Making STPs happen: An Overview

The Sustainability and Transformation Plans (STPs) published to-date set out a dynamic, transformational programme for improving both quality and efficiency across health and social care. Having read through these documents, we have developed a set of guidance notes designed to help senior clinicians and managers working on STPs to move to the next phase which is to convert these exciting aims objectives and proposals into best practice, locally bespoke solutions for implementation.

We are focusing on those areas where we have specialist expertise and experience, and where we have demonstrated triple-aims outcomes over relatively short timescales. These include major STP enablers and innovations where in partnership with clients and our international collaborators we can accelerate the agenda. The key requirements for progressing STPs are illustrated here:

Guidance notes on how to move each of these forward can be accessed via the tabs on the right hand side of this document.

“Using their extensive knowledge of international healthcare models and their vast experience of UK healthcare, Conrane were able to frame a strategic outline case that described best how we can respond to the challenges of the 5 Year Forward View. The model that resulted from their work has now become the blueprint for the next step on our journey towards delivering primary care at scale.”

Sustaining primary care within accountable care
Managing Director
large GP Federation in Yorkshire 2016
Sustaining Primary Care

Sustaining primary care is a key objective within STPs. Not only do we need to address new supply challenges, we need to extend primary care within an accountable care mode. Our internationally, innovative approaches in advanced or comprehensive primary care are proving essential to whole population management and delivering triple-aims outcomes.

1. **The home for evidence-based practice.**
   This includes effective long-term conditions programmes such as the care coordination of patients with complex needs and standardisation of best practice in referral to specialist care. Effectiveness requires these programmes to be co-located in primary care.

2. **An enabling approach to primary care workforce development.**
   We need to free GP time to fulfil the role of clinical team manager and address supply challenges. So we develop the traditional GP, and nursing team-model, to include pharmacists and new support roles. These are physician and medical assistants designed to deliver the GMS and extended to long-term conditions, attached paramedics for urgent response and allied health and social work skills. This requires localised workforce redesign to ensure a more flexible working approach between practice-based and community staff to ensure better continuity for all patients and equity of access for house-bound patients.

3. **Demand and utilization management based in primary care.**
   Surveys show that 25% of current GP activity could be managed either by other staff or virtually. This requires a more integrated approach to rapid response, use of remote consultations and widening the primary care team with competent assistant practitioners.

**Key Requirements**
- Developing a local model of current workforce capacity, mapping and analysis
- Quantifying local good practice
- New roles and local team design
- Competence frameworks
- Future workforce requirement scenarios
- Preferred option via supply analysis and cost appraisal
- Premises - capacity and fit for service review and investment plan

---

Evidence-based practice
Risk adjusted capitation
Patient focus co-produced
Locality and practice-based
Workforce capacity and sustainable supply
Concurrent utilisation review and virtual working

---

www.conrane.com
Sustaining Primary Care

Advanced Primary Care: Implementation
Primary care has proved to be one of the most sustainable keystones of all high quality health and social care systems. ‘Advanced primary care ‘designed for population management can build on this success across 4 dimensions which extend the traditional GP core role.

1. Urgent Care pro-active care coordination can prevent some current urgent care demand. When it does present the immediate response at primary care level should include:
   - Deploying paramedics who are skilled in pre-admission triage accessing hospital care only where genuinely needed;
   - Rapid response service for patients not needing acute hospital referral but some short-term medical and social support in the home – available 24/7; including extended hospital at home.

2. Long-term condition management A “co-production” model using evidence-based care pathways for the management of single conditions such as diabetes, COPD, CHF and asthma needs to be delivered at primary care level with access both in the practice and the patient’s homes. This extends to services for patients with mild-to moderate mental health problems,

3. Extended provision which includes some devolved activity from the secondary hospital sector:
   - Outpatient activity which can be managed in the community (up to 30%);
   - Sub-acute and rehabilitation linked to overnight stay in locality hubs;

4. Pro-active care There are two major service components:
   - Community concurrent utilisation review which includes evidence-based practice in referral to hospital and providing a first point of contact for urgent care services and to access localised sub-acute services;
   - Care coordination of complex needs patients within a ‘co-production model’

