

Quality and Efficiency

Value for money lessons and performance measures from the Primary Care Reference Design Project



The Scottish
Government

SCOTTISH
FUTURES
TRUST

hub
Building better local
services together



Architecture+DesignScotland
Aithearrachd is Dealbhadh na h-Alba



Health Facilities
Scotland



Introduction

Health and Social Care is changing rapidly. Imagining new ways of working and a place that can support them is a difficult task; one that most client teams tackle just once. They do this in a context of uncertainty as people are asked to join together, setting aside barriers and territories, with financial constraints that can cause anxiety about the quality of environment expected at the end of the process. Often these teams learn in isolation from others tackling similar issues, and build solely on local experience.

This publication is intended to help client groups and their partners in their learning, and establish clear expectations in terms of the quality and affordability of the resultant proposals.

The designs and ideas on the following pages are the result of a reference design study which built upon recent good practice from across Scotland, and elsewhere, testing what could be achieved in a real context. The designs were developed through dialogue and engagement with stakeholder groups by two architecture practices who were each tasked with providing creative responses to the new service agenda. These responses had to meet the quality expectations established by Government as well as being delivered within affordability constraints. The proposals are not intended to be used as strict templates to be repeated across the country. The diversity in scale and nature of projects being commissioned would make this impracticable, even if it were desirable. The publication therefore includes:

Design Lessons : replicable ideas and elements from the designs to support briefing and appraisal of future projects.

Process Lessons : learning from the streamlined appointment procedure adopted, and the methods of engagement with stakeholders.

Performance Measures : establishing area and financial benchmarks for similar developments to aid clients in assessing value for money.

Through the careful consideration and application of such ideas, we can develop affordable facilities that meet the Quality Ambitions for NHSScotland, supporting the community now and into the future.

Content

1. The Test
2. Design Lessons
3. Process Lessons
4. Area and Cost Performance Measures

Appendices

Cost and Area Analysis of Both Designs

Acknowledgements

Guidance and Further Reading

Plans and Illustrations of the Two Developed Schemes

(cover page) GHA render of internal atrium

(far left) Workshop with stakeholders



1. The Test

The Eastwood Health and Care Centre brings together four GP practices, a range of other Health and Community Care services and the third sector into one location, in order to make more services integrated, and more accessible to the community. As a result, services will be relocating from seven existing premises into one integrated Health and Care Centre. An ambitious program of change management was being undertaken in parallel, with agile working arrangements being introduced across the Community Health and Care Partnership (CHCP) and new touch-down arrangements trialled in existing facilities.

The challenge given to the architects was to provide the accommodation needed to support these services within 6190m², accommodation that might traditionally be scoped at nearer 6600m², based on historical patterns of working and space utilisation. The client team made clear that a high quality environment was expected within defined affordability caps - a prime cost budget not exceeding £1400/m²* and lifecycle costs below £20/m²/annum over 25 years.

The designs were to be developed for a real site so BREEAM could be considered and the normal challenges of developing in a community context could inform the design. The preferred site was accessible by public transport and large enough not to dictate an unusual number of floors or a particular plan response. Changes in level and proximity to rail lines, road noise and homes provided common challenges around privacy, noise, access and response to context; including how to respectfully fit a development of this scale into an existing neighbourhood.

The two design teams - led by Building Design Partnership (BDP) and Gareth Hoskins Architects (GHA) - were each given just two months, and three ½ day sessions with stakeholders, in which to test and develop the brief and form a design response. The process was informed by around 30 stakeholders representing Patients, Carers, teams from Social Work, Mental Health, Children and Families, Occupational Therapy, Rehab, Addictions, Physiotherapy, the different GP Practices, Service Development, Estates etc. Gathered under the auspices of the Eastwood Project Board, these people were charged with ensuring the briefing and designs were grounded in a real operational context. A steering group, chaired by Scottish Futures Trust (SFT), comprising East Renfrewshire CHCP (East Renfrewshire Council and NHS Greater Glasgow & Clyde), hubCo, Health Facilities Scotland (HFS) and Architecture+Design Scotland (A+DS) brought additional learning from projects elsewhere and looked to develop elements that could inform future projects.

The resultant plans are included in the appendices and full Stage C reports are also available online (see page 39 for details). The drawings capture a point in the design development where space, circulation and use strategies are established allowing the concepts and direction to be tested. However, it should be noted that not all technical issues are fully resolved so the designs should not be simply replicated.

The following sections pull out the lessons from this process, the aspects of briefing and intelligent design that helped the propositions to meet these challenges, and the quality of environment expected. Also described are area and cost benchmarks for delivery. These benchmarks are based on the reference designs and other projects being developed nationwide to ensure they communicate a realistic and helpful reference point for future development.



(above) Stakeholder workshop

(left) Site context showing site and current distribution of existing facilities
 Google Maps. (2013). [Eastwood Dirstrict, Glasgow] [Street map]

* Cost at 4Q 2012 base date: Prime Cost refers to the total work package value for the project. This includes design development risk, Group 1 equipment and its installation plus Group 2 equipment installation only. It excludes external works, preliminaries, client contingency, overhead and profit, professional fees and Client direct costs.

2. Design Lessons

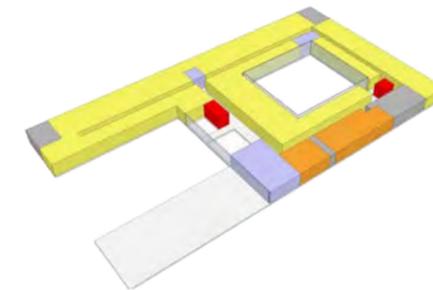


The New 'Front Door'

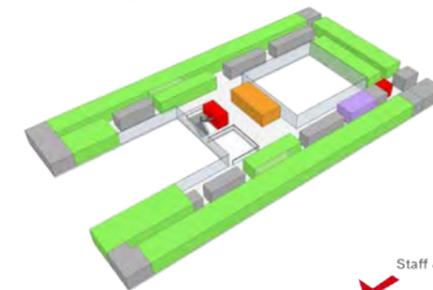
Historically there has been an assumption – supported by guidance – that GP consulting rooms should be placed on the ground floor, as close to the entrance as possible, to aid patient access. However, as GP services move out of smaller premises, and into facilities with a greater range of services, this presumption is being challenged and the advantages of bringing other services closer to the front door are being recognised.

