

## PHI<sup>®</sup> Tool

Ben Bolgar,  
PFBE

The Prince's Foundation for the Built Environment (PFBE) is dedicated to enriching the quality of people's lives through changing the built environment. The relationship people establish with their surroundings is either enhanced or inhibited by the facilities near their homes. Years of observation and research shows there is a maximum distance people will walk to reach goods and services before deciding to drive. This length is typically a 5 minute walk or 450 m radius. However, health care facilities are often not easily accessible within that distance, and the implications of encouraging driving include increased levels of obesity, poor air quality and carbon emissions. The PHI<sup>®</sup> Tool seeks to add accessibility criteria into the planning of future clinics and hopes to influence their location to better meet the needs of the patients.

The current restructuring of the Primary Care Trusts allows for the development of better facilities, and now is the chance to examine the estates and enhance the system. The PHI<sup>®</sup> Tool looks at the whole development and illustrates the impact on the whole region. Simply, the polysystem could cause more or less carbon emissions based on the location of the health care facilities.

## Vision for Redbridge

Heather O'Meara,  
CE of Redbridge PCT

Health care is a complicated industry, and one word cannot describe the process. Therefore, the Vision for the Redbridge Primary Care Trust (PCT) has been illustrated in the rich picture created by clinicians and users through illustrators.

The key element of the Vision is to take the best parts of what exists in the care sector and add additional services to create a



The Prince's Foundation  
FOR THE BUILT ENVIRONMENT

# Redbridge: 7 Kings PHI<sup>®</sup> Pilot Workshop Executive report

In Response to the 2008 NHS Next Stage Review that launched 4 critical challenges, The Prince's Foundation for the Built Environment, (PFBE) supported by the Department of Health, developed the PHI<sup>®</sup> Tool to help Primary Care Trusts with the analytical and planning skills necessary to deliver the 4 critical challenges. The PHI<sup>®</sup> Tool sets out a method which provides a holistic framework for the allocation of health care services and strategic planning, resulting in a model of health care that will improve services delivery and patient accessibility.

In September 2009, PFBE ran a pilot workshop to test the methodology of the PHI<sup>®</sup> Tool based on the Redbridge 7 Kings Polysystem. This Executive Report documents the key information and outcomes from the workshop and gives a synopsis of what is needed to further improve the tool.

system that better serves patients now and in the future.

The user, or individual, needs to be in control of their own care, and they need to be able to access facilities near their homes. The individual is supported by a range of services, buildings, and new technologies, but an additional range of well-being exercises will be added in the future for support. The polysystems are the glue that keeps together the levels of care to help a wider area of people.

The vision extends to have fewer patients for each GP and a service structure based on one main hub and two spokes. A need exists for a 24 hour care service facility that is open 7 days a week. The goal is to add this in the new polyclinic model.

The final, and most important, vision element is to make the care affordable for the individual.

The system polysystems inside the PCT allow for practice-based commissioning to align with the PCT agenda. This means the delivery and service transformation is done by the individual polysystems based on their data of users and services needed. Each polysystem creates its own business and service plan that suits their individual needs but aligns with the PCT agenda. Estates strategies then come under the commissioning units because the new facilities will be dependant upon the services required at each location.

# Analysis of Estates

Will Vote,

## Redbridge PCT Estates Strategic Development Manager

Estates planning begins with an examination of the current buildings. The estate's history, health and safety compliance, backlog maintenance, and monitoring systems are all analyzed. The strategic framework is then inspected for impacts from the local and the national level to verify the estate has adequate



facilities to accommodate future growth. Then implementation is trusted to the 5 polysystems to address the health, efficiencies and inadequacies. The PCT acts as an "enabler" for the polysystems to change their estates.

The first step for each polysystem is to facilitate a survey of the existing centres. A six facet survey has been created by Healthy Urban Development Unit to collect information about the physical condition; functionality; space utilization; quality; fire and health and safety review; and environment management. Each category is given a grade ranging from A to D. The GP/ patient ratio is also used to determine where services are needed. The estates planning can then grow/ relocate based on: floor space; site condition; strategic location; site availability; public transportation; site ownership; parking; planning suitability; and legal actions.

Redbridge has currently surveyed all the PCT owned facilities and is preparing to survey the non-PCT owned buildings. The strategic planning shows the need to increase the number of GPs by approximately 60%. A new polyclinic is being planned at St. George's Hospital to meet rising demand in the growing borough.