Our project delivery
- Redesign of the, GP role and support functions mitigated major GP supply problems in SW London
- Analysis of workforce capacity and deployment show major opportunity for learning across local practices to improve virtual working and deploy nurse practitioners.
- Analysis of outpatient activity showed scope to devolve significant income to primary care with no additional work for GPs
- Current care coordination projects show a cost saving of £1000 per patient per year net of service costs for 5% of a typical CCG population
- What if tool to cost and appraise options for accountable care in a Vanguard Project
- Estates appraisal and costed development plan for primary care hubs and spokes
Improving hospital efficiency through Integrated Delivery Systems (IDS)

Common to all STPs is the need to achieve financial balance and improving patient experience with high quality services. Achieving these ‘triple-aims’ requires a whole-system approach to improving efficiency.

Creating an integrated delivery system is key to the most successful care networks internationally such as Kaiser, the Veterans Administration in the US and Clalit in Israel. These integrated systems function well (i) on about 15% fewer beds than the NHS (ii) by aligning their inpatient capacity to need as defined by levels of care. So two-thirds of beds are designated and staffed as secondary and tertiary acute with the remainder as sub-acute, rehabilitation and step-down. They are staffed and costed accordingly. These systems also provide accountable care with extensive out of hospital services, utilisation review, and comprehensive or advanced primary care.

Why is this transformational? A worked example illustrates.

An STP footprint starts with 6 local acute hospitals and one tertiary care provider with local acute. These provide 90% of local bed capacity and all are designated and staffed as acute. However the hospitals currently admit some patients who do not really need 24/7 acute care, some who do when they present but whose problems could have been prevented by more proactive care in the community, whilst they retain patients beyond their need for acute care due to delayed discharge and lack of suitable alternatives. It is also proving difficult to provide sufficient consultant cover to offer a 7 day service across 6 acute sites.

The present: 6 local acute hospitals one with a tertiary centre attached working within a loosely connected system across the STP footprint that is acknowledged to be in serious need of reform and improvement.
Improving hospital efficiency through Integrated Delivery Systems (IDS)

The STP challenge
The STP aims to reduce unscheduled acute hospital utilisation and release expenditure from current acute care through integrated care and sustainable primary care. It needs to deliver 7 day working. It may or may not have an overt aim to reduce bed capacity. At the same time, closing a current acute site would be challenging. Hence a new configuration is required.

In this example of a new configuration, which creates 2 integrated delivery systems (IDS) based on clinical networks and where bed capacity has been reduced overall by 10%. Each acute site has re-designated its beds using the 4 levels of care and staffed them accordingly. Patients are admitted against evidence-based pathways using clear admission and discharge criteria. The 4 levels are differently staffed and the costs are aligned to the intensity of care.

Of the original 6 acute sites one hospital site in the footprint has been re-designated as Primary and Acute Care system (PACS)s. Acute services include urgent care, some elective procedures and specialist outpatients. From this an accountable care hub sub-acute and rehab services can outreach to patients homes thus offering maximum continuity and whole system utilisation is managed. A large group practice offering advanced primary care is attached so that doctors can offer cover to inpatients. This is one of two hubs – the second is a multi-specialty community provider which provides easy access to the teaching hospital. The other GP practices are then linked by clinical networks to one of the hubs.

Future footprint

The future: Two Integrated delivery systems each operating a network across the STP footprint using person centred care pathways

Benefits
- Patients get the service they truly need avoiding admissions and prolonged discharge
- Services focus on what they are good at.
- Acute hospital costs fall by 20% due to capacity and staffing optimisation.
- Integrated and accountable care are a reality.
- 7-day working is deliverable through 2 clinical viable clinical networks.
- Patients are empowered and care is individualised.
- No existing acute site loses acute care.

Key enablers
- Intelligence on local utilisation patterns
- Concurrent utilisation review (UM) is the process to aligning services and capacity to patient need.
- Whole system utilisation management and pathways
- Payments based on pathways and packages of care
- Staffing to patient acuity so that costs by level of care are appropriately differentiated
- Accountable care systems
- Advanced primary care
- Sufficient capacity in the outside hospital services to balance the system
Managing emergency hospital demand through Effective Clinical Care Coordination

Unscheduled admissions have been rising steadily for 3 years. Many are elderly people. At the same timely discharge is becoming more challenging as social care funding is constrained. Acute hospitals face growing financial pressure as a result. There are also major quality issues:

1. admitting older people to hospital should be avoided and prevented where possible and
2. there is an opportunity to improve self-care and treatment concordance for people with complex needs through co-production.

