

EUHPN WORKSHOP COPENHAGEN – 2012

Response to New Strategic Planning Model for Health Infrastructure in Northern Ireland

John Cole



FORMAT OF PRESENTATION

- Problems of Previous Model
- Description of New Model
- Results of Survey on Response of Patients and Staff to New Model

PROBLEMS WITH PREVIOUS MODEL

- Ever-increasing demand for hospital services
- Threat of real reductions in funding or non-affordability of status quo
- Increasing number of beds in acute hospitals occupied by elderly patients waiting for care packages in the community
- Large number of beds (up to 35%) occupied by patients with chronic diseases
- Hospital waiting lists growing
- Difficulty in staff recruitment to smaller hospitals rendering high quality complex care increasingly unsustainable in these facilities
- **Limited effective integration between primary / community and acute sectors**

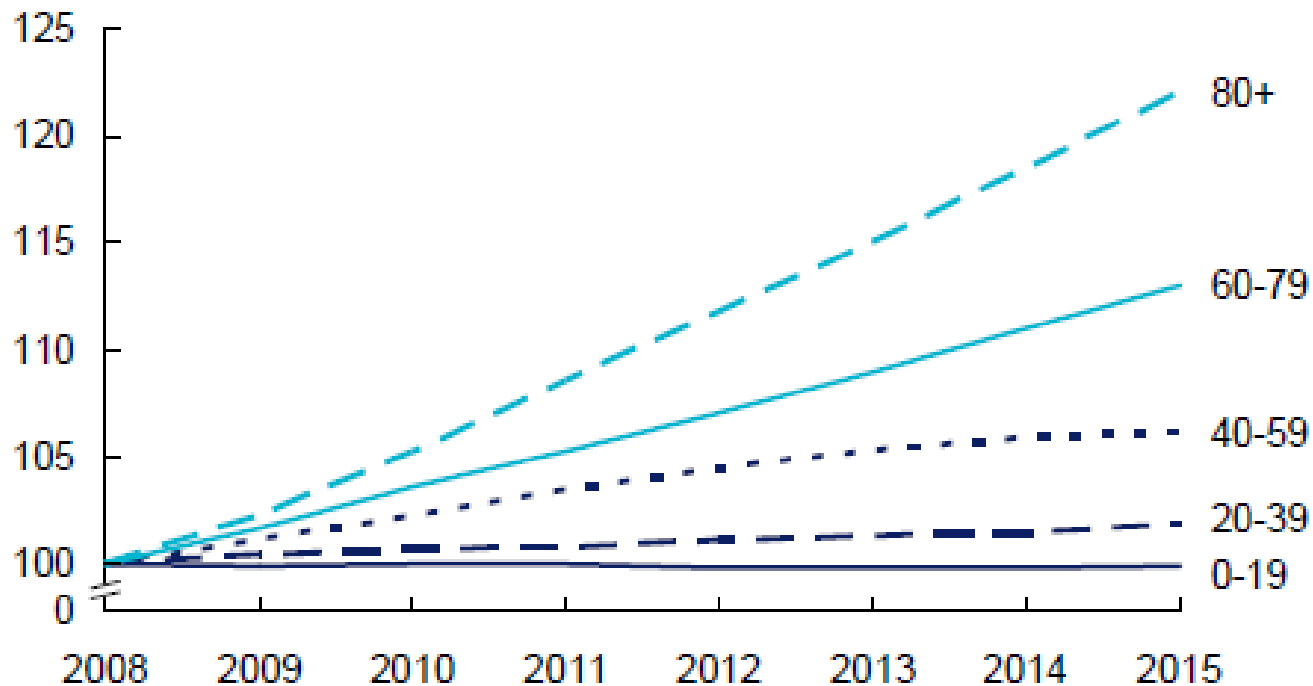
DEMOGRAPHIC CHANGE

- Growing Elderly population
- Multiple co-morbidities
- More cases of cancer
- Fractured hips
- Strokes
- Chronic disease
- Dementia
- Lower birth-rates – potential reduced demand for obstetrics and paediatrics but smaller future workforce to support aged population
- Movement within European Community

THE GROWING PROBLEM

NI's population is ageing

Population growth by age group in Northern Ireland
100 = 2008 population



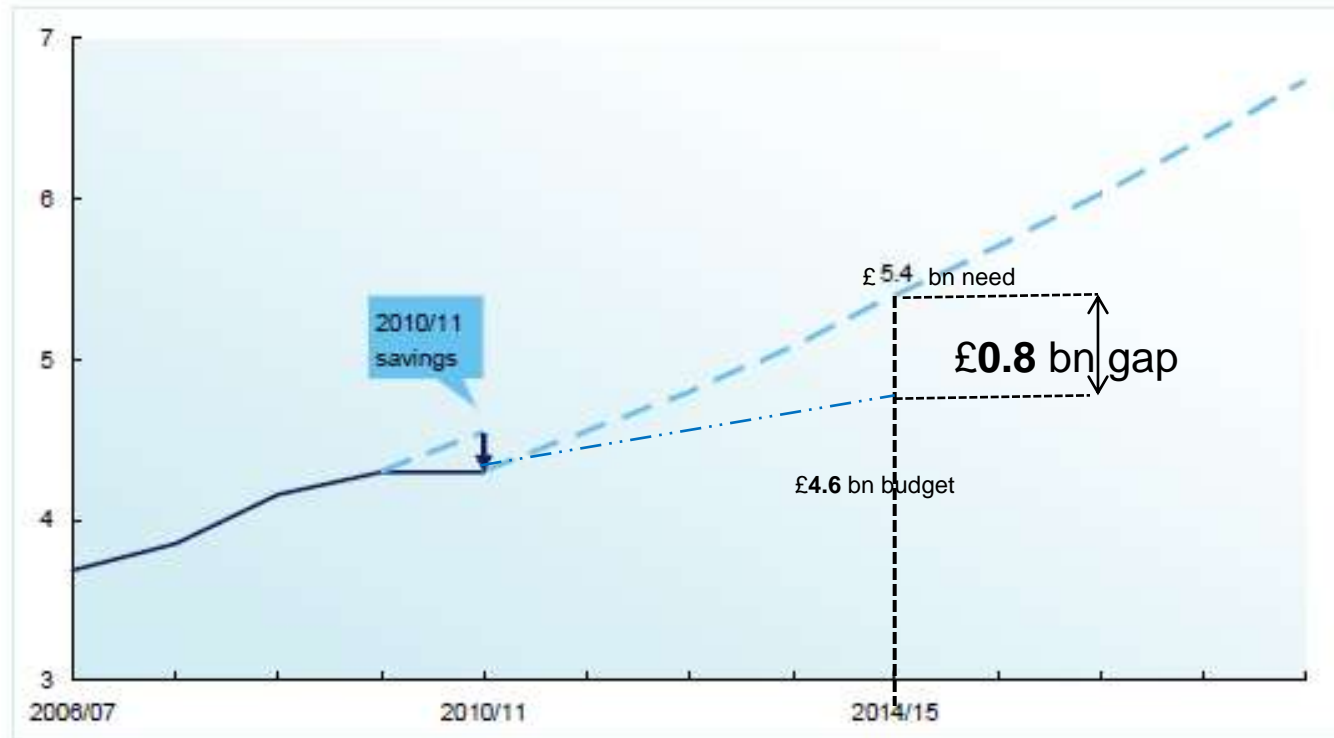
SOURCE: Northern Ireland Neighbourhood Information Service

THE FUNDING GAP

Demographic change, residual demand growth and cost inflation, unmanaged, would increase spend by ~6% p.a.

£b per annum, nominal, total DHSSPS allocation

— Historical/forecast spend
 - - - Forecast 'do nothing' spend
 (x) Spend gap



SOURCE: SRF; DHSSPS; various Northern Ireland historical activity sources for residual growth (see appendix for details)

In Northern Ireland savings of 3.5 % per annum recurring required to break even
 In England annual cost £100bn. Target to save between £15-20 bn from 2011 and 2014

THERE HAD TO BE A BETTER WAY

TO CONTINUE TO DO WHAT WE WERE
DOING WOULD ULTIMATELY BE TO FAIL

CONFIRMED SERVICE VISION

- Less reliance on **reactive more expensive care in hospitals** with a move to creating **integrated care partnerships** between hospital staff, GPs and community staff
- Providing more efficient, effective and economic proactive health and social care **services closer to where people live**.
- Putting the patient at the centre of a high quality **multi-disciplinary integrated team**
- Focus on **preventing illness and improving health and well-being** through improved life-styles, diet, exercise, amenities, education, access to information and support in the community.
- Facilitating people to live longer and more independent lives in their own homes with the support of technology where appropriate

ATTEMPT AT TOTAL SYSTEM DESIGN

facilitated by:

- A better understanding of demand
- A better understanding of cost and affordability
- Development of new models of care
- Organisational change
- Re-engineering of the work-force
- Optimising Information Technology
- Redesigning the infrastructure to support the new models of care

THE SHIFT RIGHT AND LEFT:

- Fewer but larger hospitals providing the critical mass of staff and facilities to provide acute and complex services as Centres of Clinical Excellence
- The creation of a range of large Health and Care Centres as hubs in the community providing the critical mass to deliver good local access to comprehensive range of health services, treatment and advice, some of which would only previously have been available in hospitals
- **Better chronic disease management** reducing the need for more expensive hospitalisation and maintaining people in their own homes
- Accessing appropriate care in less expensive settings:
 - urgent care,
 - diagnostics,
 - out-patients
 - Minor procedures
- **Optimisation of technology, earlier diagnoses and interventions** leading to better patient outcomes

KEY CHANGES IN THE LOCATION OF SERVICES

Movement of out-patients diagnostics and treatments from acute towards community
Key issue is the movement of chronic disease management to the community
preventing unnecessary hospitalisation