## Redbridge 7 Kings: Estate Options

### Option 1

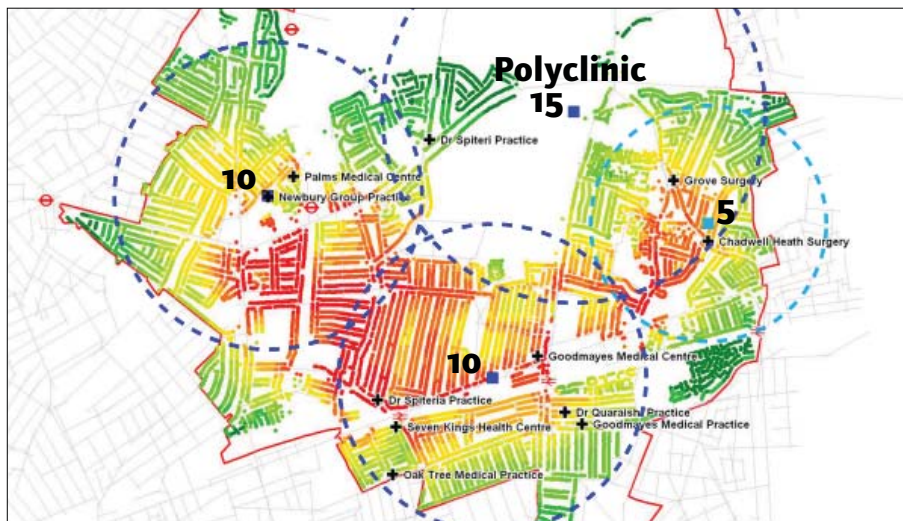
This option looks at creating a large polyclinic with large neighbourhood clinics that support it.

#### Pros

The pros for this option include: financial efficiency; collocated difference services; increased diagnostic and clinical safety; partnership working; increased specialization; enhanced estate; and enhanced DDA accessibility.

#### Cons

The cons for this option include: high initial cost; stakeholder (GPs) resistance; decreased accessibility; and increased reoccurring estate costs.



### Option 2

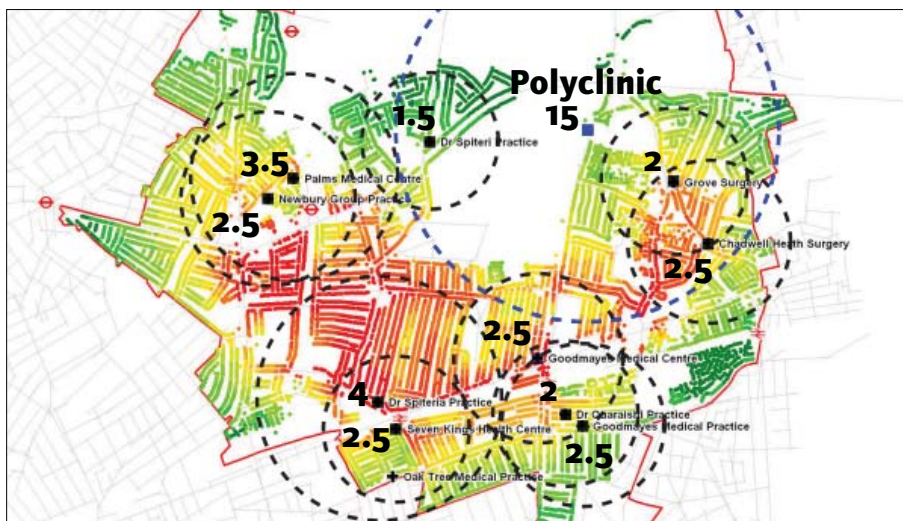
This option looks at creating a large polyclinic at St. George's Hospital and leaving the existing clinics as are.

#### Pros

The pros for this option include: minimal change and accessibility to GPs.

#### Cons

The cons for this option include: no addition other than polyclinic; limited improved services; maintains poor estate of existing facilities; and no DDA accessibility improvements.