As a result of the workshops with stakeholders, both design teams independently developed schemes that split services over three levels; placing flexible clinics and the third sector on the ground floor, GP practices on the first floor, and offices for peripatetic staff at the top. Although some GPs were initially reticent about moving from the ground floor, the benefits to both patients and their practices (see over page) soon became clear and the location was agreed. This zoning is becoming increasingly common with built examples such as Barrhead in East Renfrewshire and The Arches Centre in Belfast, that can be visited to aid learning and briefing.

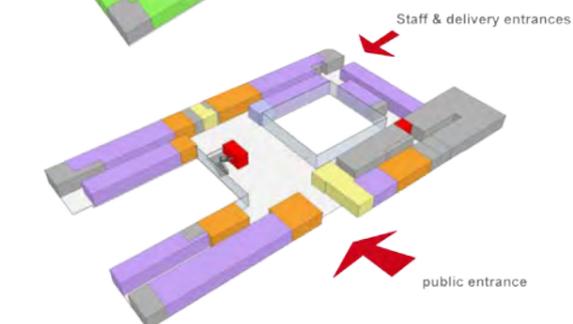
Second floor
Offices



First floor
GP practices



Ground floor
Clinical/3rd sector



(left) GHA illustration identifying zoning

(far left) GHA rendered illustration of the approach



(above) BDP illustration of the ground floor entrance

Benefits

Community Health and Care Services are likely to have greater number of potential users (patients of the GP practices within the building and others from the wider area). Bringing these services towards the 'front door' can help:

- + wayfinding for those less familiar with the facility.
- + the 'visibility' of such services in the experience of all users; increasing familiarity of the range of services on offer and providing opportunities for users to access appropriate services/initiatives on an impromptu basis.
- + increase the accessibility and use of shared rooms and spaces for various initiatives, and by the third sector and community uses during the day and out of hours.
- + GP areas feel calmer, with less through traffic, and more readily 'shut down' while other areas remain open.
- + increase privacy in GP consulting areas, especially on upper floors with windows above external pedestrian routes increasing daylight and views out.
- + potentially bring GP areas closer to staff offices increasing the viability of shared staff resources (working spaces, rest areas, library) and creating opportunities for developing a shared experience and ethos.

Design Watch Points

- 👁️ Zone building into three use areas:
 - Shared services zone (clinics and bookable spaces) closest to the entrance
 - GP areas visible and easily accessible from entrance area
 - Staff areas furthest from entrance, with quick connections to shared zone and GP areas

Depending on the scale and nature of the facility this zoning could be horizontal or vertical.
- 👁️ Shared meeting areas, Group rooms and Physiotherapy gym sized for multiple uses, clustered around the central circulation hub, to minimise walking distances and ideally with ability to be opened into main space for flexibility of use.
- 👁️ Careful planning of routes and views to the GP areas are needed to make access clear and easy – GP areas should not feel distant or disconnected. Floor voids and clear/attractive stairs and lifts are sound investments in aiding connectivity, an escalator may be appropriate in some circumstances.
- 👁️ Careful planning of waiting areas at ground floor is needed to offer privacy for service users where needed.
- 👁️ Egress from upper floor for those with impaired mobility - both by stretcher (medical evacuation) and in event of fire – requires careful planning.



(above) GHA ground floor highlighting areas for community use

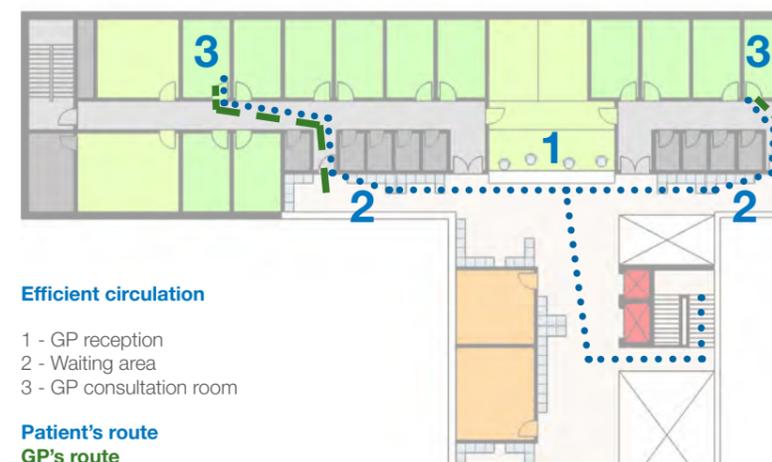
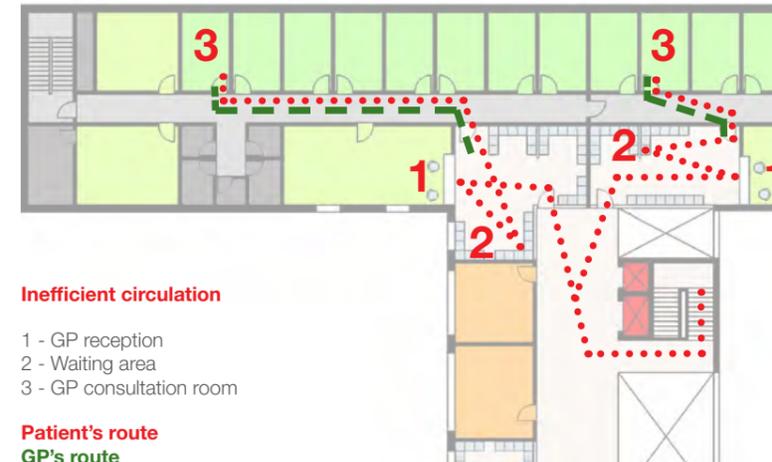


Efficient Patient Circulation

As we bring services together we increase the number of consulting rooms, which in turn increases the length of walk needed to get to them.

Traditional planning of GP areas places reception as the 'gatekeeper' to the routes to consulting rooms, meaning that patients wait distant from consulting areas, often 'doubling back' to the waiting area after reporting to reception. The walk from the waiting area to a consulting room can be the sum of the length of the waiting area, the route past reception, then the full length of the GP corridor.

This is both inconvenient for patients and inefficient, particularly as it lengthens the time taken for patients to walk from waiting to consulting (stage 3 of the diagram below). As the scale of the facilities grow, new circulation diagrams are needed that are built around the patient journey, making access easy and pleasant whilst maintaining observation of patient routes from reception points.