Around 5-7% of the population of a typical CCG who can currently account for 20% of unscheduled admissions, could benefit from clinical care coordination. Effectiveness is concurrently monitored using triple-aims outcomes.

“Conrane are engaging with a number of partners across both commissioning and provider organisations to facilitate a collaborative approach which aided the success of the pilot. Early indications are excellent, patient and staff feedback, better medicines management and a fall in using secondary care hospital admissions, therefore we have extended the pilot for a further year.”

North Kirklees CCG 2016
Managing emergency hospital demand through Effective Clinical Care Coordination

For patients with multiple conditions and other complex needs
Most aged over 55 and often not on the caseload of current community matrons and ‘virtual wards’ they can cost health and social care 5 times the average – as follows.

To address this opportunity, Conrane-IHS supports evidence-based clinical care coordination. Holistic, pro-active and person-centred, our approach has been tested over 10 years and uses international best practice to improve patient experience and quality of life while delivering savings through reducing patient need for and use of high-cost services. The model is ‘co-production’ in practice where the patients and carers are central to the planning and implementation of their individual programmes with support from the CCC service. A recent evaluation in practice also shows a reduction in hospital usage with no increase in GP workload. The service works closely with GP practices, locality-teams, social care, the voluntary sector and the local medicines management teams.

A primary care linked model
To be effective, care coordination must work with the primary care team. The GP retains the clinical team-lead role, approving patient selection and the Care plan. GP, clinical pharmacists and care coordinators work together on medication reviews, reducing ad hoc contacts and home visits, transitioning patients to supported self-care in an average of 12 weeks, reducing GP workload and meaning that a full-time care coordinator can manage 200 patients per year.

Care coordination is a new initiative in Leicester, within its Sustainability and Transformation (STP) Planning where risk analysis shows that up to 25% of the patient population would benefit from more proactive care.

How does it work?
Key components are:
- Evidence-based and peer-reviewed
- Backed by comprehensive, supportive practitioner development
- Fully integrated at patient, primary care and locality level
- Measurable, reportable, auditable
- Cost-effective

Fragmented care is 2 to 3 times more costly than coordinated care for patients with the same case-mix (Barbara Starfield, 2012) Hence:

Patient empowerment, enhancement of experience and quality of life are key outcomes of effective care coordination

Quality gain produces productivity gain

Reduction in hospital, primary care utilisation and pharmacy costs
Managing emergency hospital demand through Effective Clinical Care Coordination

Case Study

Risk stratification in North Kirklees identified a population of patients with high needs, multiple co-morbidities and greater than average attendances and admissions to acute services. Working with Conrane IHS, they introduced a new approach that brought together the GP federation, end-of-life care provider Curo Health and community healthcare provider Locala Community Partnerships to recruit and train five nurses in a new Clinical Care Coordinator role. The two-week training programme was followed by a 3 month mentoring relationship.

Using international best practice, the methodology approaches patient care from a longer term perspective – what is likely to happen to these patients in the future, rather than what is happening to them now. This risk-focused methodology enables Clinical Care Coordinators to better manage patients living with long term illnesses such as diabetes or chronic obstructive pulmonary disease (COPD), so they are less likely to become unwell and need hospital treatment.

Clinical Care Coordinators also help to identify patients who need support to continue living at home and work with organisations such as the council and the voluntary sector to help them access this support.

First year outcomes can show a saving per patient of £1000 after the cost of the service is taken into account. A CCG with a population of 200,000 is likely to have at least 3,000 people who could benefit from this service.

