimise will generate new client information if enabled, specifically the semi-automation of pe-PIDs for projects and site utilisation planning. This can be extended to other areas allowing for greater efficiency in the future, for example responding quickly to NHSE project funding requests

Table 1: Data Sources for Core Optimise Dashboards

| Data Source | Data Source Updated & Refreshed | Dataset Description | ICB Externally held and Internal Data Source data per annum used | % | New data linkages generated by Optimise for PMO, SEG reporting and Core Asset Review |
|---|---|---|---|---|---|
| **NHS Digital** | Monthly | All GP Primary Care Branch Addresses including active status data | 19,347 | | |
| NHS Digital | Monthly | All Primary Care Networks, Addresses and including active status data | 10,288 | | |
| NHS Digital | Monthly | All Primary Care Core Partners (GP Practice Codes) including active status data and linked to PCN | 34,841 | | |
| NHS Digital | Monthly | All GP Primary Care Practice Addresses including active status data | 23,170 | | |
| NHS Digital | Annually | All NHS Trust Site Estate ata as part of the annual ERIC Returns | 2,103 | | |
| NHS Digital | Annually | All NHS Trust data as part of the annual ERIC Returns | 1,060 | | |
| NHS Digital | Monthly | All active GP practice workforce demographic data and patient list size data | 1,449,605 | | |
| NHS Digital | Monthly | All active high level GP practice workforce demographic data | 1,440,045 | | |
| NHS Digital | Monthly | NHS Digital GP Practice data quality report from NWRS monthly returns on workforce data | 80,218 | | |
| NHS Digital | Quarterly | NHS Digital PCN data quality report from NWRS monthly returns on workforce data | 60,442 | | |
| NHS Digital | Monthly | GM NHSPS related properties with addresses | 54,144 | | |
| NHS Digital | Monthly | All NHS Trusts including address and active status data | 2,470 | | |
| NHS Digital | Monthly | All NHS Trusts Sites including address and active status data | 419,730 | | |
| NHS Digital | Monthly | All NHS Treatment centres including address and active status data | 2,600 | | |
| | | | **3,600,063** | **88%** | |
| **CHP** | Quarterly | All CHP properties with high level Pulse and Tap data, including addressess | **20,394** | **0%** | |
| **Shape / Parrallel** | TBA with ICB | Primary Care data gathering exercise data output from Shape | **162,978** | **4%** | |
| ICB Own Data | TBA with ICB | GM 10 year snapshot of Infractsure Plan & Strategic Projects | 4,140 | | |
| ICB Own Data | TBA with ICB | GM Assets marked as Core/Flex/Tail - Partially complete | 28,601 | | |
| ICB Own Data | TBA with ICB | GM Rent Review data, partially complete (some historic out of date reference points eg CCGs) | 30,243 | | |
| ICB Own PCNT (IHP Enhanced) | TBA with ICB | Primary Care Toolkit data enhanced by the EPP Project. | 94,920 | | |
| ICB Own PCNT (IHP Enhanced) | TBA with ICB | Primary Care Toolkit data enhanced by the EPP Project. | 44,460 | | |
| ICB Own PCNT (IHP Enhanced) | TBA with ICB | Primary Care Toolkit EPP data, combined with enhanced data to be captured from ICB. | 50,402 | | |
| ICB Own PCNT (IHP Enhanced) | TBA with ICB | Primary Care Toolkit EPP data, combined with enhanced data to be captured from ICB. | 60,610 | | |
| | | | **313,376** | **8%** | |
| **Optimise** | Daily | IHP Project Management Office Data (Gannt Charts, PID Management and Project Status) | | | 4,454 |
| Optimise | Quarterly | All National Post Codes mapped to Latitude and Longtitude | | | 796,484 |
| Optimise | Quarterly | ICBs and Places mapped to local area post codes (geographical requirements) | | | 1,274,398 |
| Total | | | **4,096,811** | **100%** | **2,075,336** |

## Overview

Optimise's automated update processes populate a relational database that combines large volumes (4m) of dispersed multi-source data, then makes it accessible so it can be combined onto individual dashboards as needed to create decision-making information.

The volumes require a software solution.

The data quality plan (DQP) in the support package makes this data reliable by tackling issues in such a way that changes are updated to source data, so when extracted they are good. This also improves total system data quality.