0 - THE HOME

1 - LOCAL HEALTH CENTRES

2 - COMMUNITY HEALTH CENTRES

3 - LOCAL HOSPITALS

4 - ACUTE HOSPITALS

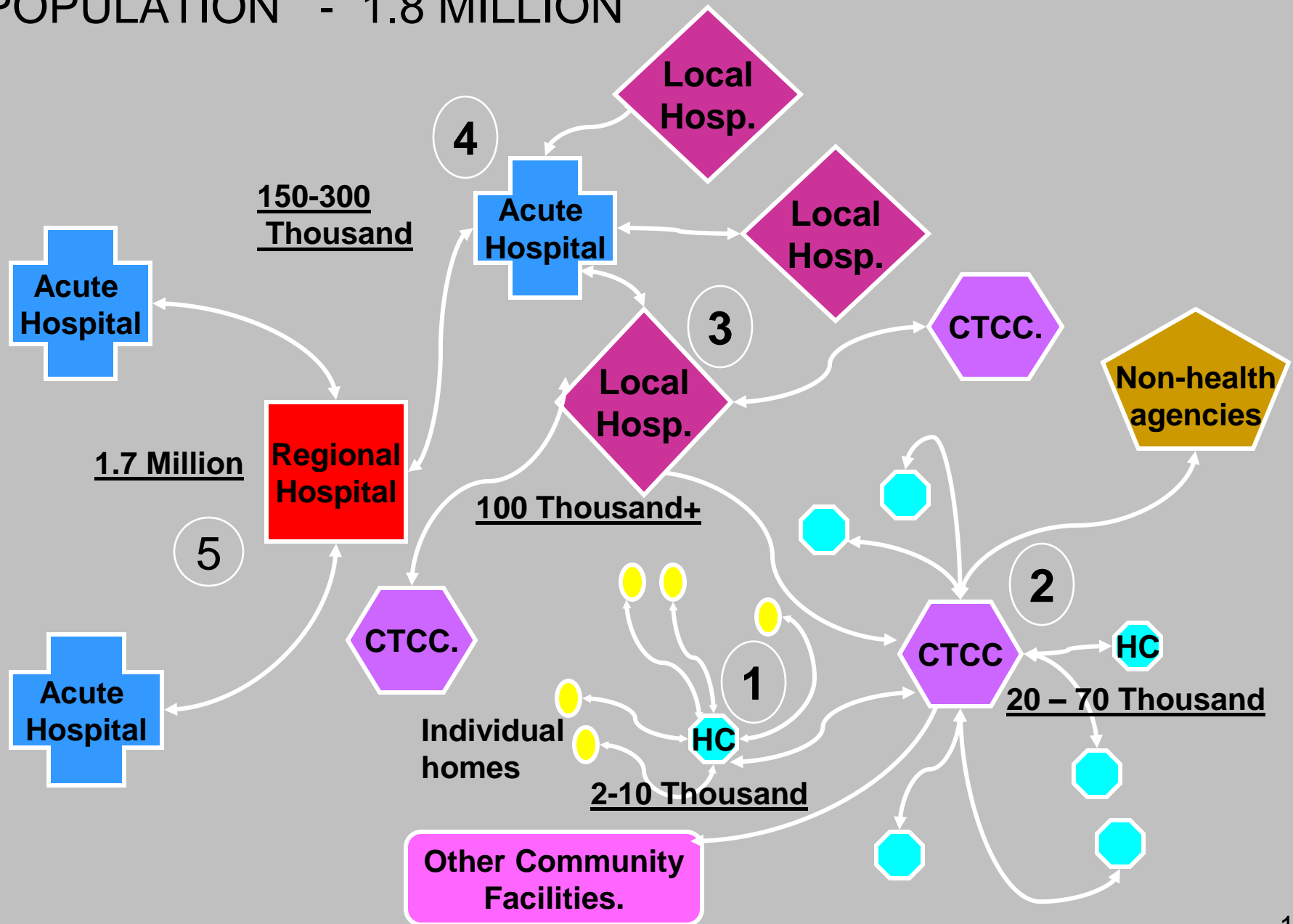
5 - REGIONAL CENTRES



Movement of complex specialties or specialties benefiting from higher critical mass to Centres of Excellence

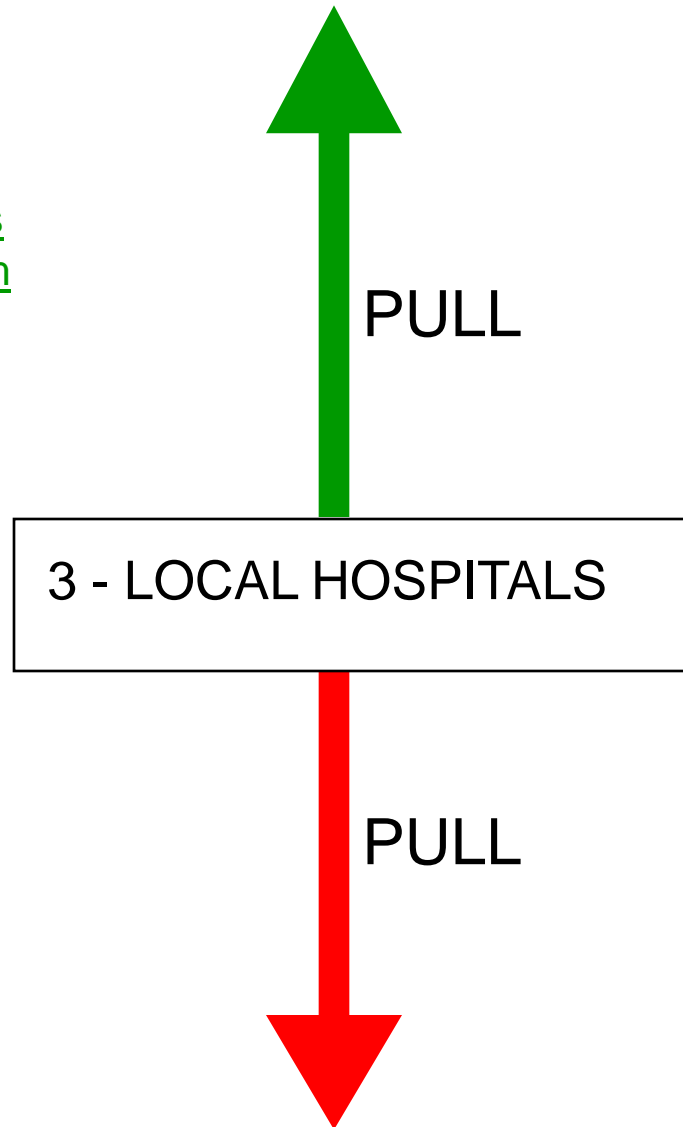
INTEGRATED SERVICES MODEL NORTHERN IRELAND

POPULATION - 1.8 MILLION



KEY EUROPEAN TRENDS IN LOCATION OF SERVICES

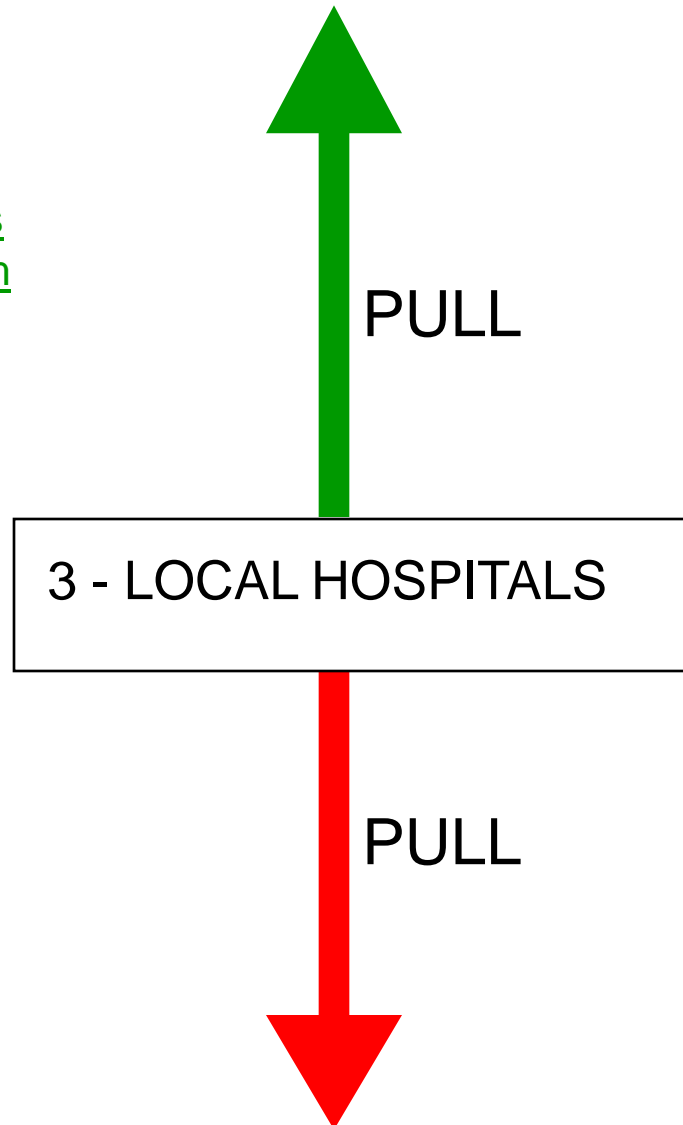
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Movement of complex specialties or specialties benefiting from higher critical mass to Centres of Excellence

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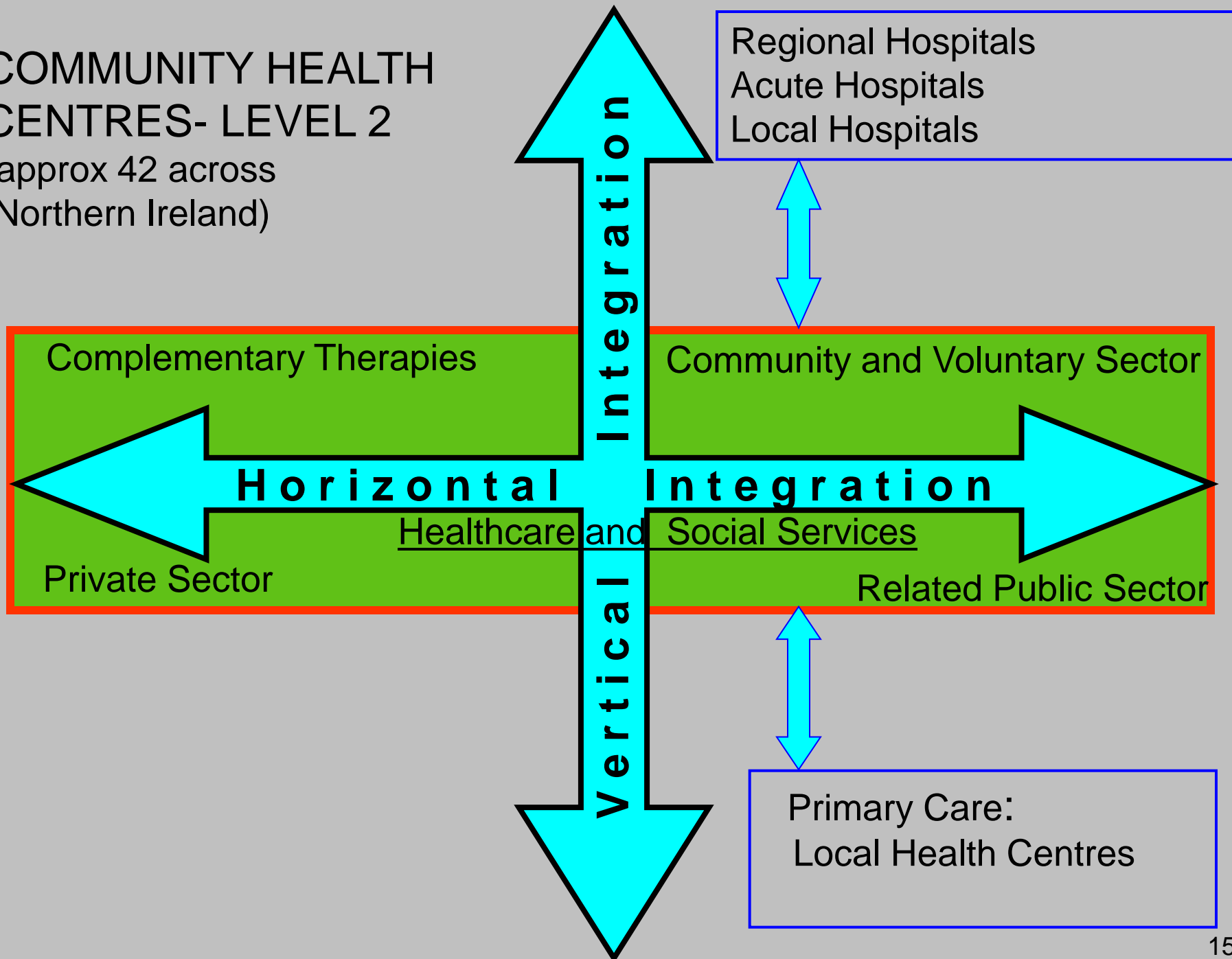


= LESS BEDS

Movement of complex specialties or specialties benefiting from higher critical mass to Centres of Excellence

COMMUNITY HEALTH CENTRES- LEVEL 2

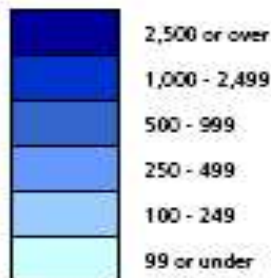
(approx 42 across
Northern Ireland)