(far left) The Arches Centre atrium in Belfast by Penoyre and Prasad



(above) GHA render of public atrium space at first floor level

Benefits

Managing security around a more direct patient flow, where each stage of the journey takes you closer to consulting, and breaking that journey into short steps within an attractive shared space, improves:

- + access, especially for people with impaired mobility.
- + minimising transfer times from waiting to consulting, reducing down-time between appointments and increasing opportunities for staff to collect patients in person, a service valued by patients.
- + minimising patient use of corridors, and the monotonous experience of many access corridors.
- + the quality of environment when waiting, with good visual connection to receptions to feel secure and not forgotten, and greater opportunities for personal choice and visual interest (compared to being in individual waiting rooms).

Design Watch Points

- 👁️ Good visual connection from entrance space to GP areas to make route clear and the services feel close and accessible.
- 👁️ Vertical circulation positioned in clear view of entrance and centrally so that 'doubling back' is minimised.
- 👁️ Reception areas of all GPs equally prominent and accessible from vertical circulation, the journey from stair/lift to reception should be short and clear.
- 👁️ Distributed waiting areas which allow people to continue journey towards consulting rooms after reception, complimented by more central areas for use by all services.
- 👁️ Visibility, from reception/admin areas, of all routes used by public: approach to reception, waiting areas, access points to GP corridor and along GP corridor.
- 👁️ Seating that is arranged in small groups, to allow privacy and personal space, which have good day-lighting and from which there are interesting views.
- 👁️ Flexibility of routes from consulting rooms to waiting areas, to allow clinic/practice size to vary.



(above) North Croydon Medical Centre, Surrey, by Allford Hall Monaghan Morris Architects. Photographer: Timothy Soar.
(below) New Stobhill hospital by Reich and Hall





Changing Working Modes

One of the biggest anxieties of all stakeholder groups is what their working environment will be like. Dedicated desks and offices can no longer be provided for staff who spend much of their time elsewhere. They fear huge 'call-centre' style open plan offices, with no character, poor acoustics and little privacy for the sensitive calls.

Traditionally, office space was designed around desk based functions. However, modern office design needs to understand the reasons staff come into the office and the variety of tasks they undertake while there. With increasing IT capacity, our desktop can be with us on the move so office time is less about typing – though that is still an important part – but increasingly about meetings, catching up with colleagues, developing one's learning and carrying out sensitive tasks that cannot be done elsewhere. Collaboration space, social space, and quiet space, therefore becomes more important than a dedicated desk.

A recent SFT study 'What can we do with the office?' is available to help clients in developing a workplace strategy and includes case studies and benchmarks for office design including likely desk ratios for different working patterns from 8:10 for many areas, to 5:10 or lower for field workers.

The briefing for the reference design was based on this shift in working methods. Touch down spaces were being trialled across the CHCP in parallel with this project; the learning from which would inform the furniture and fit-out specification. Whilst the layouts developed would not give every staff member a dedicated desk, they could – if needed – provide staff with a place to sit and work through the use of meeting areas, learning and social areas etc. The variety of spaces provided in each design made them far richer working environments than could be achieved with an expanse of desks, and offered choice in the type of place you can work; from café style to quiet corner booth.

(far left) GHA render of office environment with mixed formal/informal spaces for working



Benefits

Creating a variety of formal and informal office spaces that are shared among staff, helps:

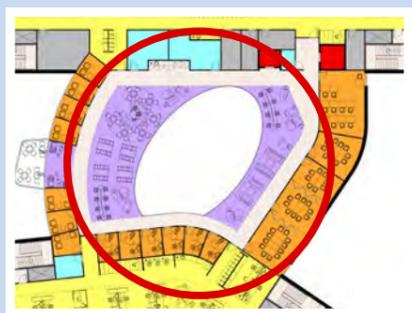
- + create flexibility to accommodate new and more mobile work patterns and for teams to change and grow over time.
- + provide good quality spaces for collaboration, away from the desk, and retreat spaces for quick conversations or more sensitive calls: these spaces being available for use by all staff, not just those with seniority. Such areas become particularly important as occupational densities increase.
- + offer choice in location to suit the day's schedule of activities, and a range of space types to allow for personal preferences (as opposed to providing own space to be personalised) and places for staff to get away from their normal working environment.
- + ensure resources are not wasted; building, heating and lighting largely unoccupied spaces, but instead are put into providing a positive working environment for staff.
- + reduce territoriality and increase opportunities for people from different team/disciplines to meet and talk on a social/impromptu basis – helping build a shared ethos.
- + provide opportunities, over time, to allow GPs to learn/work away from consulting rooms, freeing up additional consulting sessions.

Design Watch Points

- 👁️ Open plan desk areas with groupings of different sizes, good daylighting and views. These should be positioned so that there is no through traffic from external visitors, though routes for staff within the facility can helpfully go through office areas. The design of furniture, work spaces, storage areas etc. are hugely important in making these areas feel pleasant places to work.
- 👁️ Hot-desking drop-ins are provided as zones within appropriate public areas (such as café and information zones) and within staff areas such as the library, rest room etc., rather than as a dedicated space. IT must support this working in a variety of areas.
- 👁️ Meeting rooms and booths in a range of sizes, easily accessible by all staff. Ideally, meeting rooms should be designed to be combined and divided for a range of functions and occasions, including larger gatherings and initiatives for staff, which can also help cope with peak occupancy levels.
- 👁️ A centralised staff rest area is beneficial to encourage use by all, particularly if integrated into general shared areas with meeting and informal working spaces allowing greater variety and quality of space. These need to be supported by satellite tea preparation in working departments.
- 👁️ IT infrastructure to enable flexible and mobile working patterns.

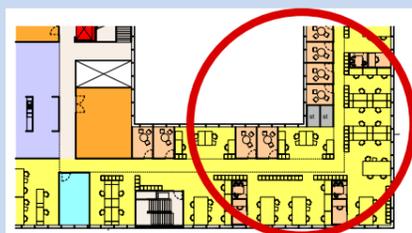
(above) BDP illustration of open plan cafe next to offices to promote informal collaboration

(below) Dundee City Council offices by Reiach and Hall. Image from "What can we do with the office?"



(above) BDP second floor plan highlighting potential for socialising and informal collaboration (purple)

(below) GHA second floor plan highlighting flexible work environments (yellow: formal working space; light orange informal breakout working spaces)





Flexibility and Space Efficiency

All services have peaks and troughs in demand and spaces they need, but not all the time. If we plan for peak need within each department then most of the time there will be empty spaces; spaces that still cost money to heat and maintain, reducing finances for other things.