The majority of data is from NHSD however there will be increasing amounts of ICB own data and Optimise itself will generate data if projects and core asset reviews are enabled. To enable those applications Optimise has structured the automation of over 2m data items annually so sites can be located and compared.

### 1.3 .2 Dashboards

Core Optimise contains 52 user Core Dashboards and (section 1.3.2) 8 data quality control dashboards and reports. As part of the on-boarding process those dashboards can be tailored to specific client presentation needs. Organised by expected user area of interest, makes the use more intuitive and empowers client access controls.

How dashboard design supports user applications:

- Visual Dashboards with 'click and see' abilities provide a quicker understanding of the data, a lower training requirement and their export abilities reduce team workload.
- The majority of dashboards can be filtered down from client to Place/SEG to PCN and onto individual GP practice enabling user's operating at every level within the client
- Many of the Place-SEG dashboards have similarities to presentational tables within the ICS Infrastructure Plan, and it is expected over time that their use makes ICS plans more 'live'

As the clients evolving needs, structures and sources of information change, the client has the ability to:

- Tailor the dashboards
- Add new dashboards / Remove existing dashboards
- Alter or extend the data sources for each dashboard
- Set access rights for users to specific dashboards

As part of an established Optimise system this process is much quicker and less expensive than alternatives. Some types of possible future VfM dashboard enabled opportunities are reflected in Issues and Opportunities embedded into the detailed workplan.

**The Core Optimise Dashboards**

*Note: the number shown against each Dashboard shows the number of data sources used to populate that Dashboard; the higher the number the greater the benefit of Optimise's consolidations and cross analysis to the user*

These dashboards provide the ability to see information instantly, look across the client and early indications through the Asset Reviews and PMO aspects of transformation and delivery; in the on-boarding process the linkage between different areas and applications will be discussed to tailor access and user training to client plans and benefits.

## Client Dashboard

Provides an instant overview of Primary Care estate and Non-Primary Care estate. Due to Optimise being started as the follow up stage to maintain the PCN Toolkit programme, as at today it has greater information at PC level than others.

| | | |
|---|---|---|
| Client Dashboard | Client Dashboard | 11 |

## Primary Care Dashboard Suite

| Core Primary Care - PCN Dashboards | | No. Data Sources |
|---|---|---|
| PCN NWRS and ARRS | PCN NWRS Dashboard | 4 |
| | PCN Overview and Locations | 8 |
| | PCN NWRS Overview | 4 |
| Primary Care Dashboard and Overview | Primary Care ICB Dashboard | 10 |
| | Primary Care GP Dashboard | 5 |
| | Primary Care Overview (filters) | 11 |
| | Primary Care Place Data Summaries | 9 |
| Primary Care Estate and Data | GP Estate Dashboard | 9 |
| | GP Estate Profile | 8 |
| | GP Property Tenure and Rent Review | 7 |
| | GM – GP Rent Review Data | 1 |
| | GP Estates Cost | 7 |
| | GP Practice and Branch Details | 10 |
| | GP Workforce Profile | 9 |
| | GP Current and Forecast Capacity | 8 |
| Primary Care Projects | Primary Care Project Dashboard | 1 |
| | Project Locations | 5 |
| | Optimised Projects Metric Scorecard | 6 |
| | PMO Example | 0 |
| **19 Dashboards** | **Average sources per dashboard** | **6.4** |

**Overview**

These provide an instant Primary Care estate overview and drill down ability across ICB-Place-SEG-PCN-Practice-Site and Project levels.

The key Primary Care information is found here provides an understanding of the estate, their capacity issues, and the transformational change occurring through ARRS and Projects.

Supplementary data on workforce age is included for sustainability analysis.

The Optimise data quality plan is largely focused on this area to ensure that the PCN Toolkit work is maintained over the period.

## Healthcare Partners Dashboard

| Core Healthcare Partnerrs Dashboards | | No. Data Sources |
|---|---|---|
| Healthcare Partners Finance | Capital and Inflation Dashboard | 1 |
| | Finance Infrastructure Dashboard | 1 |
| | Financial Summary (filters) | 1 |
| Healthcare Partner Estate and Data | Healthcare Estate | 2 |
| | Healthcare Estate - ACSO | 3 |
| | Healthcare Estate - CDC | 3 |
| | Healthcare Estate - ICC | 3 |
| | Healthcare Estate – CHP LiftCo | 2 |
| | Healthcare Estate - MHLD | 3 |
| | Healthcare Estate - NHSPS | 2 |
| | Healthcare Estate – NHS Trust HQ | 3 |
| | Healthcare Estate – NHS Trust Sites | 3 |
| **12 Dashboards** | **Average sources per dashboard** | **2.3** |

**Overview**

Optimise has uploaded ERIC, CHP and NHSPS data to allow provide analysis of the total NHS heath estate as is currently reported.