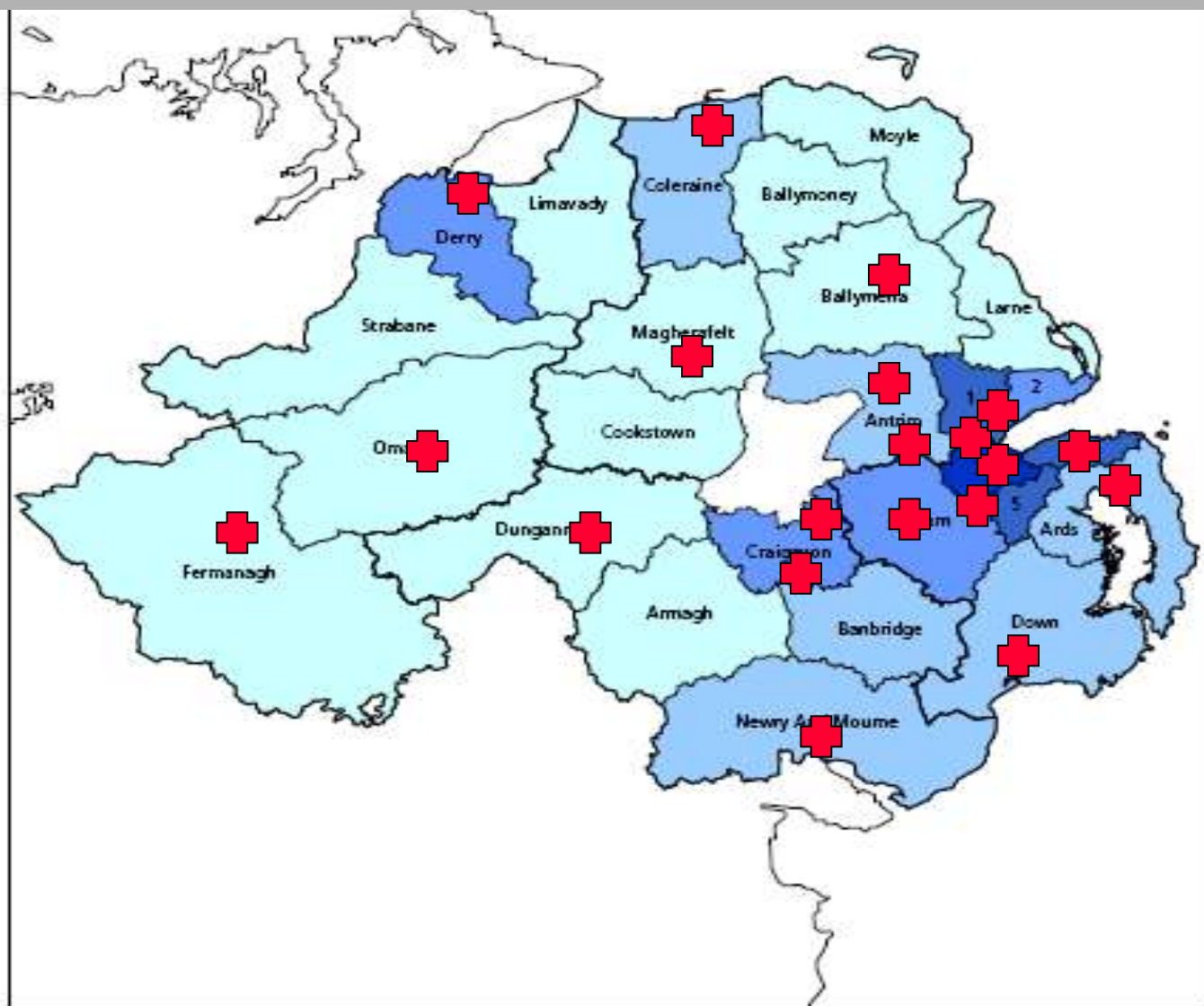
HISTORICAL LOCATION OF 20 HOSPITALS PROVIDING ACUTE SERVICES



Population density, 2006
(people per sq km)



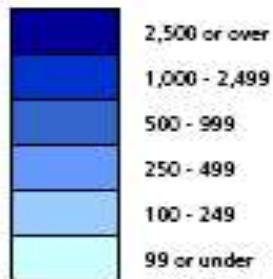
- 1 Newtownabbey
- 2 Carrickfergus
- 3 Belfast
- 4 North Down
- 5 Castlereagh



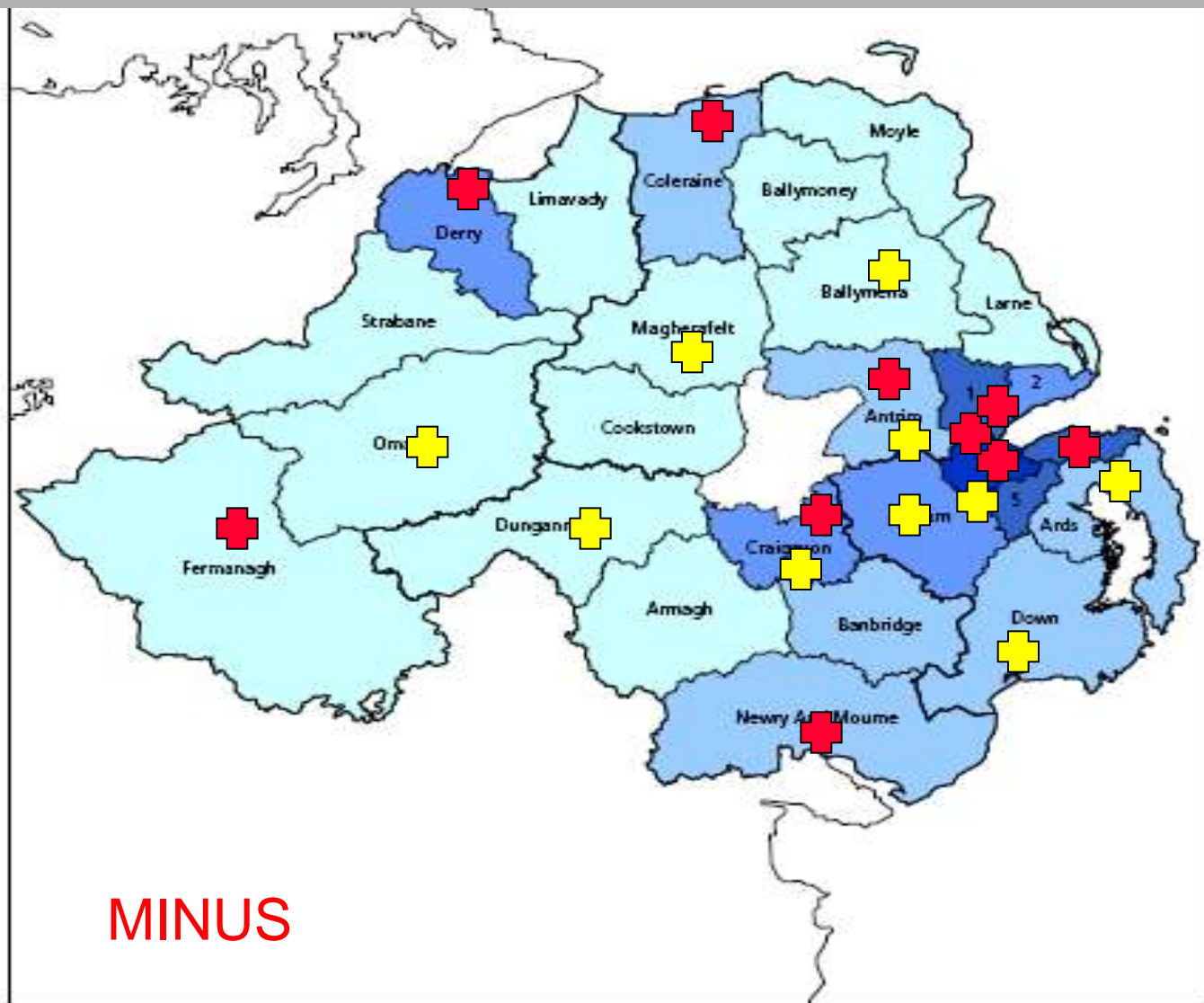
10 HOSPITALS WHICH TO-DATE HAVE LOST ACUTE SERVICES



Population density, 2006
(people per sq km)



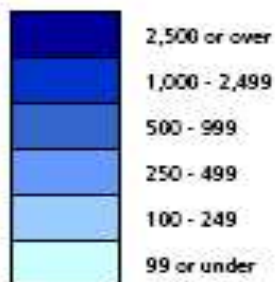
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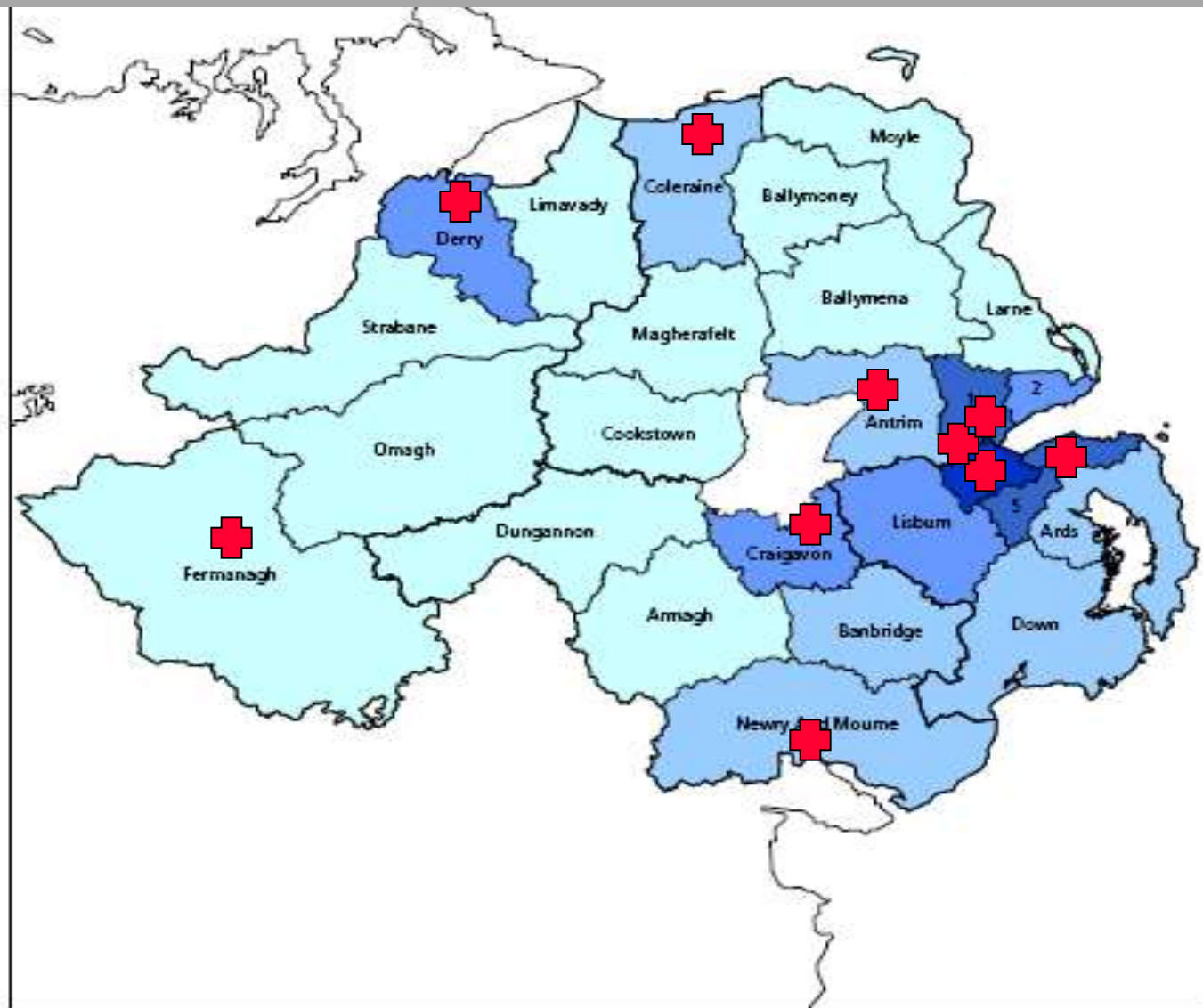
LOCATION OF EXISTING 10 ACUTE HOSPITALS