Improving space utilisation, therefore, improves value for money as the same service can be provided from a building that has a lower construction and running cost. Achieving this relies on a few simple principles:

- Commonality of design: developing room layouts that allow as many uses as possible rather than rooms that suit only one function or person.
- Integrated circulation: ensuring as many spaces as possible are accessible to all services.
- Long term thinking: laying out the building to allow the number of consulting spaces used by any one service or practice to flex over time without structural alterations.

Whilst room layouts were not developed in any great detail in the reference design the above basic principles were adopted. Standard room layouts have also been used in recent projects in Lanarkshire and across NHS Greater Glasgow and Clyde. The learning from these, and others, should be available after the projects are complete.

Some projects, such as Kentish Town Health Centre, have included bookable GP consulting rooms; augmenting the office space to allow admin tasks to be carried out elsewhere, freeing the consulting room for other doctors. This reduces the total number of rooms needed per consult, and total build area. Though this was not universally adopted in the brief from stakeholders, some consulting rooms are intended to be bookable. The reference design plans could allow this use pattern to be extended, increasing the capacity of the building.



(above) GHA render of ground floor showing shared waiting areas for peak occupancy

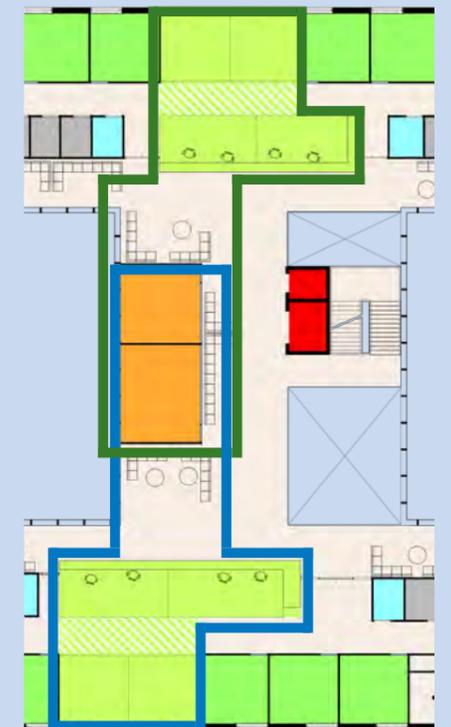
Benefits

Placing space and functions so that they can be used by a number of groups both initially and in the longer term helps:

- + reduce the total build area needed without reducing room areas or functionality,
- + increase the range of resources that can viably be made available to any one service,
- + provide flexibility to deal with unexpected peak occupancies or accommodate special events and initiatives,
- + create greater co-ordinated working, and provides opportunities for informal discussion and collaboration between different GP services,
- + prevent barriers to adaptation in the longer term,
- + ensure investment in these service providing spaces benefits as many service users as possible.

Design Watch Points

- 👁️ Layouts which minimise provision of dedicated “departments” and maximises opportunities for flexible sessional use of all service delivery rooms.
- 👁️ Rooms for general sessional use grouped and served by a shared reception with a mix of clinical and interview rooms and operable in a range of clinic sizes.
- 👁️ Centralised waiting areas that provide ‘overflow’ space for patients at peak times.
- 👁️ Some sessional space may be helpfully located at the front-end of GP practices to offer GP flexibility. Careful planning and agreement on reception arrangements would be needed with practices.
- 👁️ GP Treatment Rooms banked between practices to allow flexibility for temporary extended use for flu-clinics etc.
- 👁️ Adjacent location of receptions for sharing of resources and for long term flexibility. This should be the norm where services are adjacent to allow ease of adaptability, and where sharing is not initially practicable.
- 👁️ Shared ‘back of house’ resources like staff toilets, tea preparation areas.



(above) GHA first floor plan highlighting shared reception spaces, waiting areas and resources



Room for Reduction?

In addition to using rooms more efficiently, so that fewer rooms may be needed, there are times when the size of rooms can be reduced. The reference design schemes used consulting rooms and treatment rooms of around 15m² each. The consulting room's size was based on previous work carried out by NHS Lanarkshire, where a standard layout was agreed with local stakeholders within a 14.7m² footprint. These rooms were not tested in detail in this project as the area falls within guidance, rather than below it.

As section 4, 'Improving Area Efficiency' explains, Clinical rooms form 20-30% of the overall space. Shaving space off these - potentially impacting functionality - was not seen as effective as reducing circulation and support spaces, and increasing occupation rates, as described above. However, there were a few areas where it was felt that, with a bit of lateral thinking, room areas could be significantly reduced without impacting functionality.

Over the lifespan of the facility it is much more economical to move to electronic records than to build and rent space for paper record storage. The cost of scanning records for 4 practices was estimated at around £70,000. Reducing the build area by 60m² (15m² per practice for records) would save circa £135,000 in construction costs and around £375,000 in the unitary charge over 25 years (based on £250/m²/annum*) before considering reductions in cleaning and equipment costs etc. Currently, GP practices would generally have to meet the scanning cost themselves, whereas they are reimbursed accommodation. This can be a bar to realising the saving so a mechanism is needed, either centrally or within the project, in order to 'spend to save'.

Areas that are often squeezed are the public spaces, being seen as overheads rather than as potential venues for services. With the increased concentration on health promotion, the social aspects of well-being, and integration of the third sector, reducing these could have a detrimental impact on how new initiatives can use the facility. Furthermore, as more services are brought into one place, the spaces between the rooms become busier. It is therefore important that they are designed so that people can find some personal space, privacy and comfort in them.

* Indicative for illustration

(far left) Pulross Intermediate Healthcare Centre, London, by Penoyre and Prasad



(above) GHA render of courtyard space

Benefits

Reducing areas such as record stores, whilst defending soft areas (waiting spaces), provides:

- + reduction in overall footprint without reducing functionality,
- + spaces for new service modes and initiatives,
- + space for partners and the third sector, increasing the use of the facility, familiarity and the sense of public ownership,
- + spaces for social support and interaction - increasingly important for wellbeing.

This ensures that the investment is focused on supporting effective service provision, rather than building ancillary space, maximising the benefits to the service users.

Design Watch Points

- 👁 Seating arranged in groupings (rather than rows) to give defensible space and privacy within larger areas and smaller areas of seating away from the general space.
- 👁 Public areas with venues for accessing information through IT and other means.
- 👁 Public areas with space for 3rd sector stalls and flexibility for out of hours use.
- 👁 External areas designed to provide additional service opportunities for physio/children's services/3rd sector and promotion events, rather than as unusable lightwells.
- 👁 Large rooms such as physio gym and meeting rooms provided centrally to allow out of hours use.
- 👁 Dedicated Physiotherapy space can be reduced if it is co-located with suitably equipped bookable consulting rooms (rather than placing all plinths in a single area and reducing occupancy for reasons of privacy).