This allows Places-SEGs to take a comphrehensive view of managing their estate and direction of travel.

When available improved NHSPS data - ICS Trust Atlas will be uploaded as part of Core Optimise. Known gaps exist on Eric sites < 500m2 and NHSPS data in general.

## Asset Review Dashboards

| Core Asset Reviews (Application) Dashboards | | Dashboads-Reports |
|---|---|---|
| Asset Review Dashboards | Primary Care Asset Dashboard | 2 |
| | CHP (LiftCo) Asset Dashboard | 2 |
| | NHSPS Asset Dashboard | 2 |
| | NHS Trust Asset (Main Site) Dashboards | 2 |
| | NHS Trust Sites (Portfolio) Dashboards | 2 |
| | Atamis Procurement (Awaiting ICB data) | 1 |
| Primary Care Bottom Up Asset Review | Stage 1 Primary Care Asset Dashboard | 1 |
| | Stage 2 Primary Care Asset Dashboard | 1 |
| | Data export and Pre-PID reports | 1 |
| Top Down Asset Review | Stage 1 Healthcare Top Down Asset Review | 1 |
| | Stage 2 Healthcare Top Down Asset Review | 1 |
| | Data export and Pre-PID reports | 1 |
| New Dev. Site Map | New Development Site Map | 1 |
| | Data export and Pre-PID reports | 1 |
| **19 Dashboards** | | **19** |
| Stakeholder Surveys | Awaiting ICB - IHP joint design and ICB decision on implementation | NK |
| | | NK |

**Overview**

These dashboards allow the ICB-Place-SEG to quickly understand current issues of utilisation and condition of all their assets, supportive of ICS Infrastructure Plans

The tools - Bottom up,Top down and new sites enable planning option generation (pre PID) of actions to improve core asset utilisation (VfM) and how it impacts current and new projects. Planning projects move to the PMO to develop.

Potential example gains
a. Single site (tail) options to relocate to core
b. Underutilised core site - what exists in its catchment with utilisation or service pressures
c. New LG site - what could be placed here to support joint planning (and later s106)

## PMO Dashboards & Tools (with Optimise Generated Data)

There is currently one dashboard, but this may be extended post conversation with the client.

The PMO section has multiple purposes:

1. It is an overview and holding of all client projects: Active, Pipeline PCN Toolkit not active and Pipeline non-PC projects to tie into the ICS Infrastructure and other key client data sources
2. It is an overview and holding of all Pre-PID Optimise generated planning projects from the PC and Core Asset sections to targeted at VfM. Within the PMO they can be moved to active or pipeline if desired by the client or removed if no longer considered needed or viable.
3. It contains basic functionality and data to respond to NHSE requests for projects should funding become available: this however can be enhanced via out-of-scope work

## Client Responsibilities Non-Core: Future Dashboards, Tools, Reports and Data Sources

IHP is providing all the above Core Optimise and will maintain them via Part B (service support contract); anything beyond this is the responsibility of the client and should be contracted separately as an additional out of scope works. The client could also do it itself at the end of the contacted period, should they decide to take Optimise support in-house.

## Part B - Specification of the Support Service

## 1.0 Introduction & Implementation Considerations

### *1.1 Overview of service*

This one-year support service, provided by a mix of IHP specialist staff, is designed to implement and populate the client databases and dashboards, keep them updated, and support users via training, engagement, access and advice on current and if requested potential future applications.

The link and extraction, including changes to their content or structure, to the originating external data sources will be managed as part of the data management plan.

The quality of the primary care data, including NHS digital-client-PCN Toolkit capacity model updates, will be overseen by the Data Quality Plan via its 8 data dashboards and targeted human intervention and support to maintain and raise the quality of this data over the year, refreshing the PCN Toolkits on an exception, as needed basis, without repeating the PCN Toolkit programme.

Regular reporting of performance against plan is contained within the workplan.