# Accessibility and Carbon Analysis

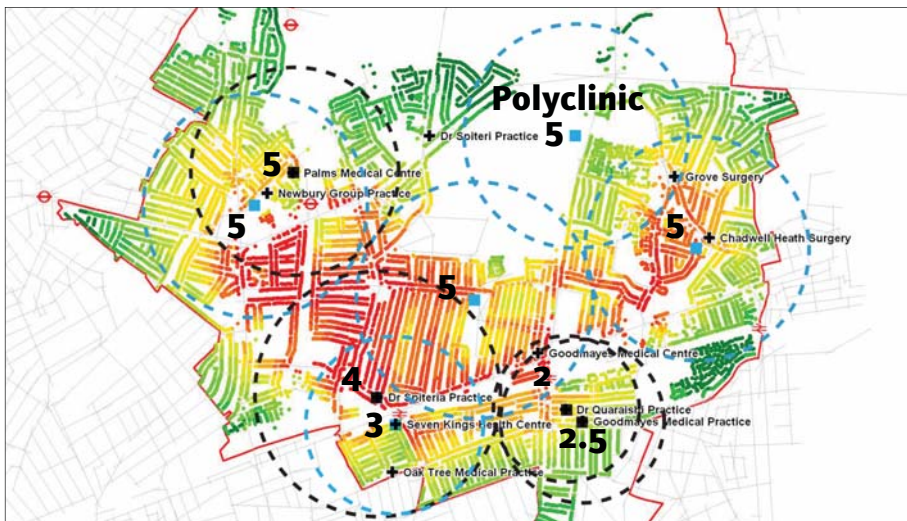
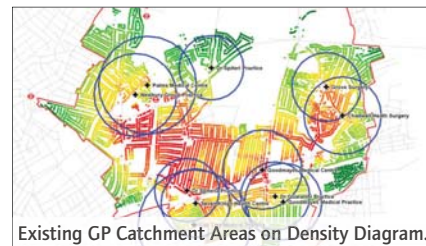
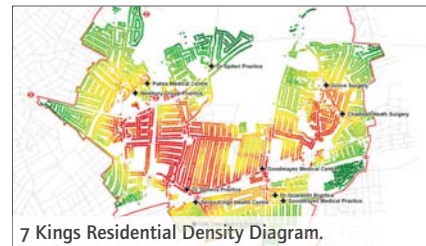
Noah Raford,

PFBE

The location of new GPs as well as a polyclinic in each polysystem is important to minimize the travel time and carbon emissions for patients and staff. The existing locations give 7 Kings residents an average trip time of an 11.5 minute walk. Approximately 14.8 tonnes of CO<sup>2</sup> per annum is released from those who drive as 68% of the 7 Kings population are located within a 10 minute walk from an existing clinic.

Residential data helps determine these numbers, and this can be illustrated as GP coverage based on list sizes and residential density. It can also be refined by proximity to important uses, such as schools, pharmacies, and public transportation. Layering this data on top of the existing GP locations begins to show where new clinics should be located. In this analysis one can see that there is a lack of services in a highly populated area. When this information is layered together, the different factors can be adjusted to determine where new facilities should ideally be located.

Once the possible locations are determined, catchment and trip calculations can be recalculated to track the impact from the changes. For example, moving GPs and placing a polyclinic at St. George's Hospital increases the tonnes of CO<sup>2</sup> per annum release by 78%, and this efficiency of services actually is detrimental to the carbon goals set by the government and NHS. However, depending on the make up of the polyclinic at this site, the efficiency of the current system could be maintained with GP locations in multiple locations rather than one.



### Option 3

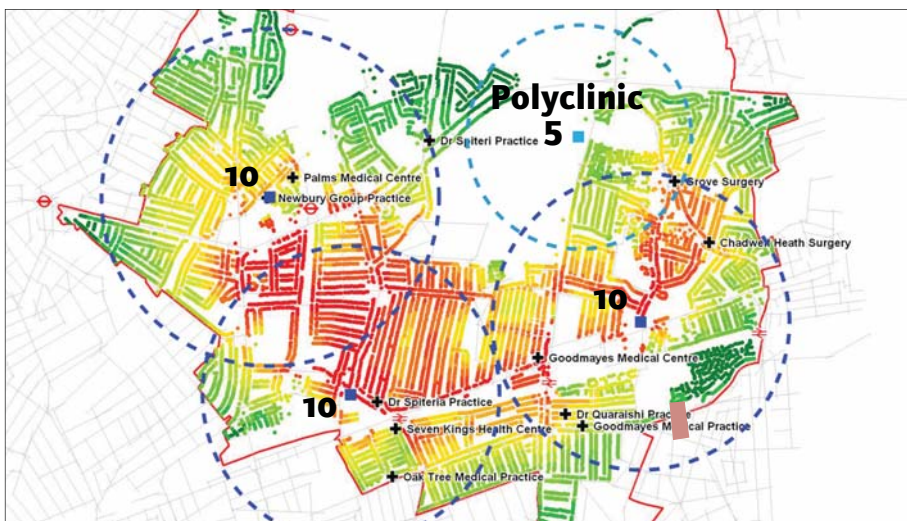
This option looks at creating an interim solution that leaves some existing facilities and adds new clinics where appropriate for demand.

#### Pros

The pros for this option include: better access/ Darzi; relatively easy to implement; and minimal change.

#### Cons

The cons for this option include: increased reoccurring cost for estate; DDA maintenance for existing estate; maintains poor estates of existing facilities.



### Option 4

This option looks at creating three centralized facilities with a small polyclinic.