(above) Maggie's Cancer Caring Centre, London, by Rogers Stirk Harbour + Partners

(below) Grouped office seating with electronic records, Renfrew, by Holmes Miller



*“The process of engaging competing architects up to Stage C worked extremely well and helped accelerate the design process whilst focussing on design quality. It also helped users understand the options available and commit to the successful approach. **As a quality-led approach to developing design solutions the process worked extremely well.**”*

John Donnelly, NHS GG&C Capital Planning

“Working with the various stakeholders on the Reference Design was not only enlightening but highly rewarding. Initially protective of their individual needs, through a series of interactive workshops, their shared experience resulted in a far more interesting, efficient and integrated solution.”

Colin Allan, Director, BDP

‘The process brought together a wide range of staff groups, managers and users in a focused manner that is not often used in public projects, providing a focused forum for discussion across these varied groups. The intense workshop process - our preferred way of working - demonstrated the value that an iterative design approach can bring to exploring alternate ways of working and the types of place needed to support the public and the staff providing these services. It also demonstrated the clarity and level of ‘buy-in’ that focused ‘design and review’ can bring to the engagement of stakeholders, and to the efficiency of developing solutions.’

Gareth Hoskins, Director, Gareth Hoskins Architects

*“I found the process enlightening, informative and interesting - it seemed the architects had a real desire to understand how GPs work, and how the design of the building could complement this whilst providing a positive experience for patients and staff alike. **Ideas, concerns and expectations were incorporated and the final concept exceeded my expectations.**”*

Dr Valerie McDougall, Maclean Medical Practice

3. Process Lessons

The reference design project was developed quickly and involved a wide range of stakeholders at different stages. The process of drawing the people together and seeing two design teams in operation provided lessons also. These are summarised below.

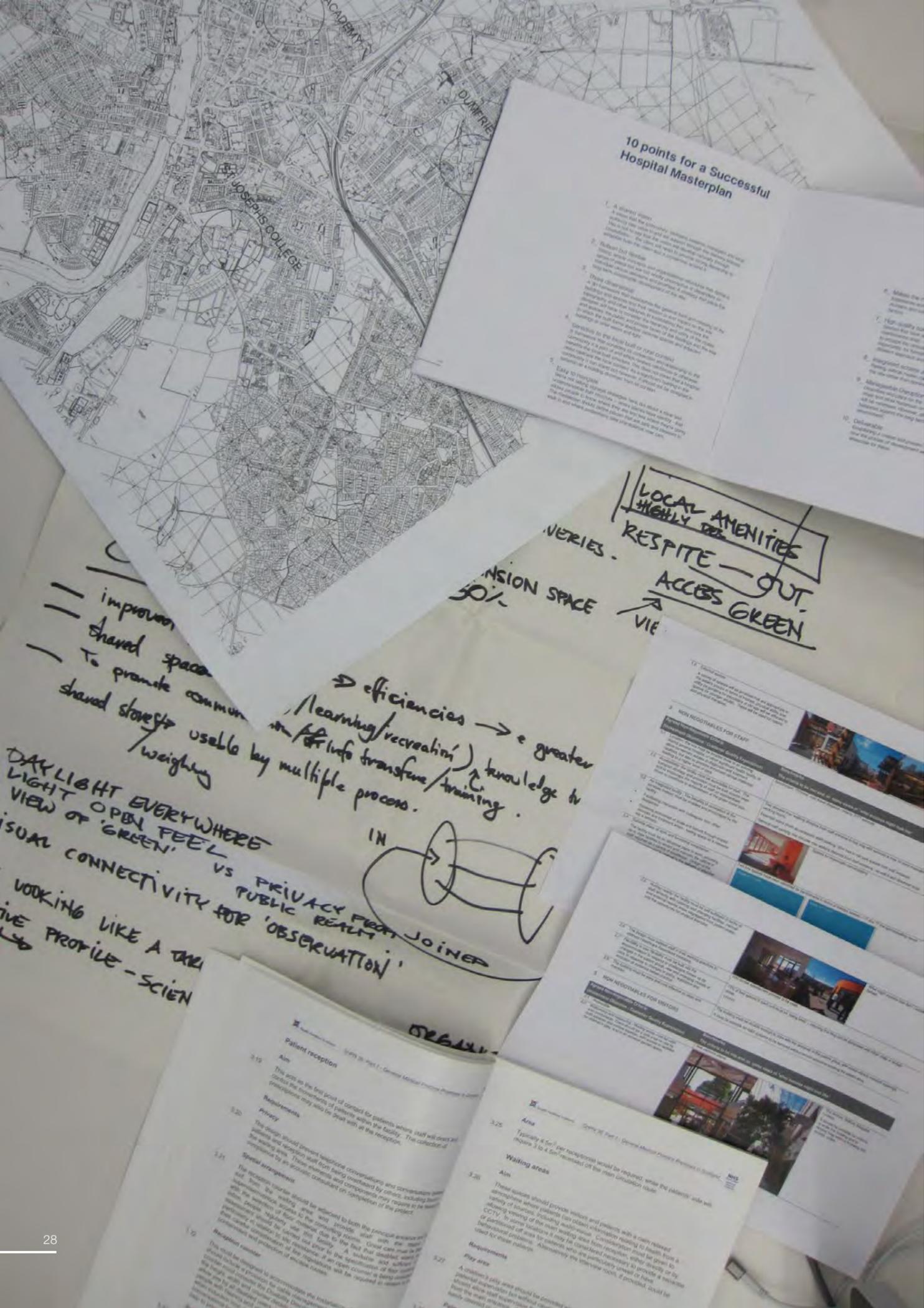
Concentrating the Programme

The process of stakeholder engagement and design development was rapid and demanding, with designs developed in under two months through a series of consultation workshops. Approximately 30 key stakeholders set aside one day each fortnight and the two architect firms were each given half that day to structure as they felt best, working with everyone together or in more targeted groups. The impact on staff diaries was substantial. The feedback, however, was that the investment of time was worth it: the rate of progress built the enthusiasm of stakeholders as they could see their project taking shape, and their opinions informing that process.

Such momentum could not have been possible without a motivated client team who organised diaries and venues well in advance of the designers' appointment and had a well-scoped brief as a basis for discussion. The timetable required the designers, on a fortnightly cycle: to orchestrate the consultations, digest the information gained from each group, synthesise it into concepts and designs for the next event, then prepare and manage the next workshop. Significant commitment and skill was therefore needed to develop a sound concept in a short timeframe. This commitment was matched by the many stakeholders who attended each session, providing continuity and their valuable expertise.