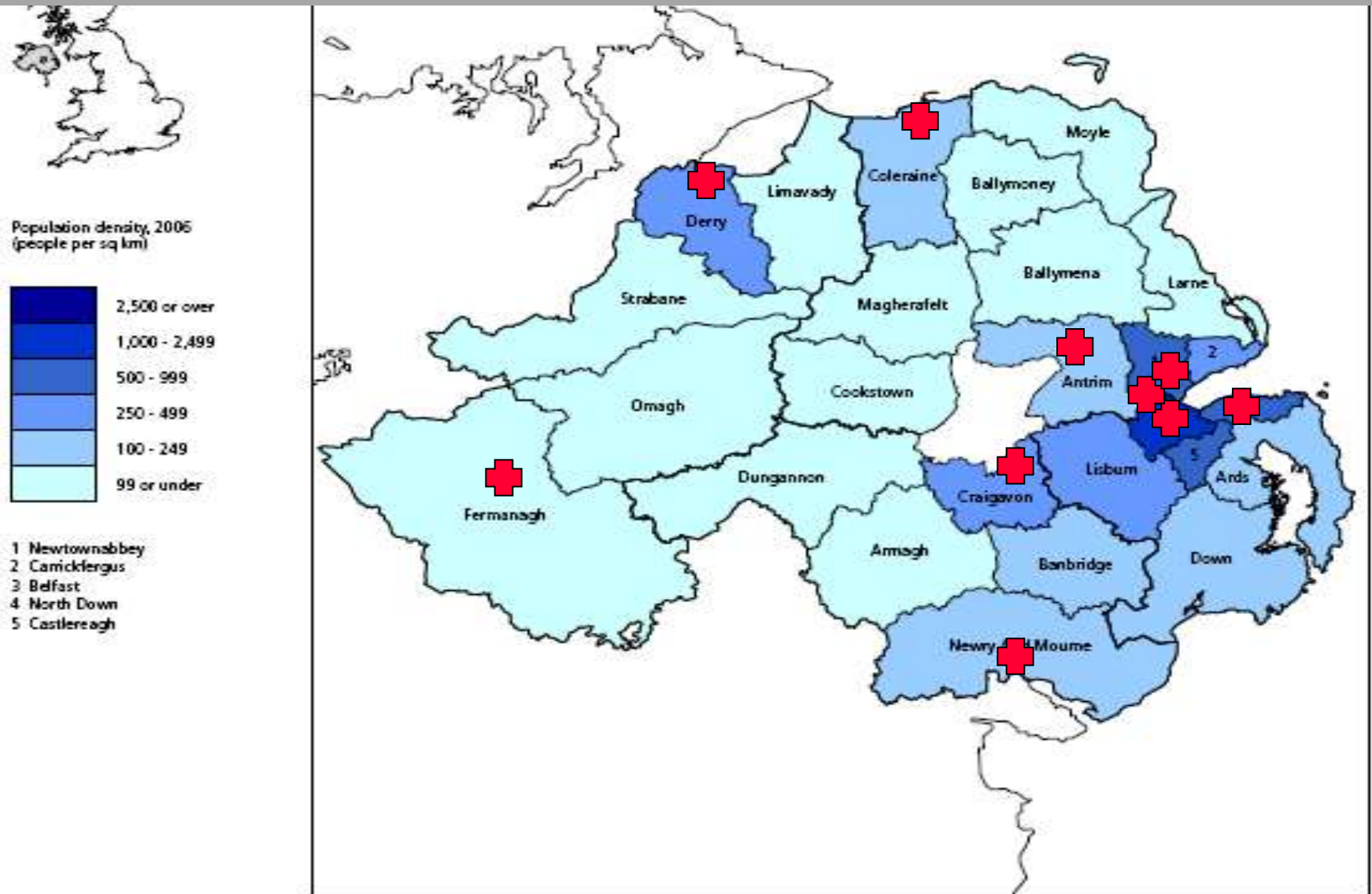
Population density, 2006
(people per sq km)



- 1 Newtownabbey
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CURRENT PROPOSAL BEING DEVELOPED TO REDUCE FROM 10 ACUTE HOSPITALS TO BETWEEN 5-7 NETWORKS

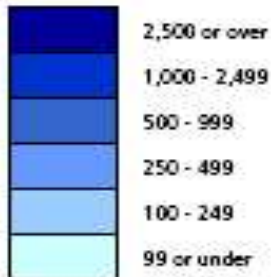


Approx £1000m being spent reinforcing Centres of Excellence

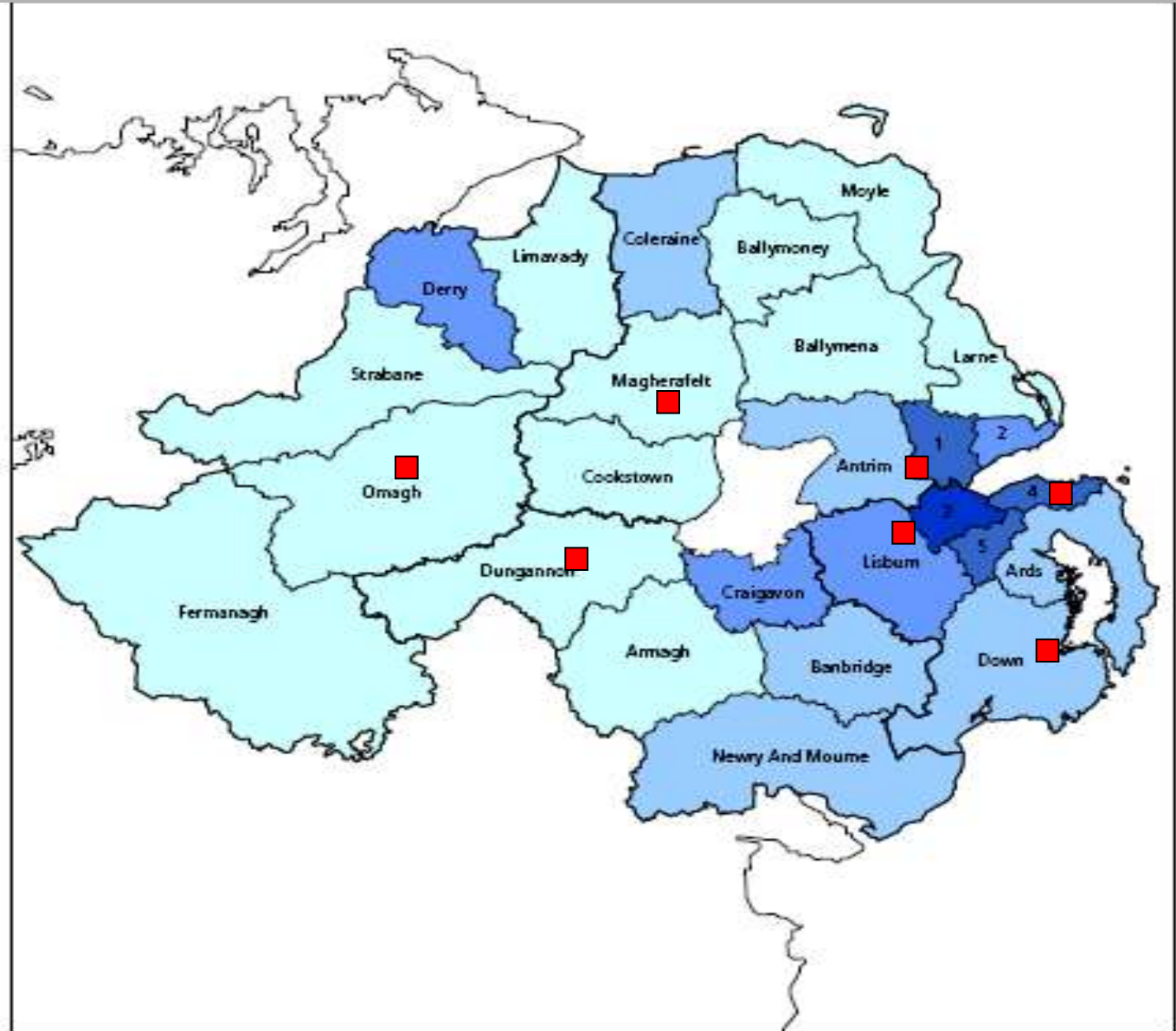
LOCATION OF LEVEL 3 FACILITIES - 7 LOCAL HOSPITALS



Population density, 2006
(people per sq km)



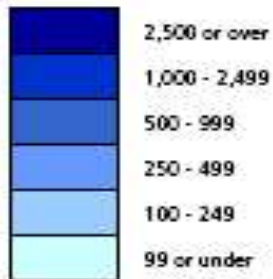
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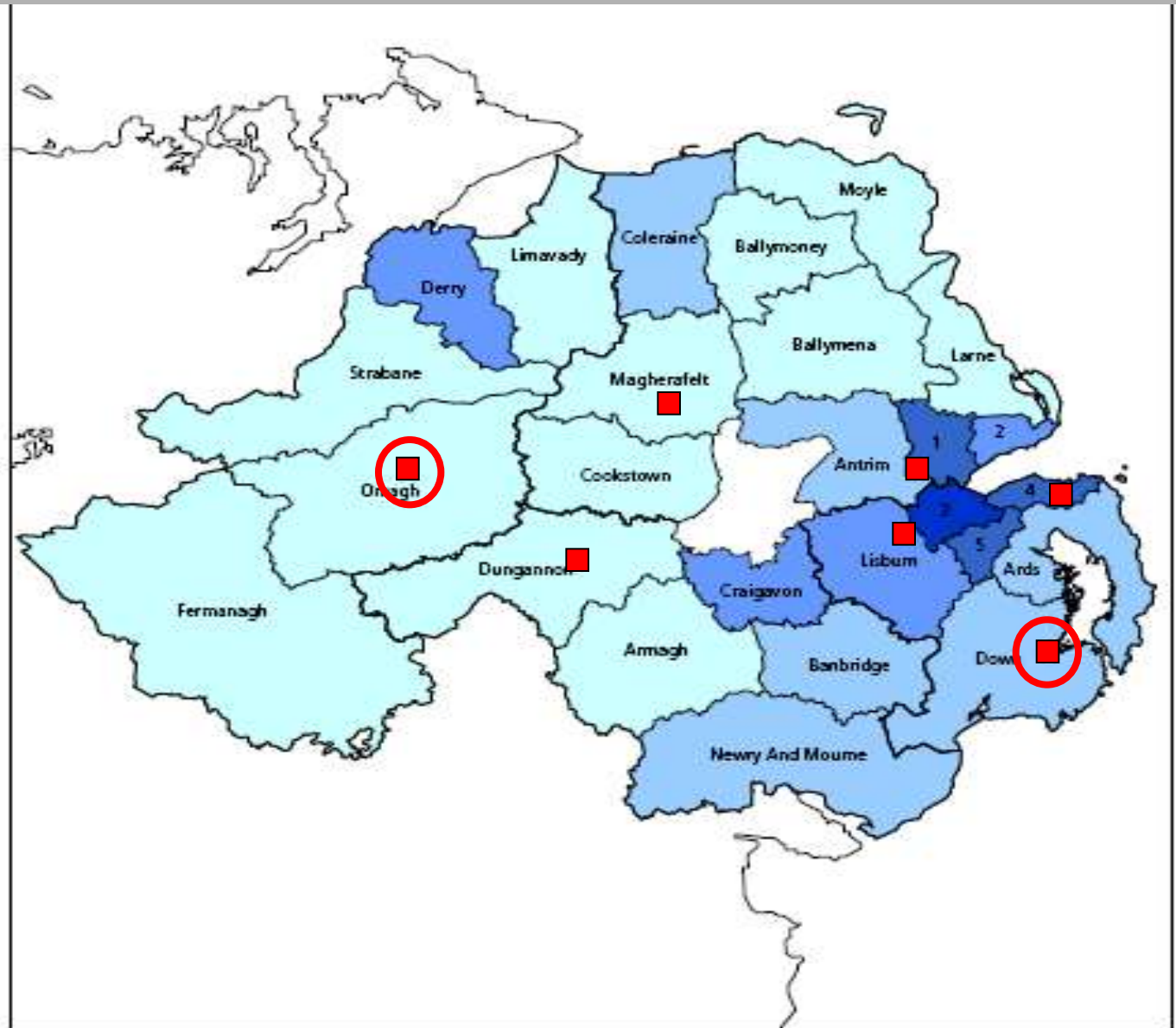
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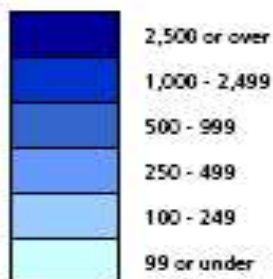