Key Requirements

The role is usually a Band 6 nurse progressing to Band 7 on completion of training and mentoring programme to acquire skills in;

- Holistic care planning and contingency planning
- Patient self-management training and motivational interviewing
- Inter-disciplinary skills around long-term condition management
- Clinical assessment skills including medicines management
- Independent prescriber or in-training
- Supporting discharge and transition from hospital
- Working with nursing home staff
- Predictive modelling and effective targeting
- Reflective practice and clinical audit
Accountable care at locality level

Accountable Care Organisations (ACOs) comprise providers reconfigured as Integrated delivery systems with a strong base in comprehensive primary care and with clear accountability for quality and costs across the continuum of patient care. Payments are aligned and performance is monitored on the IHI triple-aims framework. Through care coordination, ACOs aim to reduce utilization of acute care services by improving health outcomes in clinically-excellent networks where pro-active care and out of hospital services are the predominant provisions. The key components of the most successful to-date in the US are:

- An accountable care system
- Individualised care
- Aligned incentives
- Care coordination
- Pro-active
- Needs-based planning and payments
- Performance monitoring integrated with clinical audit

[Diagram of care coordination showing levels from health need to social care, with subcategories such as admission avoidance/prevention, re-ablement, and re-habilitation.]
Accountable care at locality level

Working with Vanguards in the NHS we have developed a working model for organising and supporting accountable care at locality level. This has quantified the needs which are usually met by acute care but which can be viably provided in an AC network. This applies to both rural areas, and cities with distinct neighbourhoods and communities. At the same time there are issues of critical mass, staffing viability as well as facilities and technology requirements.

Hub and spoke approach integrates these objectives

**AC locality hub**
- Devolved 'acute'
- Sub-acute/rehab
- Concurrent whole system utilisation review
- Single point of access

**Benefits**
- Population management
- Evidence-based decision
- Locality integrated
- Manages demand
- Practices in clinical networks
- Practices retain local identity

**Spoke**
- Population management
- Evidence-based decision
- Locality integrated
- Manages demand
- Practices in clinical networks
- Practices retain local identity

**Patients homes**

**Primary care**

**Community nursing/MH/MDT**

**Care coordination**

**GP PRACTICE**
- Rapid response
- Urgent care

**GP PRACTICE**
- Assessments and interventions
Accountable care at locality level

Whole System Utilisation Review
Community-based concurrent utilisation review (ComCUR) a core component of ACOs in the US and essential to releasing significant activity and resources from hospital through integrated care. This service complements acute hospital-based CUR now common in the NHS - but pioneered by our consultants. Not only can ComCUR prevent and avoid hospital usage, it can also impact significantly on primary and community care demand:

Through pro-active care
- Managing the risk stratification process and access to the multidisciplinary team in partnership with the patients GPs;
- Pro-actively and holistically coordinates care for patients with multi-morbidity;
- Sourcing best practice in vertical long-term condition management practice;

In urgent care
- Providing a single point of access for local practices to admission avoidance services such as sub-acute beds, hospital at home, and rapid response including primary care attached paramedics;
- Coordinating with hospital CUR at point of patient discharge and for patient who presents to A and E who have established care plans and contingency plans;

In elective care
- Supporting GPs in standardising best practice in referrals using evidence-based guidelines;
- Monitoring proposed elective activity against procedures of limited clinical value as defined nationally.

By measuring and reporting triple-aims
- Manages outcomes reporting with on-site medical assistants and informatics information staff.

Benefits from recent projects
- Quantified and costed opportunity analysis
- Local stakeholder engagement to identify shared benefits
- GP support to comprehensive primary care model
- Staff plan, development and critical mass
- Options model handed to client to inform further amendment if required.
- Business case finally agreed by NHSE.
- Skills transfer, and building clients internal capacity
Sustainable Workforce Planning

Workforce is recognised as a key enabler in all STPs
Aligning workforce plans to STP objectives is one of the major challenges for the tertiary and secondary sectors. Our approach therefore extends across all services, staff groups - clinical and non-clinical - and develops quantified scenarios to inform decision making as options are considered. Key components include:

- Ensuring that staffing delivers a safe and high-quality service aligned to changing patient needs.
- The implications of 7-day working for the medical workforce
- Dovetailing workforce development with service and capacity transformation.
- The drive to improve productivity and release costs
- Securing workforce sustainability by addressing supply challenges, education and training issues.
- Developing local organisational capacity and bespoke what if modelling tools

Stage 1 Understanding our current Workforce - Situation and opportunities
Our first stage presents a clear picture of the current workforce in line with the capacity and the service. It currently delivers an overview of the need or opportunities for change in terms of:

- Situational and opportunity analysis (by staff group, grade and skill mix) for each aspect of the service covering
  - Productivity
  - Workforce supply issues including use of agency/locums
  - Scope for workforce design

Stage 2: A Consensus Workforce Plan
Our comprehensive, costed workforce plans link the workforce to capacity and workload (both current and planned) for each service.