The speed of progress also required quick responses from the client group in providing factual information and resolving any contradictory briefing coming from engagement sessions. This was not always possible in the time frame so the stage C designs include some minor assumptions that required further detailed development. However, a lot of ground was covered in a short time, and though slightly extending this phase of work could ease the time pressures experienced by all, the concentration of effort in was seen to have significant benefits over more commonly protracted programs where momentum and ideas can easily be lost.

As can be seen from the previous pages, both designs developed new ideas that are worth learning from. The chosen proposal has subsequently been developed in more detail and the concept has proven robust.



Stakeholder Engagement Tools

The designers used different tools to structure the engagement: explorer packs, games, large group workshops and smaller discussions. Though the variety of experience was useful in keeping interest, the methodologies themselves were not seen as material in developing the briefing. The interpersonal skills of the person leading the discussion - to challenge constructively, to listen and hear needs - was key in drawing out brief developments, as was bringing different stakeholders together. Often each practice and service is consulted separately, however mixing up the groups:

- helped the cross fertilisation of ideas and practices, encouraging people to reach beyond their own experience and breaking down preconceptions of what is possible. When a colleague describes how they work in one way it becomes difficult to say it is not possible.
- started to build the relationships that will be needed in the new centre.

Thereafter, the skills to bring competing factors together into a well designed whole - where each can see their fears and hopes have been addressed, though not necessarily looking exactly like the design developed by stakeholders through games - developed trust and confidence.

Targeting the Appointment Process

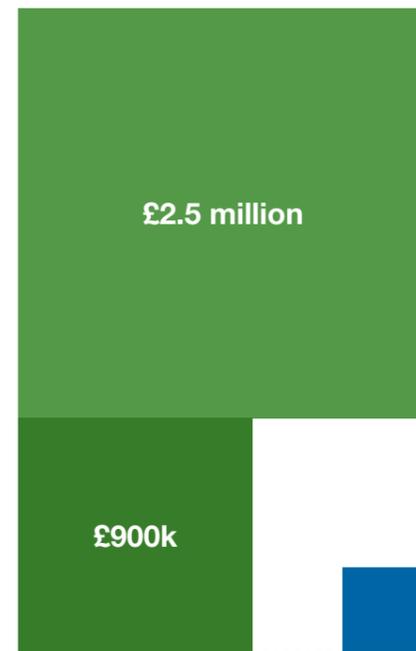
The two teams were appointed through a fixed fee, Quality Based Selection (QBS) procedure. The fee was benchmarked to ensure it was appropriate. Competition then focussed on the skills needed to bring innovative approaches and deliver a high quality environment within a budget; establishing the focus of work from the outset.

The tender and selection period was short, and the project required consultants to start immediately; attracting good teams was therefore key. The QBS appointment process provided certainty over fees and required them only to provide evidence of their relevant skills, motivating them to engage immediately and positively. The client teams efforts could also focus on assessing and choosing a team with the skills to deliver wider benefits, rather than operating a more lengthy process which generally prioritises fee levels over the ability to realise long term best value.

Through clever design and the development of attractive and supportive working areas, the teams were able to reduce the total area of the building and gain the stakeholders' confidence that the development would work for them. By reducing the GIFA by over 410m² both teams reduced the schemes' construction costs by over **£900,000**. The unitary charge saving (£250/m²/annum*) over 25 years would therefore equate to over **£2.5 million**. The saving in construction cost alone was more than 22 times the design fee to stage C.

Therefore, making the project attractive to the right people and focusing on the skills needed to get the best end result is crucial. Selecting teams based on their skills, rather than on lowest fees, can be shown to be best value.

* Indicative for illustration



Design fees in relation to potential Savings from good design



4. Area and Cost Performance Measures

The Scottish Government has identified £250 million for investment in primary healthcare buildings to be delivered through the Hub Programme. Delivering value for money through this investment is a key driver to the success of the programme and the ability to measure performance, improve consistency and promote best practice will support the objective of delivering value for money.

Within the Hub Programme, value for money covers a variety of aspects which include social, economic and sustainability criteria. However, the following chapter focuses on the economic aspects and specifically provides metrics for monitoring and benchmarking efficiency in the capital and whole life expenditure for each new project. Through the development of the Health Reference Design, a cost and area metric has been developed which will support the ability to measure performance, improve consistency and is based on best practice guidance.

These metrics are based on the following performance measurements and principles:



(far left) BDP illustration of mixed working spaces in an office environment

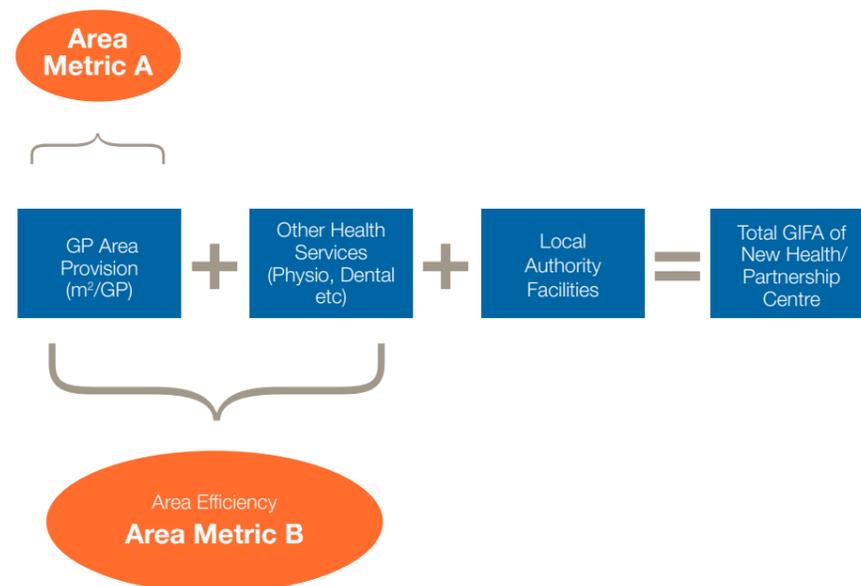
Improving Area Efficiency

The development of an area metric for new Health Centres is a complex formula which must consider the specifics of the clinical brief for each new project; taking into account the local demographic, social, health and economic profile of an area.