### *1.2 Consultative and Flexible Approach to the Service Support*

The design of the support contract will be tailored to client's expression of what it seeks to obtain and when from Optimise and how it seeks users' interactions and access.

IHP has a highly structured approach to elicit, translate and deliver those client expressions within its workplan. That client direction together with an absolute need to deliver the Data Quality Plan (data on dashboards correct) and Data Management Plan (data gets onto the dashboards correctly) will be contained in the workplan to be agreed with the client and explained within this section. It is a flexible document, and the plan will be reviewed Quarterly to adjust to client priorities and changes.

### *1.3 Critical Path Timetable*

In developing the workplan Critical Path considerations do apply as Optimise cannot use data that is currently unavailable or not accessible, nor will the client wish to release Optimise across all its areas or functionality until the governance and ability to deliver is in place.

Aside from the aspects detailed below **Optimise is populated and ready to release**:

1. Ideally Optimise should be released to a small core client group from day 1 for **two months** to allow for set-up, tailoring, benefit setting, user identification and project governance establishment, before wider dispersion and user training
2. The Core Asset Review functionality is available but an effective delivery to increase utilisation on existing core assets (VfM) would be substantially improved with objective guidance from the client and involvement of both SEGs (and/or Place) and NHSPS/CHP. The timing is client driven for discussion over

the initial 2-months post an illustrative presentation to the core group. Expectation for roll out from month 4.

3. In Part A (software specification) IHP identified a number of additional data sources, currently not available, it considers would fall into Core Optimise (and be developed at IHP not client cost) which generate substantial VfM opportunities:
    a. NHSPS data set
    b. ICS Trust Atlas
    c. Artamis data interchange
    d. Stakeholder survey functionality

IHP will run small quarterly update enhancements to Core Optimise (within contract) and would incorporate those larger updates (a-d) into that profile.

## 2.0 Programme Management

The implementation and roll out of Optimise will be determined by the client, this will include what information will be released, who the user groups will be and the data access controls. IHP will provide advice, support and implement the client decision.

As part of the Optimise programme management, IHP will provide a suite of documents to support managing, reporting and governance, track activity and updating to external platforms ie the PCN Toolkit.

***A. Storybook***

The storybook has been developed to summarise what Optimise is looking to achieve by clearly outlining the scope of works, system and user benefits as well as examples of dashboard reporting. This includes the Onboarding process and supports socialising the programme with client users and partners.

***B. Workbook Plan***

The workbook plan has been developed to work at detail level with the client in achieving their goals and targets and set the direction of travel for data metrics. The workplan will be finalised once contracted with IHP, we have completed a draft version of the workplan but will need assistance from the client to complete and agree next steps, the workplan content includes the following;

- Scoping:
  IHP and client to agree if any activity identified within Issues & Opportunities, that does not fall within the standard core offer, should be considered and brought in to scope (cost and time to be agreed).
- Governance and Assurance:
  Access control for Optimise users, Data Sharing Agreements

- Timelines & Milestones:
  Timeline and milestones based on tasks and projects agreed as part of in scope activity.
- Risks & Assumptions:
  Track risks that can potentially pose issues or problems in successfully delivering the programme and ensure they are resolved quickly. Agree assumptions with the client to ensure they are valid and reasonable.
- Change Control log:
  To manage and assure any changes to in-scope core offer that requires additional delivery resource but to also manage any currently out of scope items that require additional resource and budget.
  Change Request Log will ensure that any change requests are governed through the appropriate channels with confirmation of cost, approvals and progress. Quality Plan metrics for reporting and data management

- Delivery Status reporting:
  Reporting on the progress of delivery against in scope items, with highlights of key risks (and subsequent issues), key actions, key decisions and change requests.

### *C. Data Quality Plan*

The purpose of this data quality plan is to evaluate the accuracy, completeness, and reliability of the data presented in the Optimise Data Dashboards, and to quantify the reliability and actionability of the data contained within it.

The DQP should be read with the data quality metrics, which includes identification of areas for development and improvement, with recommendations for the operational use and maintenance of the software application.

The DQP and report aim to support focused and strategic planning, contributing to the business goals and aims of the client Infrastructure Plan, primary care development plans and digital transformation, through data centric thinking supported by robust and reliable data.