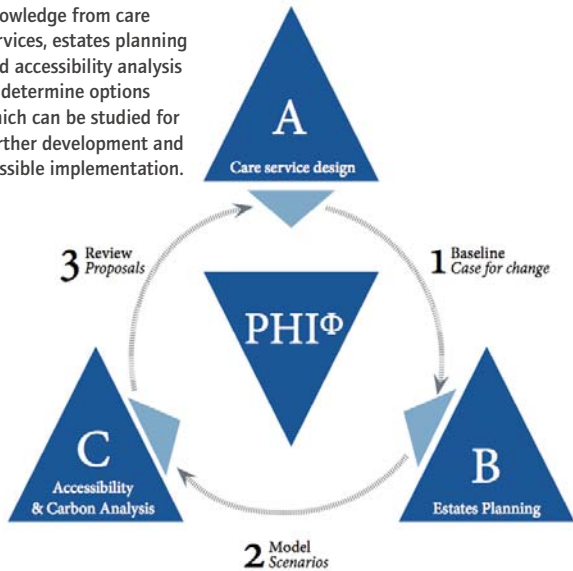
#### Pros

The pros for this option include: wider access to GPs; increased geographical access; 2 new centres on main road; potential for social integration; DDA access improved; and partnership opportunities.

#### Cons

The cons for this option include: worse access to existing (need model to verify); high initial cost/ new build; greater/ increase in patient travel; and transportation challenges.

The PHI Tool uses the knowledge from care services, estates planning and accessibility analysis to determine options which can be studied for further development and possible implementation.

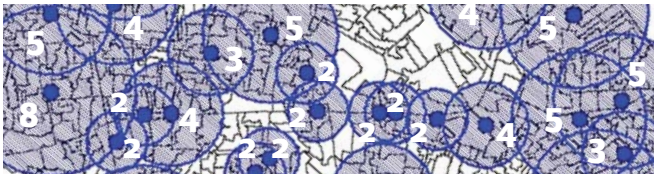


"I think [the PHI Tool]'s best used at pre and post strategic plan stage. This is to get a grip on the existing problems and exploration of possible options to address those problems (with a variety of relevant stakeholders)." -Will Vote, Redbridge PCT



## Future Planning

As the financial crisis continues to impact communities, closer attention must be paid to how and where building takes place. NHS Redbridge and the PFBE embarked on this study together to assess the goals for the 7 Kings Polysystem. The integration of polyclinics into the health care system to serve the public is an opportunity to examine the current estates and enhance their positive efficiency. As these facilities become part of the system, they need to be located where they can have the most impact and service the highest density. This workshop illustrates that there is not one simple solution, but a series of complex possibilities that arise from many different influences. PFBE's mission is to continue to develop and use resources like the PHI<sup>Φ</sup> Tool to make the best planning decision for public benefit.



## Feedback from Participants

- Each facility has different uses/ specialties, and therefore a variable will need to be factored in to the catchment size.
- In the future the clinical model for some services will change, so not as much space will necessarily be required in the future.
- The PCT needs to rebrand so the general public knows that the GP can meet needs rather than going to the hospital.
- Patients lists will not add new people from outside the catchment area, but there might be long term patient who has since moved out of the catchment area without changing GPs.
- The PHI<sup>Φ</sup> Tool needs to stress workload factor is catchment area, but street/ location, walkability factor is different.
- The PHI<sup>Φ</sup> Tool is an objective way to show practicality and get business sense for the polysystem rather than favouring the different practices.
- The PHI<sup>Φ</sup> Tool illustrates ways GPs can work together and realize benefits and penalties from the new arrangement.

## Attendees

### REDBRIDGE PCT

HEATHER O'MEARA  
LOUISE MITCHELL  
DARREN THORNE  
GLADYS XAVIER  
ANN O'BRIEN  
WILL VOTE  
DR. HECTOR SPITERI

### OTHER GUESTS

NEIL BLACKSHAW, HEALTHY  
URBAN DEVELOPMENT UNIT  
GRANT MILLS, LOUGHBOROUGH  
UNIVERSITY HACIRIC  
JAMES LATTA, DEPARTMENT OF  
HEALTH  
BRIAN COAPES, DEPARTMENT OF  
HEALTH

### PFBE

BEN BOLGAR  
PETER QUINTANILLA  
NOAH RAFORD  
ABBEY OKLAK  
BETTINA BUNGAY-BALWAH



**E** [design@princes-foundation.org](mailto:design@princes-foundation.org)

**T** +44 (0) 20 7613 8500

**F** +44 (0) 20 7613 8599

[www.princes-foundation.org](http://www.princes-foundation.org)



**The Prince's Foundation for the Built Environment**

19-22 Charlotte Road, London EC2A 3SG United Kingdom

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