As discussed previously, designing for flexibility in use, both initially and over time provides increased opportunities for area efficiency. Experience of the Reference Design Project and research on other recently completed projects throughout the UK, has led to the development of two area metrics which will enable the measurement of area efficiency of any new Health and Partnership Centre project:

- Area Metric Type A - Area per individual GP
- Area Metric Type B - Ratio of Clinical space versus Support space

In the development of new Health and Partnership Centres, the gross internal floor area (GIFA) is built up of the following components:



AREA METRIC TYPE A – PER SERVICE PROVISION

This performance metric measures the gross internal floor area attributed to the number of GP's within a new health centre. Table 1 below summaries the banding and the allocated GIFA attributed to each banding:

Number of GP's	Gross Internal Floor Area per GP
3	160m ²
4	152m ²
5	137m ²
6	130m ²
7-9	123m ²
10-11	116m ²
12-16	109m ²
17-20	105m ²
>21	100m ²

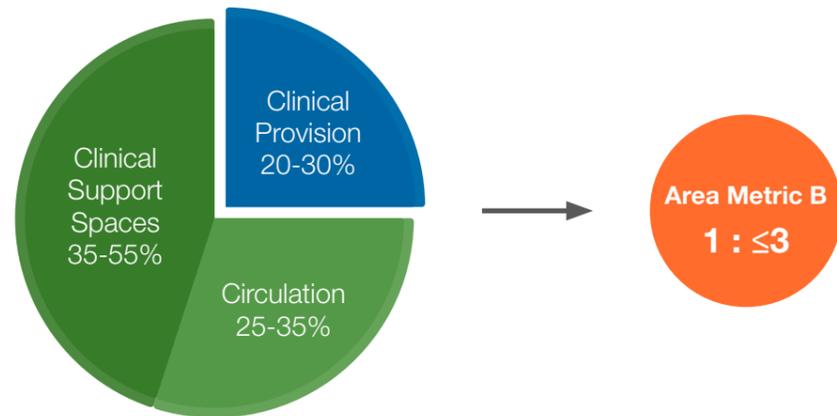
The metric for GP's outlined above has been developed in partnership with Health Boards. Figures are based on recently delivered projects, and are within national guidance for Primary Care and will be further tested by NHS GG&C on their next three projects developed through hub. This area provision accounts for GP clinical space, including all attributed circulation and support space. The application of this metric requires multiplying the GIFA per GP by the number of individual GPs (not GP practices) to give a target maximum GIFA for GP clinical space, circulation space and support space, as outlined below:



Area Metric A reflects the efficiency that can be created through the co-location of multiple GP practices into one facility. As the number of GP's increase, the area allocation reduces, which reflects the economies in shared patient spaces, plant and circulation areas. In addition to the reduced capital expenditure of a reduced size of facility, further savings will be made from the reduced running costs for the building.

AREA METRIC TYPE B – SUPPORT SPACES

Through the analysis of other recently completed primary healthcare projects across the UK, the second area metric assesses the ratio of clinical areas versus support and circulation space:



In the diagram above, 1m² of clinical space = 3m² of support space + circulation space, establishing a ratio of **1:3**. This means that support and circulation space should be 75%, or ideally less, of the total area.

The clinical provision accounts for all core consultant rooms, treatment rooms and areas to deliver clinical services. This is aligned to the area classification contained within the Scottish Health Planning Note 36 Part 1. The clinical provision accounts for clinical services beyond General Practitioners and includes for additional services (Physiotherapy, Podiatry, Therapists etc).

Area Metric B therefore offers a performance measurement for approximately 70% of a new project's gross internal floor area and across all clinical services provided within a new healthcare facility. This calculation excludes any Local Authority areas and associated support space and is solely focussed on the NHS clinical provisions. The Metric is intended to act as a guide to trigger additional analysis should the actual figures be significantly different to the ratio.

Reference Design performance against metrics	GHA	BDP
Area Metric A [◇]	100m ² /GP	104m ² /GP
Area Metric B	1 : 2.9	1 : 3.0

◇ Equivalent Area Metric A for 20 GPs is **105m²/GP**

Cost Metric Guidance

The cost metric has been developed to offer a measurement to evaluate the commercial performance of a new primary health care facility. These pricing levels are substantiated by delivered benchmark projects, the hub programme pricing levels and align with the Eastwood Health Centre reference design. The cost metric is as follows:

Facility Size GIFA m ²	Total Project Cost £/m ²	Equivalent Prime Cost (Excl Ext Wrks) £/m ²
≤1,000m ²	£2,550	£1,500
1,001 – 5,000m ²	£2,350	£1,450
5,001m ² ≥	£2,250	£1,400

The above rates include all costs to permit the development of a new build facility with the exception of the following items:

- Land purchase
- VAT
- Group 2 supply and group 3 & 4 supply and install furniture.
- IT hardware

The cost metric contains the following assumptions:

- Provision has been made for NHS Internal Management costs
- Provision has been made for decant costs
- The Base Date for the metric is 4Q 2012

Delivering Improved Value for Money

The above metrics are to be piloted in the four Health and Care Centres being developed by NHS Greater Glasgow and Clyde and it is anticipated that this approach and metrics will be used in the assessment of other future business cases.

Appendices

This following information is appended:

Cost and Area Analysis of Both Designs

Acknowledgements

Guidance and Further Reading

Plans and Illustrations of the Two Developed Schemes

- BDP

- GHA

Cost Analysis

Elements	GHA Scheme (£/m ²)	BDP Scheme (£/m ²)
Substructure	£49.80	£69.30
Superstructure	£668.69	£598.23
Finishes	£94.43	£106.24
Fittings & Furnishings	£57.33	£50.51
Services	£449.69	£505.07
External Works	EXCL	EXCL
Contingencies (5%)	£66.00	£66.53
Total	£1,385.94 *	£1,395.88 *

* Equivalent cost metric for >5001m² is £1400/m²

Area Analysis

Elements	GHA Scheme (m ²)	BDP Scheme (m ²)
East Renfrewshire Council Managed Services	890	921
NHS Directly Managed Services	1181	1125
CHCP Senior Management and Supporting Management	215	215
GP Practice Areas	1120	1120
Shared Space for All Services	1036	917
Circulation	1212	1494
Plant/ Lifts & Risers	306	326
Total Gross Internal Floor Area (GIFA)	5960	6118
Area Metric A	100m²/GP [◇]	104m²/GP [◇]
Area Metric B	1 : 2.9 [†]	1 : 3.0 [†]

[◇] Equivalent Area Metric A is **105m²/GP**

[†] Equivalent Area Metric B is **1 : ≤3**

Acknowledgements

This publication is the result of the hard work of the following:

The client group for the Eastwood Health and Care Centre, including staff from East Renfrewshire Community Health and Care Partnership, NHS Greater Glasgow and Clyde and East Renfrewshire Council and their delivery team at hubWest Scotland.