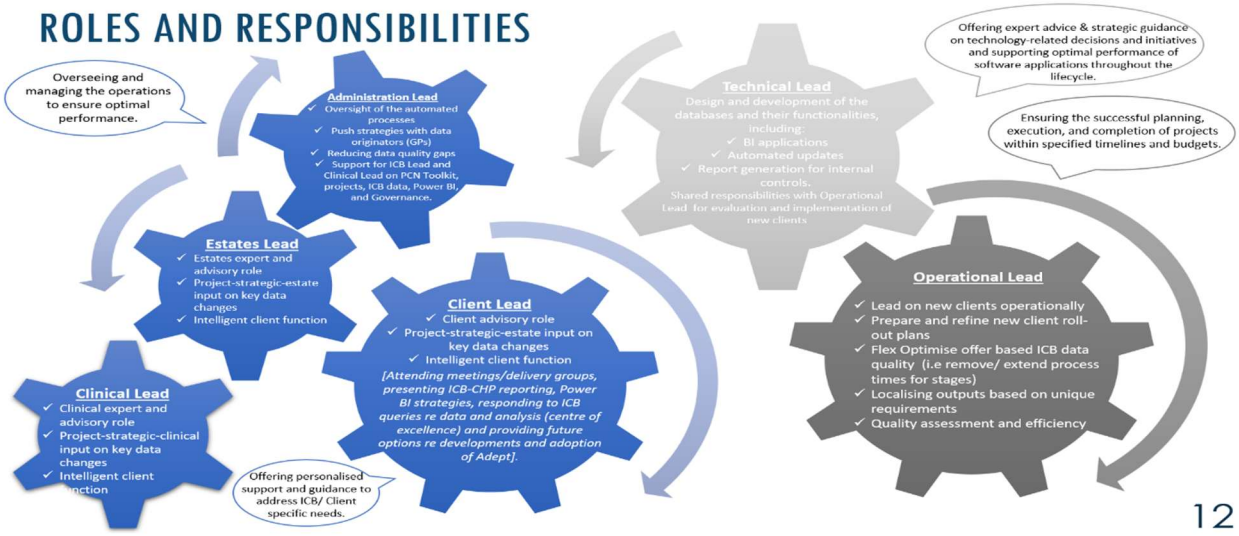
Optimise has developed information exchange requirements to extract data from these data sets into its dashboards.

Data in Optimise will be updated in response to the updating of the source datasets. For some datasets this will be a regularly scheduled update. Other datasets, particularly client Own Data, will require further discussion as to updating processes and data availability. This will include the PCN Toolkit which is currently frozen due to the impact of data updates on the utilisation modelling and accompanying narrative.

The data synthesis within Optimise comprises standard mathematical handling and presentation of data in easy-to-understand data output

## 3.0 Resource Allocation, Schedule of Payments and adjusting to changing client requirements.

The ownership of the Optimise Programme will pass to the client on signing of the 1st year support contract, IHP will not be charging any future licence fee to the client. The client has the option to bring Optimise fully in-house from year 2 or alternatively continue contracting with IHP to deliver the programme either in full or part, dependant on the client in-house resources and skills to deliver.




## 4.0 Programme Governance

The Programme will be governed according to the client's governance process, however, IHP anticipates that performance reporting and programme meetings will occur monthly with the client, this will be defined as the client supports completion of the detailed workplan.

There will be a quarterly review of any issues and opportunities that may arise through the delivery of the programme, which will impact on the client objectives, cost and forward resourcing activity position being agreed.

Within the detailed workplan, there is a governance section that will be updated to include any sign off from the client that will impact on the delivery milestones and any activity that the client has deemed to be brought into scope to support users with additional metrics and KPIs.

The detailed workplan identifies access control for specific users, this can be restricted to users based on sensitivities of the data and use thereof. Specific users can have sight

of finance and non-public available data as required by the client and data governance processes.