- We work collaboratively with local professionals and apply benchmarking based on best practice and national standards.
- Each aspect of the service is staffed to meet the activity and capacity as understood by staff and managers alike.
- Staffing numbers are attuned to the specialty and case-mix of the service and are adjusted to take account of any local issues such as ward layout configuration, split-site working, etc
Sustainable Workforce Planning

We are addressing these challenges on a daily basis by drawing on our 25 years of practical innovation across the U.K. and internationally. We span acute, primary, community, mental health and social services. Our blend includes role re-design, specialist knowledge doctors, nurses, allied health staff, and extended support role redesign within multi-disciplinary and cross-boundary working approaches informed by evidence-based pathways. We also have an unsurpassed track-record in delivering improved productivity and cost release whilst enhancing the quality of care to patients.

Outputs
- Fully-costed workforce scenarios and preferred option by service, and staff group.
- Gap analysis from starting point, showing opportunities and local implementation issues such as new role designs, training, recruitment, retention
- Detailed objectives in both operational and strategic planning timeframes
- Organisational consensus through stakeholder engagement to facilitate early wins
- More effective staffing deployment including rotas, process changes and lean working
- Improvements in quality where required by the organisation and externals such as CQC
- Modelling tools bespoke to organisations and training local staff in their application
- Cost-effective supply plans tailored to local labour markets

Recent project deliverables
- Hospital in the south-east: released large saving from the nursing budget and resolved CQC concerns on quality
- A large teaching hospital in the NW: 12 weeks work produced 18% saving on staff budgets and resolved NHS E concerns on medical staff planning
- A three-site acute provider: resolved medical locum and split-site working problems. This project found £14 m in savings in 10 weeks work, whilst identifying scope to transfer posts to meet local plans for expanding out of hospital care
- Lean solutions for imaging and theatres: which addressed current process and surplus capacity issues which were driving inefficient staffing deployment and costs
- Whole-system workforce plans for Vanguards projects
- Training and mentoring cost-effective clinical care coordinators

International practice on 4 continents
Our partners include U.S accountable care experts, the World Bank, WHO, UK DfID, the United Nations Development Programme and the health authorities of Australia, New Zealand, Hong Kong and Qatar.

“Conrane have provided me with the tools and support to effectively plan the workforce in two different large organisations, both for overarching business planning and to underpin a business case for new hospitals. Their knowledge of role redesign and access to significant benchmarking data allows them to deliver a real value-added service”,
Deputy Director of Finance, Large teaching hospital
Detailed implementation planning:

Granular quantification, options and implementation programme
The STPs published to-date set out detailed objectives across the entire local health and social care provider network. The next stage of work needs to turn these into implementation programmes which realise the strategic aims over each of the years of the plan. In the first half of 2017, each footprint collaboration needs to focus on four stages of work.

Opportunity analysis which is locally evidenced
How does the local service configuration, capacity, activity, staffing and facilities in each service sector align with population need and the aims of the STP? Beginning with a data-baseline-mapping in acute, primary care, community and social care, we also need parallel intelligence on current income flows and costs for these services. We develop a scope for change analysis to quantify at the granular level, the local opportunities for change and locate any major pressures in the system which provide challenges. This also identifies local good practice to be extended across the footprint going forward.

Bespoke modelling
The next stage is to develop a modelling tool with each service sector as a component but integrated so that how changes to one sector impact on others is explicit. For example reducing emergency admissions through concurrent utilisation review is likely to require some expansion in out of hospital services, which in turn may have a knock-on effect on primary care workload. So simultaneously we need to address the demand management capacity requirements and any staffing issues in primary care. Given the range of parameters the model needs to support ‘what if’ scenarios with varied assumptions such as volume of admissions which can avoided or prevented, revenue released, workforce and process implications for the community and potential for virtual working and deployment of pharmacists, paramedics and medical assistants to support GPs. The model is designed with your finance staff to integrate into local financial systems so they can continue to serve your organization should circumstances evolve and develop over time and therefore imply refinements.