Approx. £250m being spent reconfiguring local community hospitals

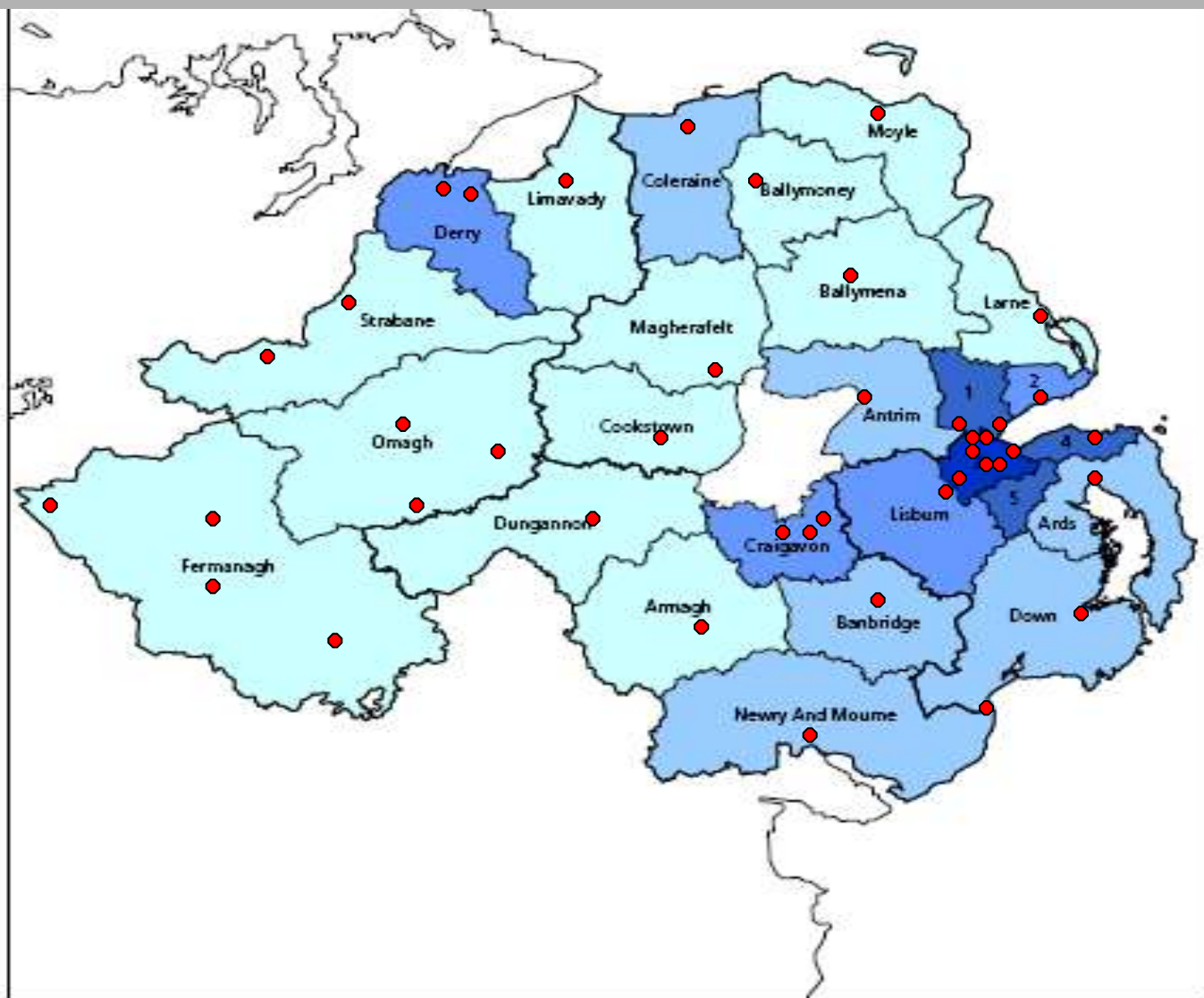
LEVEL 2 FACILITIES - UP TO 42 COMMUNITY HEALTH CENTRES (Level 2)



Population density, 2006
(people per sq km)



- 1 Newtownabbey
- 2 Carrickfergus
- 3 Belfast
- 4 North Down
- 5 Castlereagh



PLUS £500m in Health and Care Centres

DESIGN VISION

- The **right type** of facilities, with the **right design**, in the **right place**.
- Quality objectives that recognise the major contribution that design can play in creating a healing environment measured in terms of impact on health and well-being
- Developing design solutions that allow for change of demand and use over time
- Creating Health Facilities that enhance and enrich the communities in which they are located
- Maximising efficiencies in whole-life costs whilst ensuring the delivery of environmental, social and economic sustainability objectives

THE ROLE OF THE COMMUNITY HEALTH AND CARE CENTRE IN NORTHERN IRELAND

(cost approx. 60% per sq metre of equivalent
accommodation in new acute hospital
buildings)

Community Health Centres – Level 2

2
CHC

20k (rural) - 70k (urban)
population

£8 -20 million cost
Located at natural
public transport / retail /
civic centre hubs in
cities and larger towns



Typically containing:-

- GP Practices
- Treatment rooms
- Out of Hours GP Service
- Out-patient Consulting Suites
- Imaging and diagnostics
- Minor Procedures Suite
- Children's Services
- Physiotherapy
- Speech therapy
- Podiatry
- Dental Services
- Social Services
- Mental Health Services
- Multi-disciplinary outreach teams
- Home monitoring of chronic disease
- Voluntary Sector
- Community Facilities
- Information/Resource Centre
- Pharmacy (Private sector)

PATIENT STORY – CARING FOR MICHAEL



Michael aged 71 suffers from Emphysema
He monitors his vital signs at home every morning using new technology

If readings show signs of deterioration, Michael's local healthcare professional is automatically alerted and initiates early intervention.

When Michael sees his GP they have a history of measurements to look at and are able to make good decisions.

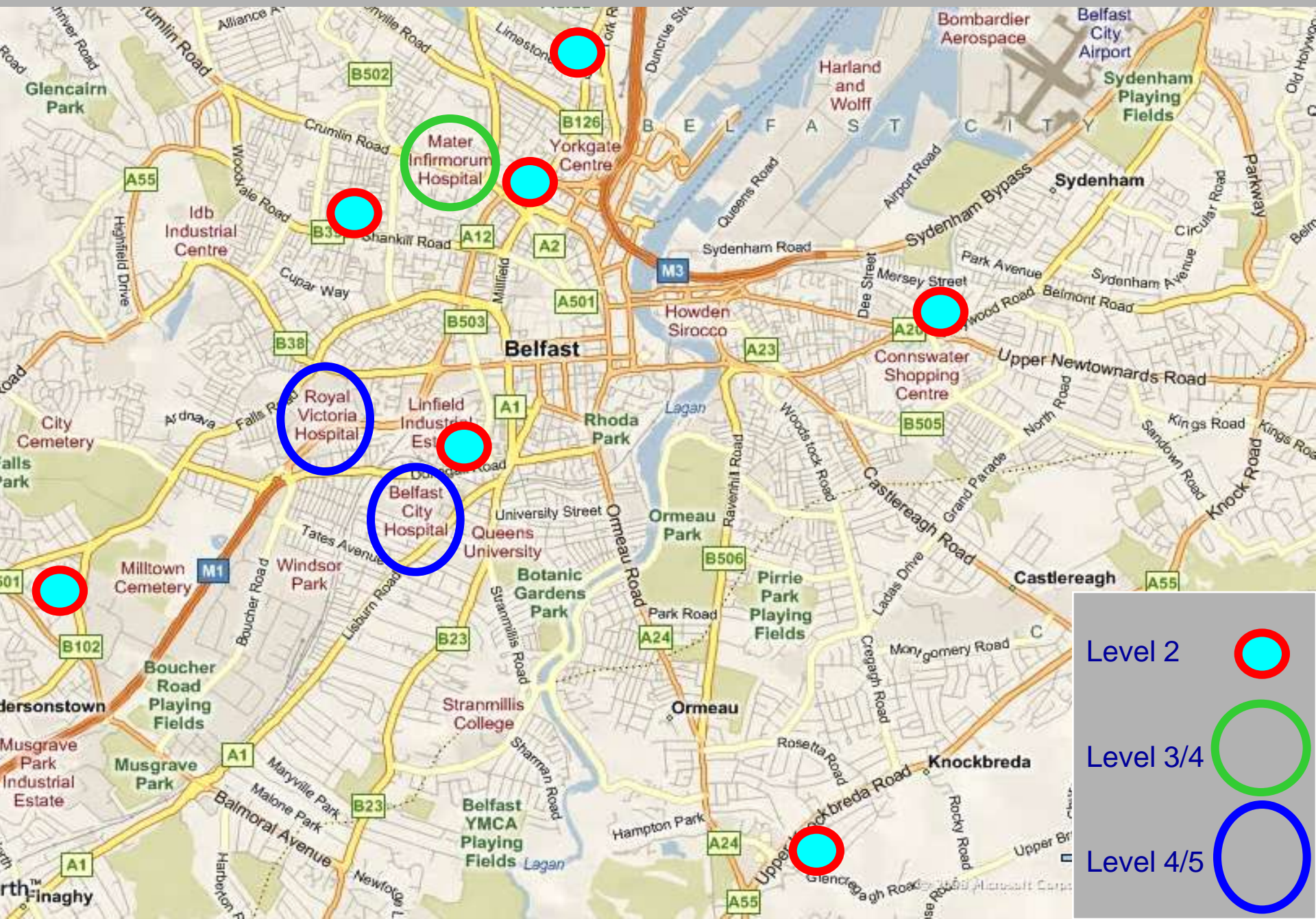
Before he had tele-monitoring he was being admitted to hospital, via A&E 2 or 3 times per year and would stay there for about 6 days.