## 5.0 Benefits and User Groups

IHP have determined that a client can benefit from rolling out Optimise, via a system approach as follows:

### Client Benefits


+ Provides confidence in primary care information
+ Includes quality control on process and data management
+ Provides the ability to link into assets held by health care partners
+ Assists in preparation of moving to a Neighbourhoods operating model
+ Enables identification and reduction of system risk for tail estate and succession planning

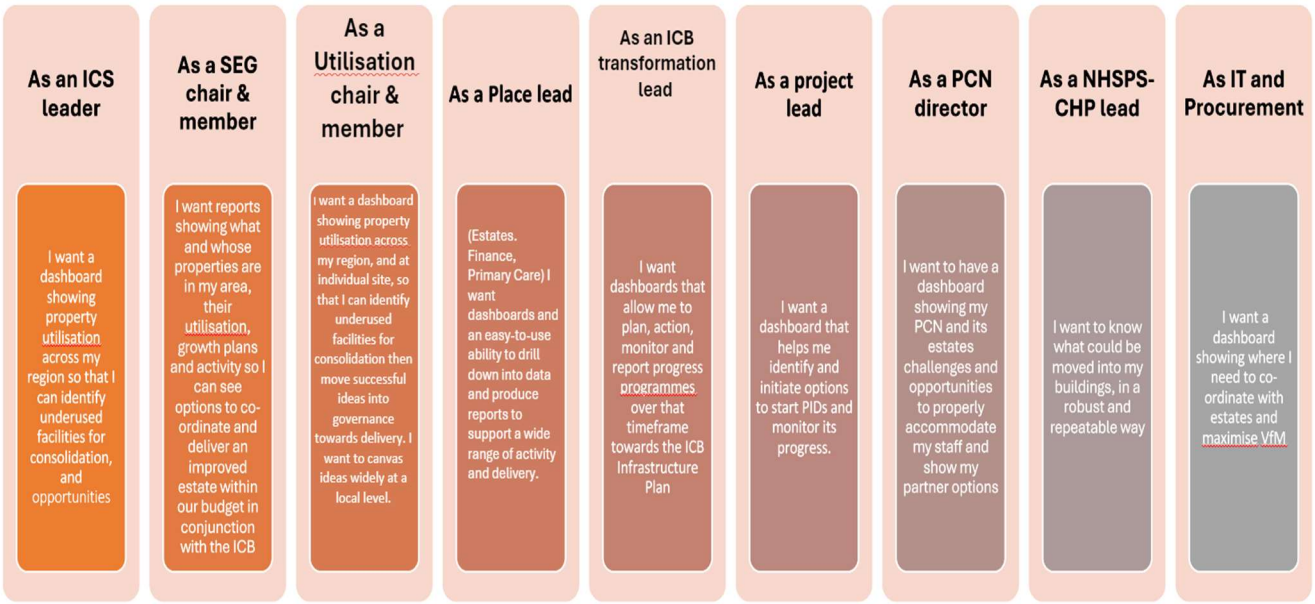
+ Enables Identification opportunities to improve NHSPS and CHP patient throughput and utilisation
+ Improves the process for reimbursable costs
+ Can reduce the cost of estate management and operation
+ Provides the ability to respond quickly to rapid changes (new funding requests, new services)
+ Data Quality plans will support updating the PCN Toolkit on an exception basis therefore reducing the annual maintenance costs of the programme.

### User Benefits


+ Keeps datasets current and amends dashboard with new data
+ Support for effective future planning
+ Annual review of project prioritisation and commitment of capital funding for immediate, medium, and long-term priorities

+ Users can build focused dashboards to support their work and tailor the analysis of dashboards as needed
+ Supports agile management with automation
+ Dashboards will provide a more economical way of reporting on ICB/Place activity

**User Group and User Stories**




## 6.0 Client Responsibilities: Non-Core Out of Scope Activities: Service Contract

Within the detailed workplan, under the Issues and Opportunities section, IHP have provided examples on how the Optimise programme can be further built upon to provide even more metrics and data management to support informed decision making. As we are looking to roll out Optimise nationally, not all clients will be in the same position and level of maturity of data to have these opportunities added to the Core In-Scope activity when entering into 1st year contract with clients. By approaching it in this way, the client has the option to bring other data sets into Optimise as and when needed.

- Examples of value adding opportunities outside the contract scope include: Live monthly utilisation modelling / Bringing in clinical sessions from Tableu / Vacant estate from LA's to incorporate into the Asset Review / Packaging funding requests to NHSE call for projects targeting Access / Savings.

To emphasise:

- Remedial Data Quality work outside Primary Care, are also outside the scope of the service contract, even if a dashboard has been created to load the data, e.g. Trust, NHSPS or CHP. It is shown as provided to Optimise and IHP are not responsible for the validation of said data.

The Workplan will confirm cost and time which will need to be agreed with the client and followed up with a contract variation, approved by the nominated budget holder.

Changes and updates to the Core Optimise software are included within this contract cost.