Opportunity analysis which is locally evidenced
Given the range of parameters and variables, many options could be generated. To inform decision, however, our approach should be to limit this to 3 which may be:
- A comprehensive approach that delivers all our Footprint STP objectives within the STP timeline
- A model with lower assumptions on degree and pace of change
- An interim model which is comprehensive for priority areas such as sustaining primary care and managing acute admissions, but has lower assumptions for other services such as estates investments
Detailed implementation planning:

These options contain detailed, quantified proposals including the workforce requirements, costs and anticipated revenue flows including system-wide efficiency targets. They also show the changes in cost, capacity and revenue by service sector. Examples here include opportunities for advanced primary care to offer current, funded outpatient and diagnostics closer to patients' homes. The options also quantify the efficiency gains from utilization review alongside the costs, workforce and organization implications of delivering these gains. They are subject to robust principles of economic investment appraisal including net present value for any capital investment.

Options are developed with key local stakeholders with our support on the technical side. We employ our international best-practice benchmarks whilst your team receives modelling outputs and selects the way forward. The output allows the Footprint Leadership to select a preferred option to inform specific service business cases and new contractual frameworks.

Implementation programme

The preferred option is then worked up into a year by year implementation programme. This contains early wins common to each option. Early wins are transformational changes implemented in the first two years to show early benefits. They demonstrate the value of the overall programme and cement local stakeholder support. Examples may be (i) strengthening primary care: (ii) care coordination and acute patient transitional planning: (iii) acute workforce planning: (iv) the first phases bed capacity reconfiguration for integrated delivery systems and estates optimization.

How we can help

We offer bespoke, best practice solutions by working with our clients in the short-term to build their capacity to manage the changes. Our approach is to:

- Deliver high-value impact within today's tight budgetary constraints for external support
- Work in partnership with client staff to achieve consensus-based solutions which tailor innovation to local need and drive forward change
- Build client capacity to embed learning into organisations by transferring skills and knowledge to client staff and deliver bespoke tools to model changing assumptions in capacity, activity, costs and investment over time

Our recent project experience spans:

- Developing quantified business cases for Vanguard projects - subsequently approved by NHS England
- Clinical utilization review across local hospital networks and implementation programmes which deliver the opportunities to manage demand for unscheduled care
- Workforce productivity and development planning including staff role redesign in acute and community to meet CQC quality requirements, release costs and meet supply challenges
- Integrated models of advanced primary care and locality service hubs which bespoke accountable care to local needs
Whole Population Management -using risk profiling

Whole Population risk profiling is defined as the process by which the health status of a population is measured for planning services, equitable budgeting, resource management and assessing outcomes. Risk adjustment using evidence-based informatics (such as the IRIS-ACG system) has three main applications of interest to STPs:

A. To identify individual patients and populations sub-groups who would benefit from pro-active care for long-term conditions and complex needs such as clinical care coordination and health coaching

B. To quantify levels of need for services within population levels to calibrate service planning, delivery and financing

C. To support new models of contracting such as (personal budgets), and equitable needs-weighted, risk adjusted capitation for accountable care localities, and GP practices

1. Levels of need

A1. Sub-groups in the population:

The schematic represents the sub-sets of need within the population with at least one long-term condition:

Levels of population need

- 0.5% highly complex case management towards end of life >5 times average cost
- 5% complex case management. Multi-morbidity and social need, 3–5 times average cost
- 12% condition management. Progressive/non-adherent
- Single condition management. Early-on-set and stable.

Advanced Illness Advanced care planning
Multi-disciplinary team – virtual ward/hospital at home
5% of admissions

Co-production, care coordination, proactive, patients as partners in the programme
10% of admissions

Supportive self-management through telephone coaching and assistive technology which is diagnostic specific
10% of admissions

Self-management support from primary care from find and treat programme

Advanced care planning
5% of admissions
Whole Population Management
-using risk profiling

2. Targeting services
A2. Identifying individual patients who benefit from pro-active care. IRIS-ACGs is an ideal tool for this since:
- It draws in diagnosis, risk factors, service use and cost data from primary, secondary and social care
- By far most patients the model identifies are ‘true positives’ so time is not wasted filtering out
- It is easy to use and clinically meaningful
- It derives a profile for each patient that can be used for care planning and also clinical audit
- This profile data can be aggregated for performance management

Profile of high risk patients in group (3) from a northern CCG as identified by ACGs for a care coordination project
- Mostly over 55 with heart disease, COPD, diabetes II & depression
- 3 times the average GP attendances, 2 + admits on average, prescribed 12 medications
- Cost 5 times average (£5000, versus £1000 per year)
- Utilisation consistent over 3 years, therefore there is no evidence of regression to the mean

By coordinating care and developing patient’s self-care skills for level patients a saving of £1000 per year per patient can be made. A typical CCG has 5% of its population in this sub-group.