He has been on tele-monitoring for 2 years and during that time he has had no admissions.

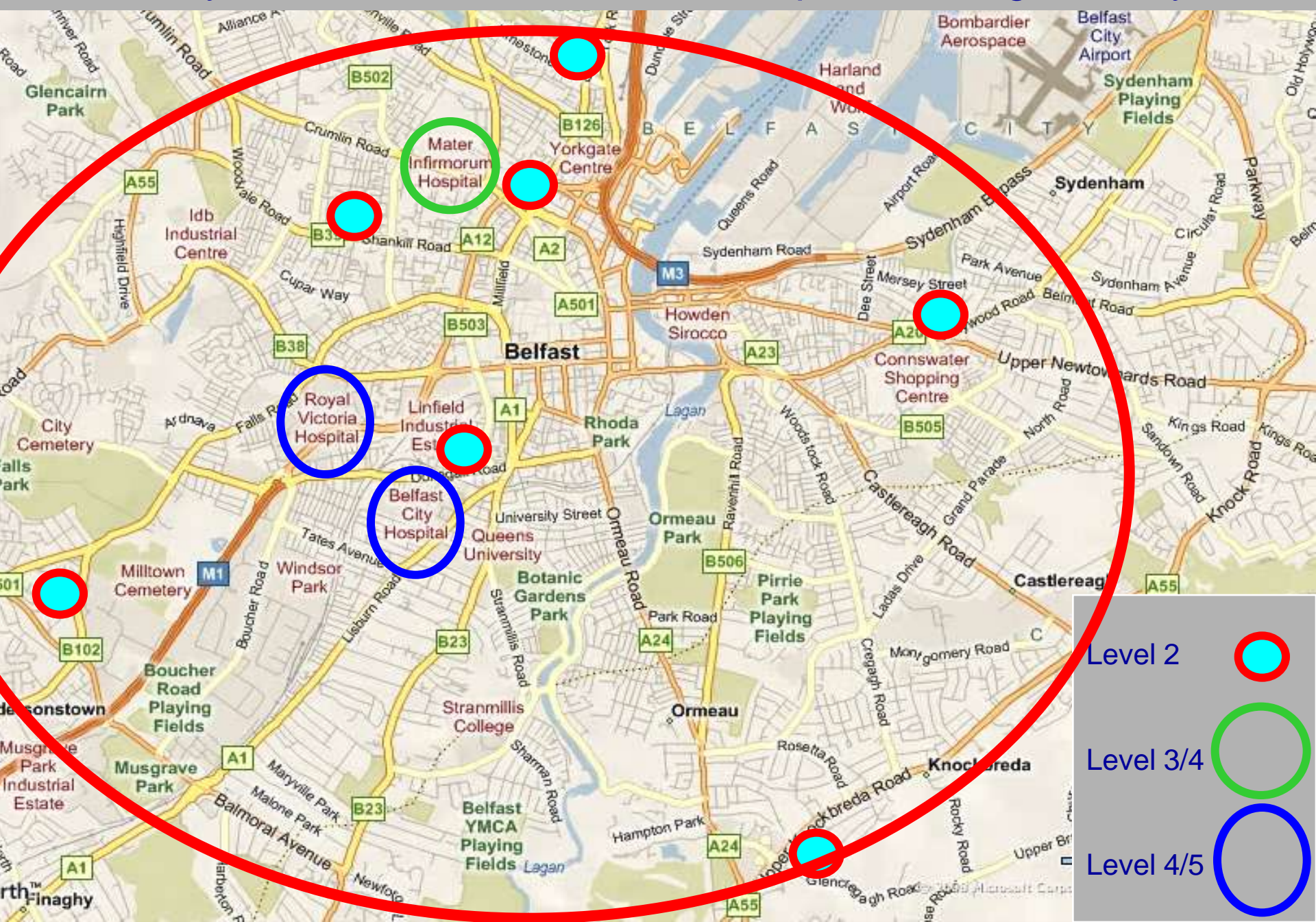
POTENTIAL SAVINGS

- Contract in place in Northern Ireland for tele-monitoring of up to 20,000 people with chronic disease over next 4 years (out of 1.8 million population)
- Based on Michael's case if 5000 of the 20000 were to have similar benefits this would save approximately £40m per annum
- Improved quality of life for him and his family, independent living, economic contribution in addition to significant cost savings

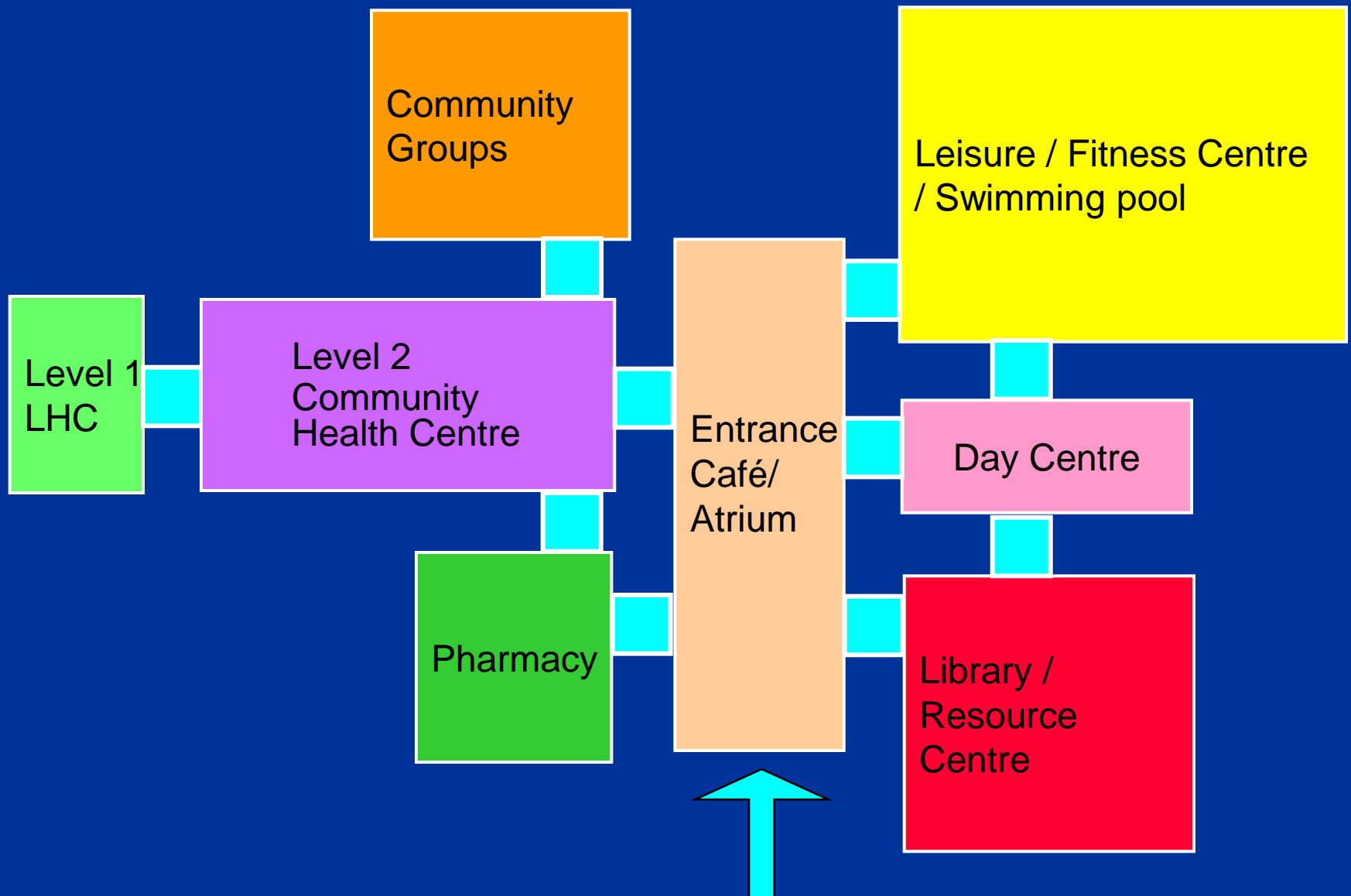
Level 2 Community Health Centres in Belfast



Community Health Centres in Belfast as part of Integrated System



CROSS - SECTORAL INTEGRATION





GROVE HEALTH AND WELL BEING CENTRE - BELFAST

The floor plan illustrates the layout of the 1st floor, featuring a central corridor system connecting various functional areas. Key spaces include:

- Classrooms and Lecture Halls:** Numerous rooms labeled with numbers (e.g., 100, 101, 102, 103, 104) and names (e.g., "Lecture Hall", "Classroom").
- Auditorium:** A large room labeled "Auditorium" with tiered seating.
- Library:** A large area labeled "Library" with bookshelves and study areas.
- Administrative Offices:** Several rooms labeled "Office" and "Administrative".
- Common Areas:** Spaces labeled "Lobby", "Reception", and "Waiting Area".
- Restrooms and Service Areas:** Rooms labeled "Restroom", "Kitchen", and "Break Room".
- Outdoor Spaces:** A "Courtyard" and a "Walkway" are shown, along with landscaping elements like trees and shrubs.

The plan also indicates the location of the "University of the Pacific" and the "Law Center" building.

Ground Floor Plan



GROVE HEALTH AND WELL BEING CENTRE BELFAST



First Floor Plan



GROVE HEALTH AND WELL BEING CENTRE BELFAST



First Floor Plan





REQUIRED DESIGN OBJECTIVES

Natural lighting (and well-designed artificial lighting)