The two design teams were:

BDP.

BDP - Architects
- Landscape Architects
- Interior Design
- Services Engineers
- Structural Engineers

Turner & Townsend - Cost Consultant

garethhoskinsarchitects

Gareth Hoskins Architects - Architects

David Narro Associates - Structural Engineers

Max Fordham LLP - Mechanical Engineers

Davis Langdon - Quantity Surveyor



Benchmarking and funding metrics were provided by the Scottish Futures Trust.

Thanks are due to the above and partners at Health Facilities Scotland and the Scottish Government.

Guidance and Further Reading

- [Scottish Health Planning Note 36 Part 1](#)
- [Scottish Health Planning Note 36 Part 2](#)
- [Health Building Note 00-02: Sanitary space](#)
- [Health Building Note 00-03: Clinical & support spaces](#)
- [Health Building Note 00-04: Circulation & communication spaces](#)

Further reading can also be found in the following relevant publications:

Downloadable from the [SFT website](#):

- [What can we do with the office?](#)

www.scottishfuturestrust.org.uk/publications/what-can-we-do-with-the-office/

- Full Stage C Reports for both practices

www.scottishfuturestrust.org.uk/publications/health/

- o BDP - [download](#)
- o GHA - [download](#)

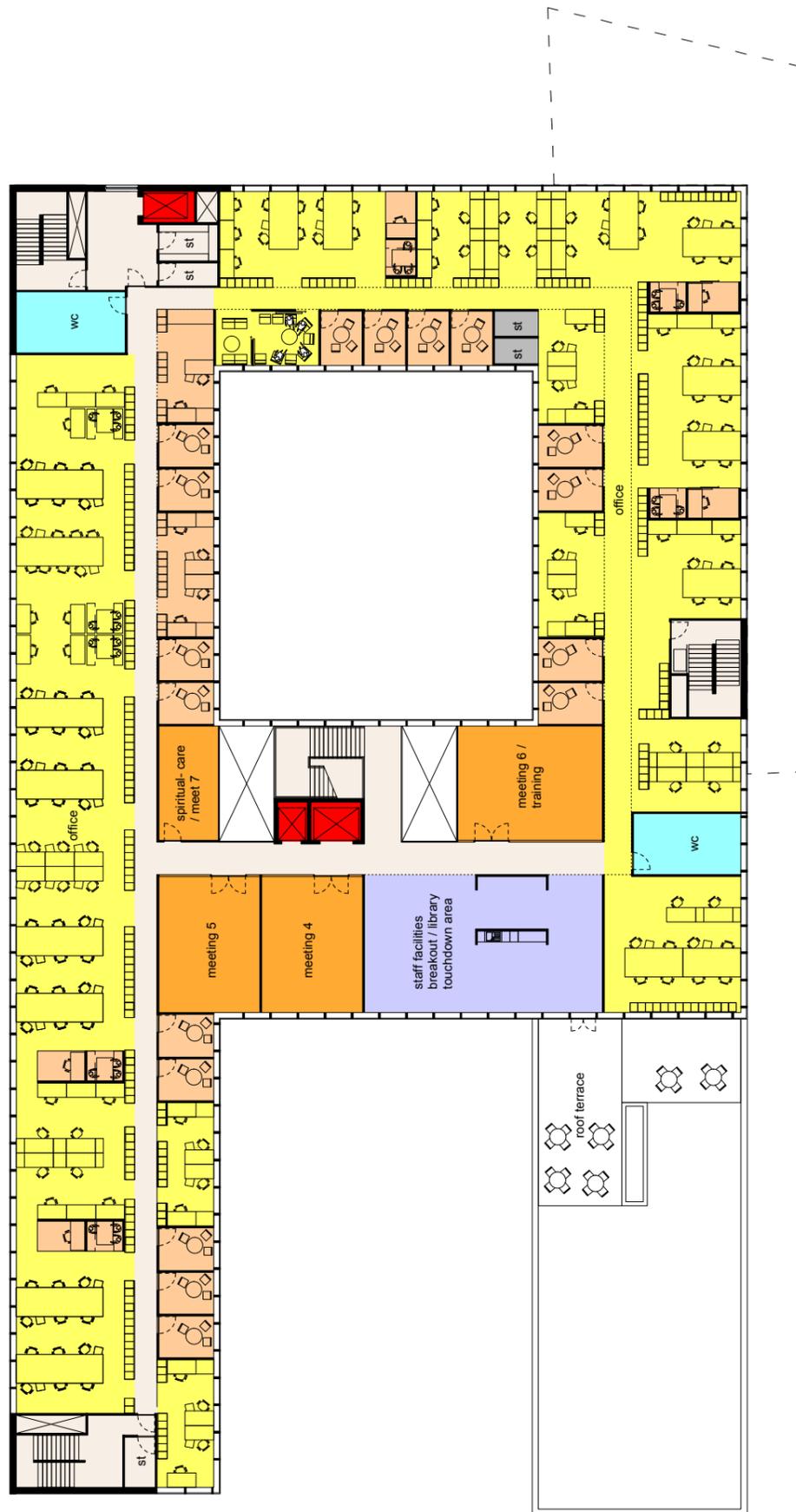
Downloadable from A+DS website at www.healthierplaces.org

- [Circulation in multi-service facilities](#)
- [Commissioning Healthcare Developments: Brief Guides](#)
- [Case Notes: Client Leadership](#)
- [Kentish Town Case Study](#)

See also [Pulse](#), the Healthier Places case study and image database

Over page: Plans and Illustrations of the Two Developed Schemes





Produced in association with:



.....

Scottish Futures Trust

1st Floor
11-15 Thistle Street
Edinburgh
EH2 1DF

T: +44 (0)131 510 0800
E: mailbox@scottishfuturestrust.org.uk

www.scottishfuturestrust.org.uk

**SCOTTISH
FUTURES
TRUST**

.....

Architecture and Design Scotland

Bakehouse Close, 146 Canongate,
Edinburgh EH8 8DD

Level 2, 11 Mitchell Lane,
Glasgow, G1 3NU

T : +44 (0)845 1 800 642
F : +44 (0)845 1 800 643
E : info@ads.org.uk

www.ads.org.uk
www.healthierplaces.org



Architecture+DesignScotland
Ailtearachd is Dealbhadh na h-Alba