3. Planning and financing accountable care
The prevalence of people in each sub-group will vary by locality and particularly by GP practice as IRIS-ACG data. This data not only identifies individuals who need an specific intervention it can be used for equitably distributing resource such as finance and staffing. This is shown in the bar diagram on the next page.

An Integrated Risk Intelligence System
IRIS-ACGs has been developed by Conrane's clinical and technical consultants in collaboration with Haines Informatics and Johns Hopkins. It is a user-friendly system which allows for the easy incorporation of social need data. IRIS can also deliver concurrent data to measure triple-aims outcomes
Why the need for case-mix adjustment? STP footprints developing accountable care need a budgetary process which reflects person-specific needs. This requires adjusting budgets and resource-management to account for legitimate case-mix variations between localities and practices. To derive budgets which are clinically acceptable to GPs and engage practices in constructive dialogue on resource usage, CCGs need an approach which reflects differing needs at practice level. Starting from the individual patient, IRS-ACGs differentiates the extent to which “some practices have patients sicker than others”. The bar-diagram opposite shows these case-mix variations between practices with similar age/sex and deprivation profiles.

Developing equitable budgets. This data can be used to assess need for and use of resources as in the first table. Compare practice 1 and practice 3. Practice 1 is using 26% more resources (acute hospital, pharmacy and GP visits) than the average (equals 1) for its population even after accounting for its case mix. The case-mix of practice 3 is marginally lower than average but its expenditure is only 60% of the average population with the same morbidity.

Clinically-informed resource management and benchmarking. Interestingly, practice 3, a large 10-GP health centre, appears as a relative outlier on medication costs. However by using the ACG System we can gain a deeper understanding of this resource usage. Shown as practice C in the next table, when unadjusted for case mix this practice is indeed 25% higher than the average on pharmacy costs. However, once adjusted for relative case-mix it is just under the average. Indeed it makes significantly fewer referrals to hospital out-patients indicating it is actually saving the commissioners money overall. Hence the IRIS-ACG System can inform a more clinically-meaningful discussion between CCGs and practices on resource needs and usage. Moreover, because it is person specific, ACG-based case-mix adjustment can be used by practices to manage their own internal resource usage and also for clinical audit.

Our expertise. Conrane have collaborated with Johns Hopkins University since 2005. Having conducted initial feasibility studies with Imperial College on the applicability of the ACG System in the NHS, our consultants have subsequently led deployments in a number of health communities in England. We have informatics partners who can offer a tailored solution including automatic data capture and warehousing.
Optimising the estate and facilities configuration

Most STPs recognise the estate to be a key enabler. Understanding the requirements of the people to be served and the model(s) of care to be delivered is essential in determining the optimum estates and facilities configuration.

Identifying the optimum healthcare estate & associated facilities.
This varies from improving GP practice premises to deliver advanced primary care, developing accountable care hubs or re-configuring hospital sites to deliver integrated delivery systems. Inefficient estate utilization is also an opportunity to identify potential sources of capital investment for these improvements. Not least the overarching estate configuration and its component facilities should be aligned with the STP service and clinical objectives.

The estate that accommodates healthcare services are core to STP objectives. Good design can make clinical team working more effective, improve communication and morale whilst contributing to high quality care. The working environment is a key to both patient and staff experience.

Estate planning and the business case process
Working with consultant architects, the current estate is appraised for condition, capacity and fitness for future services and new models of care. Space requirements are derived from detailed service activity and capacity plans and indeed may influence how services are to be optimally configured. The results are costed estate investment options which include any anticipated receipts from disposal of property that is surplus to service requirements.
Optimising the estate and facilities configuration

**Our approach**
Design sits at the heart of our approach – system, service, process, workforce, organisation, resources, and facilities. Good design involves dialogue - engaging all stakeholders. This has to be evidence based drawing upon analysis, research and best practice.