Intuitive way-finding and transparency of layout

Avoidance of deep-plan corridors and internal waiting areas

Investment in Public Realm space

Creation of varied volumes internally

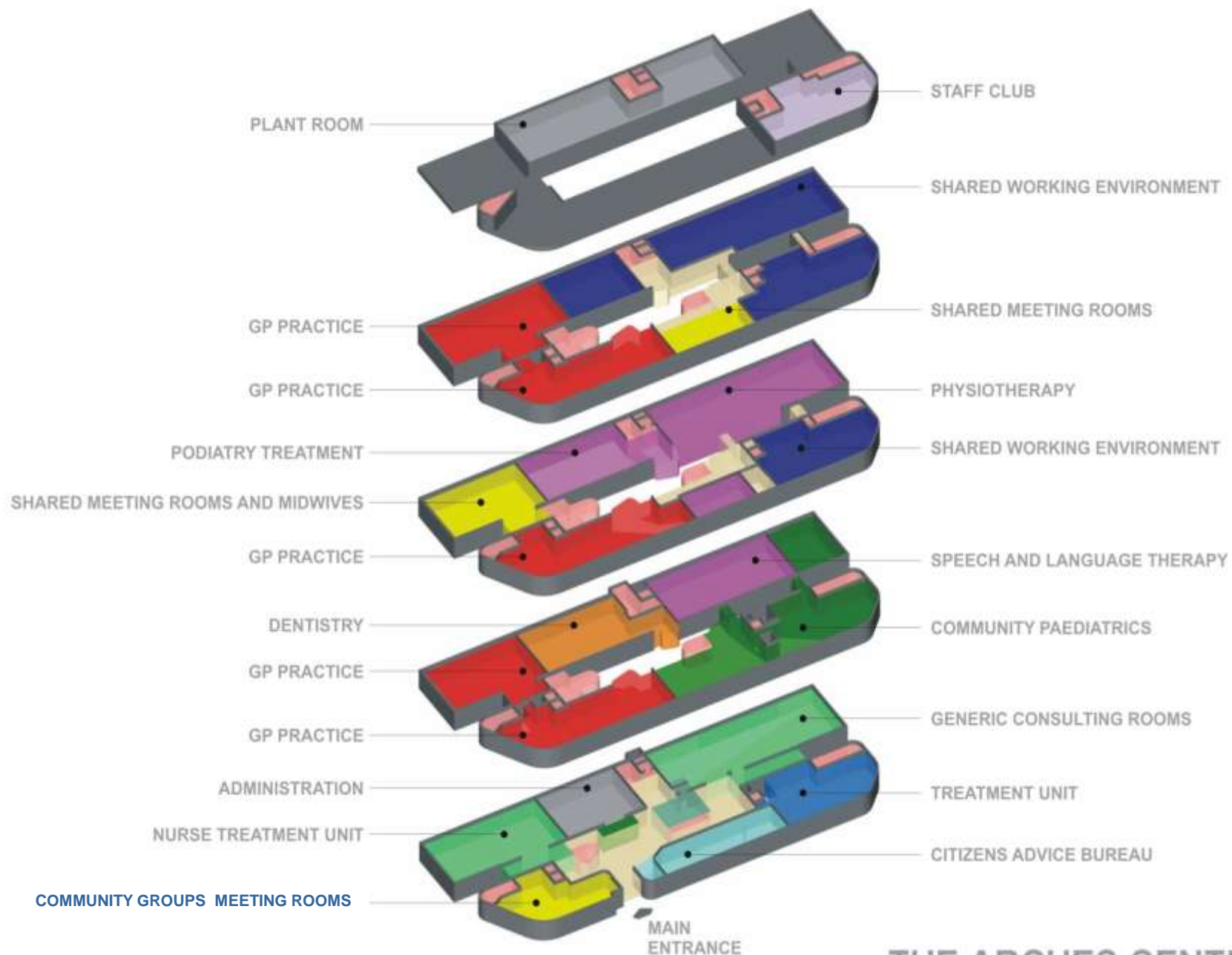
Human scale / Privacy / Design that values people

Non-institutional / create places for conversations / spaces for people

Integrated Art and Landscaping / External Views

Sustainability / Flexibility in Use

















THE CARLISLE COMMUNITY HEALTH CENTRE BELFAST

ARCHITECTS:
PENYOIRE AND PRASAD with
TODD ARCHITECTS















KNOCKBREDA HEALTH AND WELL-BEING CENTRE

ARCHITECTS:
PENYOIRE AND PRASAD with
TODD ARCHITECTS



KNOCKBREDA HEALTH AND WELL-BEING CENTRE

ARCHITECTS:
PENYOIRE AND PRASAD with
TODD ARCHITECTS



ARCHITECTS:
PENYOIRE AND PRASAD with
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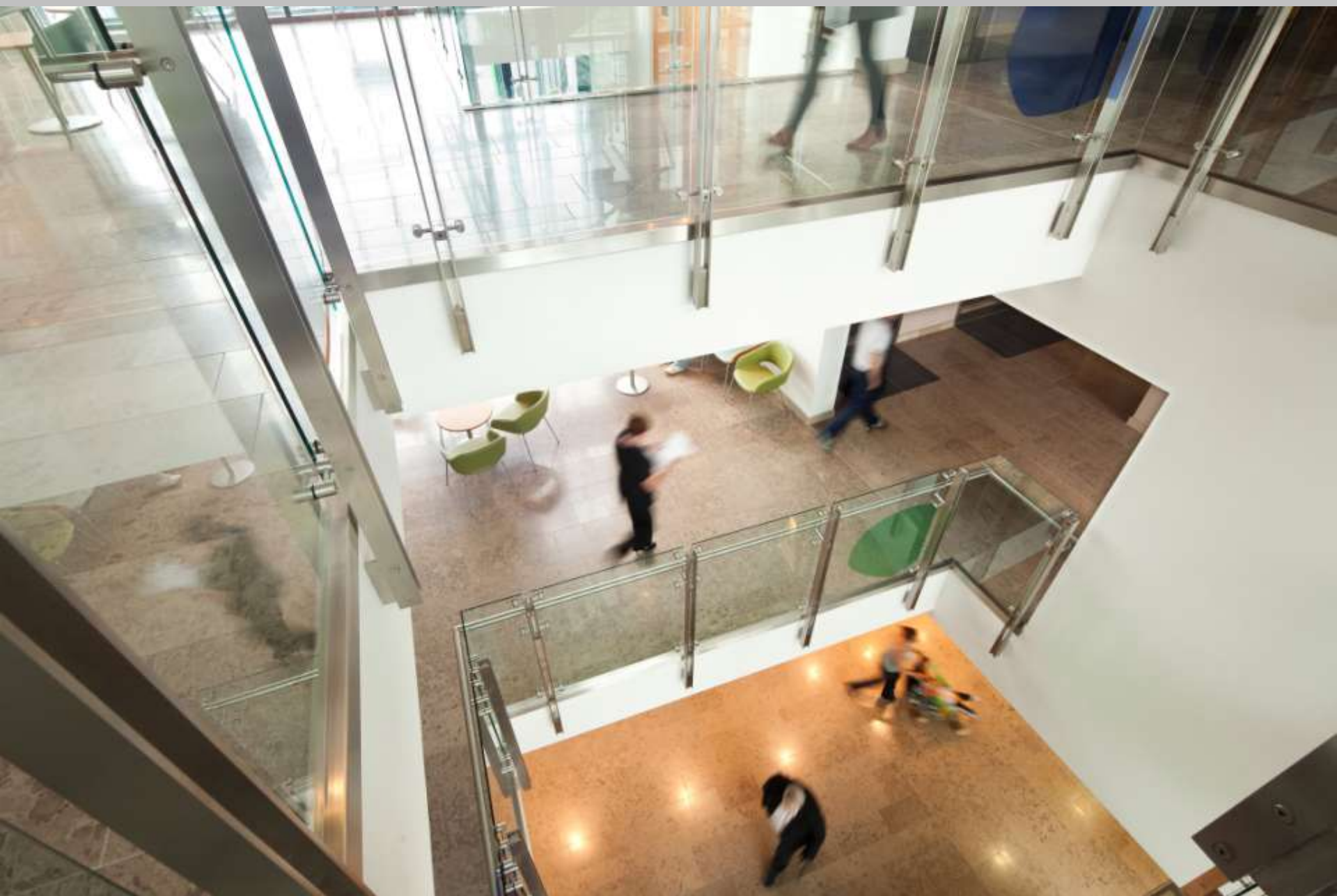
Beech Well–Being and Treatment Centre

