This process frames the scope for initial appraisal, estate and facilities strategic aims, effective reconfiguration and redesigned space that could release resources for re-use.

**The output specification underpins this process**
The output specification informs the sizing, design and organization of physical space, its fit within the estate, and how best practice clinical care and excellent service user experience are to be accommodated organized and resourced.

By bringing all of these various strands together our goal is to deliver high quality environments that secure better health, care and value for all. This underpins the business case which when approved guides the subsequent development through to implementation.

**Estate planning and the business case process**
Working with consultant architects, the current estate is appraised for condition, capacity and fitness for future services and new models of care. Space requirements are derived from detailed service activity and capacity plans and indeed may influence how services are to be optimally configured. The results are costed estate investment options which include any anticipated receipts from disposal of property that is surplus to service requirements.
**Optimising the estate and facilities configuration**

**Understanding your needs**
We recognize that our clients require solutions that are:
- Developed in collaboration with clinical experts and service users
- Based upon best practice evidence, statutory and other requirements
- Sized to accommodate the needs of the communities they serve over time
- Affordable and sustainable

**Our Services**
- We provide the following services;
  - Translating new models of care to service and facilities redesign requirements
  - Connecting activity scenarios to optimum sizing of facilities for architectural feasibility
  - Authoring Output Specifications
  - Preparing Business Cases preparation for the full variety of health and social care projects

**Our Expertise**
We have a thorough understanding of how each stage of the design development process can deliver high quality healthcare environments. Our knowledge and experience is drawn from working on projects across all sectors of care - primary, secondary, tertiary, mental health and social care - both within the UK and internationally.

**Identifying the optimum estate and facilities configuration – the process**

**The existing estate**
- 6-point survey of the existing estate
- Key Performance Indicators for the estate

**Present and future resources**
- Clinical technology
- Informatics
- Workforce planning

**The service plan**
- Future service portfolio
- Demographic change
- Future service activity scenarios
- Model(s) of care

**Income and expenditure**
- Anticipated income scenarios
- Revenue cost of option
- Assessment of financial risks and their mitigation

**The option appraisal**
1. The output specification
2. Formulation of options
3. Appraisal criteria and method including benefits realisation
4. Option appraisal
5. Selection of the preferred option
6. Risk management
7. Program and portfolio management
8. The business case
9. Approval

**Towards the future service and estate configuration**
- Blueprint for development
- Service and resource plans
- Programme management structure

**Examples of our work include**
- Preparation of estate strategies to deliver major service change in tertiary hospitals in London and the South West
- Specification and design development of two recent Vanguard Multi-specialty Community Providers
- Output specifications for award winning innovative healthcare developments
- Business Cases for all types of development
- Major projects to improve and develop primary care premises in NW England

www.conrane.com
About Conrane IHS

Conrane IHS is a group of senior health and social care consultants. Our multi-disciplinary team of over 20 experts has been at the forefront of innovation in health system development for over 15 years. We offer bespoke, best practice solutions by working with our clients in the short-term to build their capacity to manage the changes. Our approach is to:

- Deploy only specialists with extensive experience of working with the NHS and delivering demonstrable benefits
- Deliver high-value impact within today’s tight budgetary constraints for external support
- Work in partnership with client staff to achieve consensus-based solutions which tailor innovation to local need and drive forward change
- Build client capacity to embed learning into organisations by transferring skills and knowledge to client staff and deliver bespoke tools to model changing assumptions in capacity, activity, costs and investment over time

Our recent project experience spans:

- Developing business cases for Vanguard projects subsequently approved by NHS England
- A whole systems approach to managing growing demand for unscheduled hospital services
- Workforce productivity and development planning including staff role redesign in acute and community to meet CQC quality requirements, release costs and meet supply challenges
- Integrated models of advanced primary care and locality service hubs which bespoke accountable care to local needs
- Primary care staffing redesign to address emerging challenges in GP supply
- Clinical utilization review across local hospital networks to better align acute and community hospitals services to measured levels of care need in the population
- Developing evidence-based, holistic, proactive and cost-effective care coordination.