Shankill Well-Being and Treatment Centre









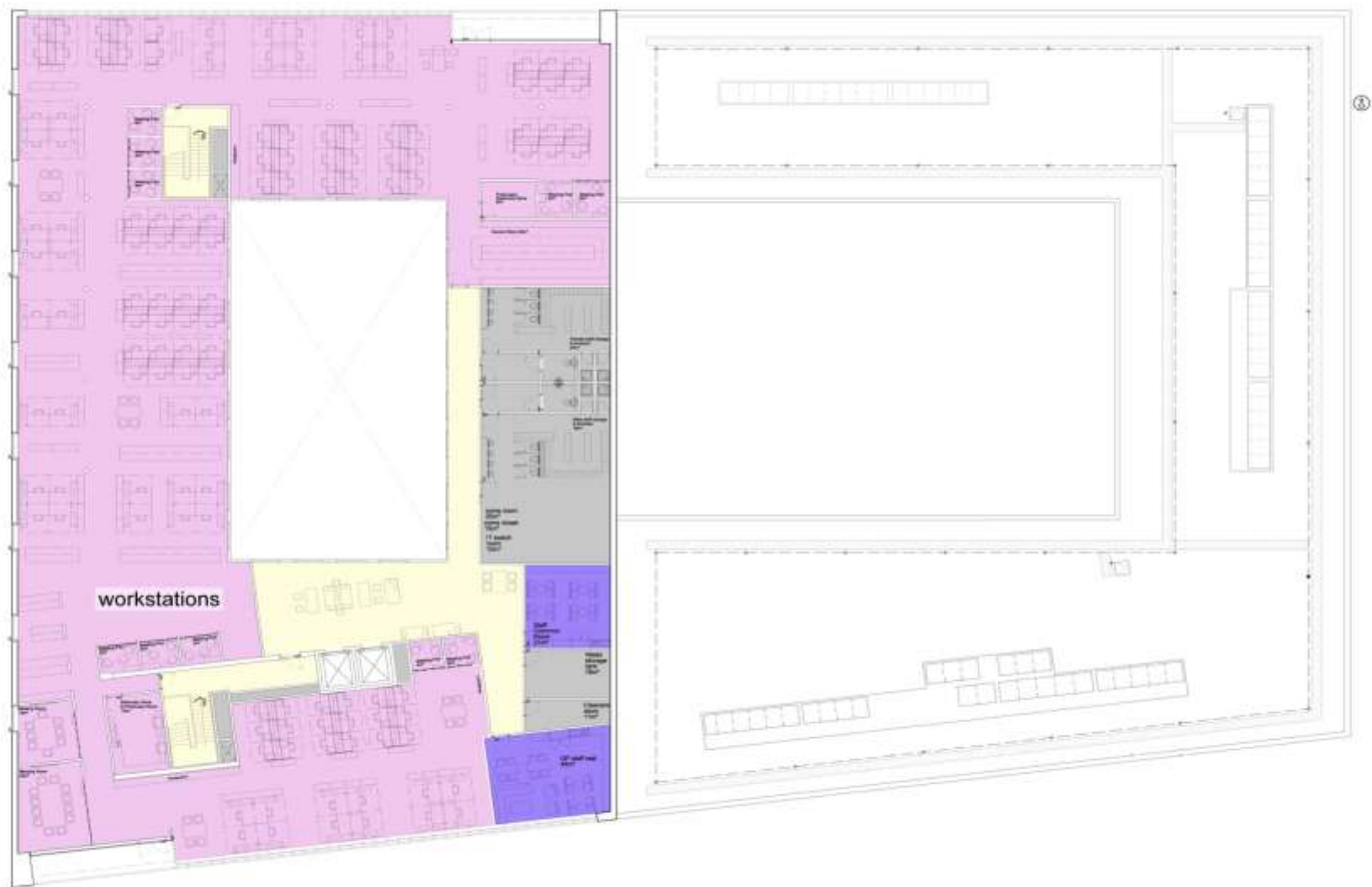


BALLYMENA HEALTH AND CARE CENTRE



BALLYMENA HEALTH AND CARE CENTRE

Level 01



BALLYMENA HEALTH AND CARE CENTRE

Level 02



keppie
garethboskinsarchitects



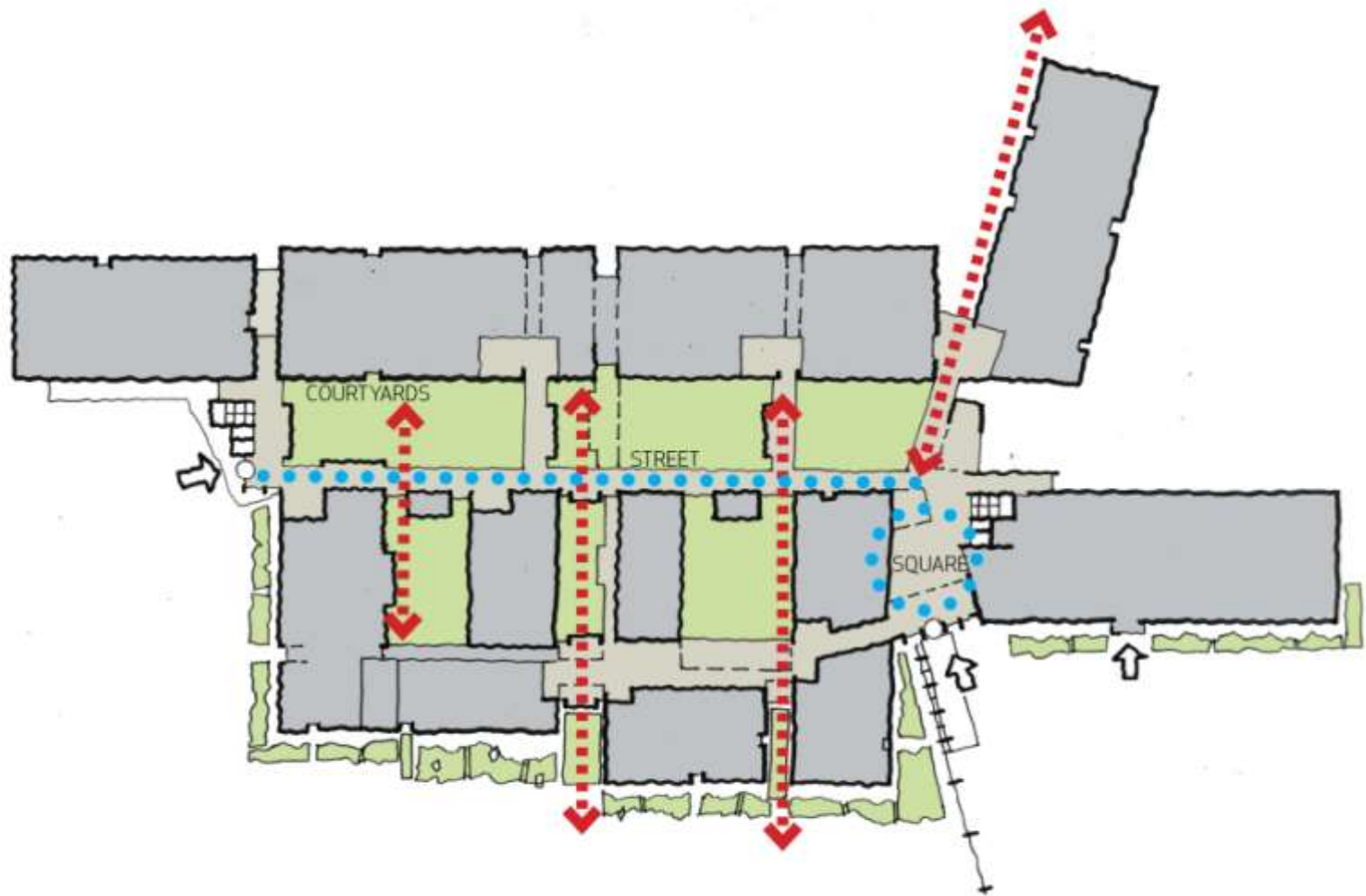




OMAGH ENHANCED LOCAL HOSPITAL



Main Entrance/Approach



CONCEPT PLAN
PERMEABILITY AND WAY FINDING



MAIN ENTRANCE VIEW
GROUND FLOOR





GROUND FLOOR PLAN



FIRST FLOOR PLAN





GP PLAN
RECEPTION AND WAITING



URGENT CARE AND TREATMENT



POST OCCUPANCY EVALUATION

- It is virtually impossible, given the huge number of variables, to determine over a short period the direct impact of the new model on the health and well-being of the population
- All we can do at this stage is assess the responses of users and staff as to their perceptions of the new service model and facilities through structured surveys
- We are currently standardising this approach for all our facilities

SYNOPSIS OF SURVEY RESULTS FOR HEALTH AND CARE CENTRES ALREADY OPENED FOR TWO YEARS

Based on:

Minimum of 100 patients/users responses per building;

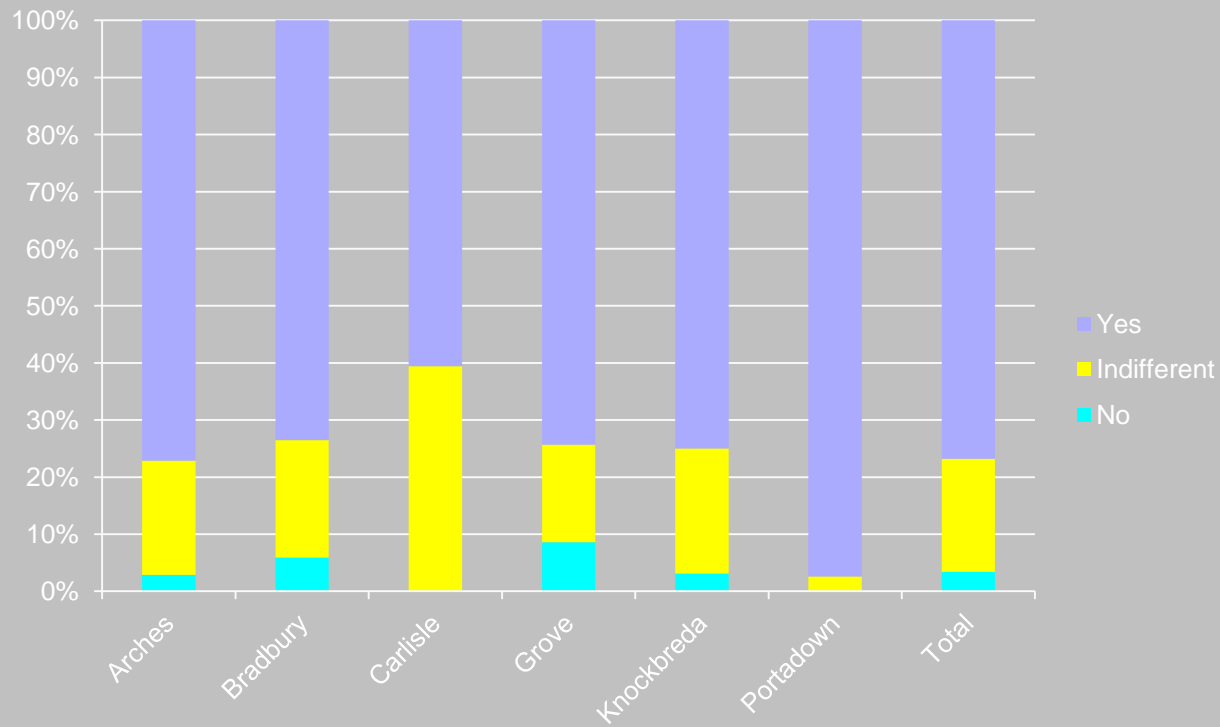
Minimum of 40 members of staff per building

STAFF SURVEY PROFILE

- 235 Staff responded
- 62% had worked in the building in question for more than 2 years
- 16% had moved from an acute hospital setting
- The survey included responses from a range of professional disciplines, managerial staff and voluntary sector staff
- Brief synopsis of key points of much fuller survey

STAFF SURVEY – ABOUT THE SERVICE

Do you think that the bringing together of services into a single building has been beneficial FOR USERS?



77% - Yes

3% - No

20% - No difference

STAFF SURVEY – ABOUT THE SERVICE

Do you think that the bringing together of services into a single building has been beneficial for users?

REPLIES 77% - YES 3% - NO 20% - NO DIFFERENCE

REASONS WHY

69.4% of staff made comments in regard to this question

POSITIVE COMMENTS

91% of respondents made positive comments. The main positive themes making up the 91% are:-

- 43% - Care is provided on a more integrated service for patients
- 28% - Better and more convenient access to services for patients
- 16% - Improved communication and working relationships among staff resulting in an improved service to patients
- 4% - Staff felt that the inclusion of GP services as being very desirable

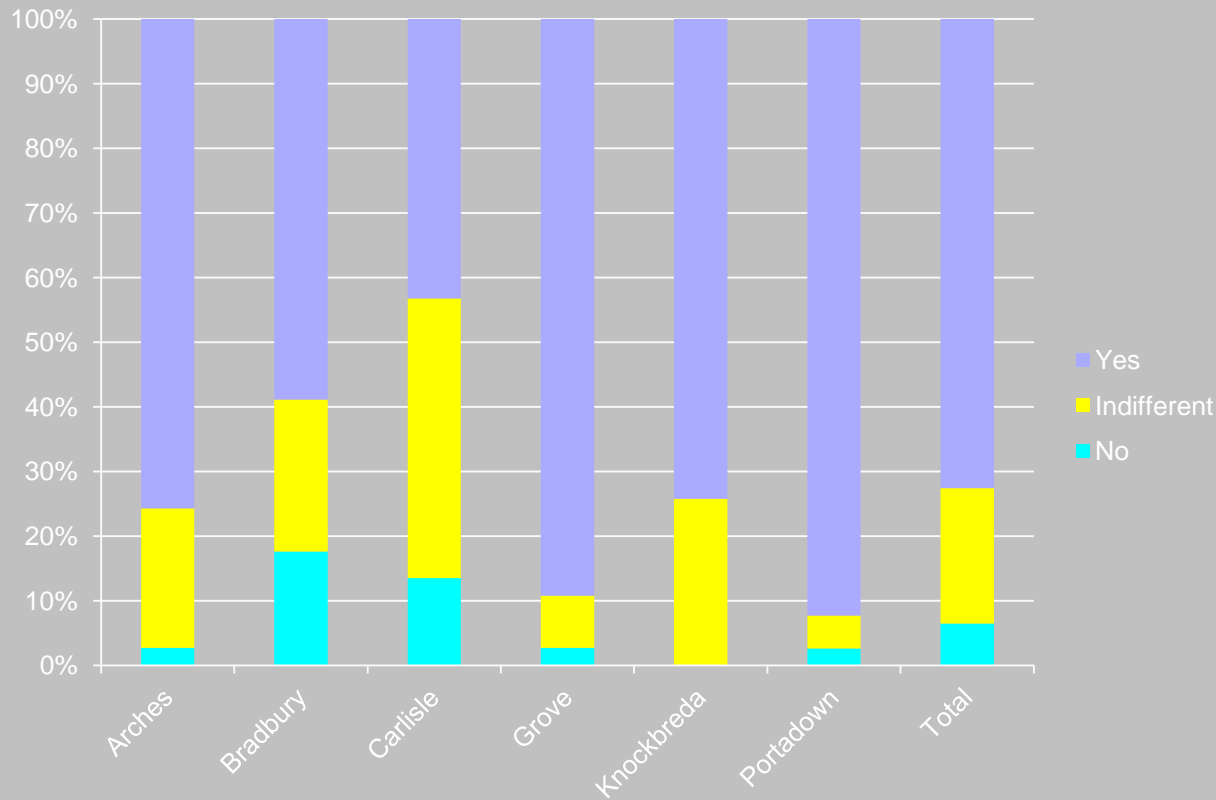
NEGATIVE COMMENTS

9% of respondents made negative comments and the main themes are :-

- the integration of services has not yet been fully developed
- more car park provision is required (Arches, Bradbury, Carlisle, and Knockbreda).

STAFF SURVEY – ABOUT THE SERVICE

Do you think that the bringing together of services into a single building has been beneficial FOR STAFF?



73% - YES

6% - NO

21% - NO DIFFERENCE

STAFF SURVEY – ABOUT THE SERVICE

Do you think that the bringing together of services into a single building has been beneficial for staff?

REPLIES 73% - YES 6% - NO 21% - NO DIFFERENCE

REASONS WHY

73% of staff made comments in regard to this question

POSITIVES

97% of respondents made positive comments and the main themes were:-

- 54% - Encourages a team working approach across the disciplines
- 40% - Improves networking between fellow health professionals which assists the treatment of patients
- 3% - Assists access to other health professionals and services to benefit of patients.

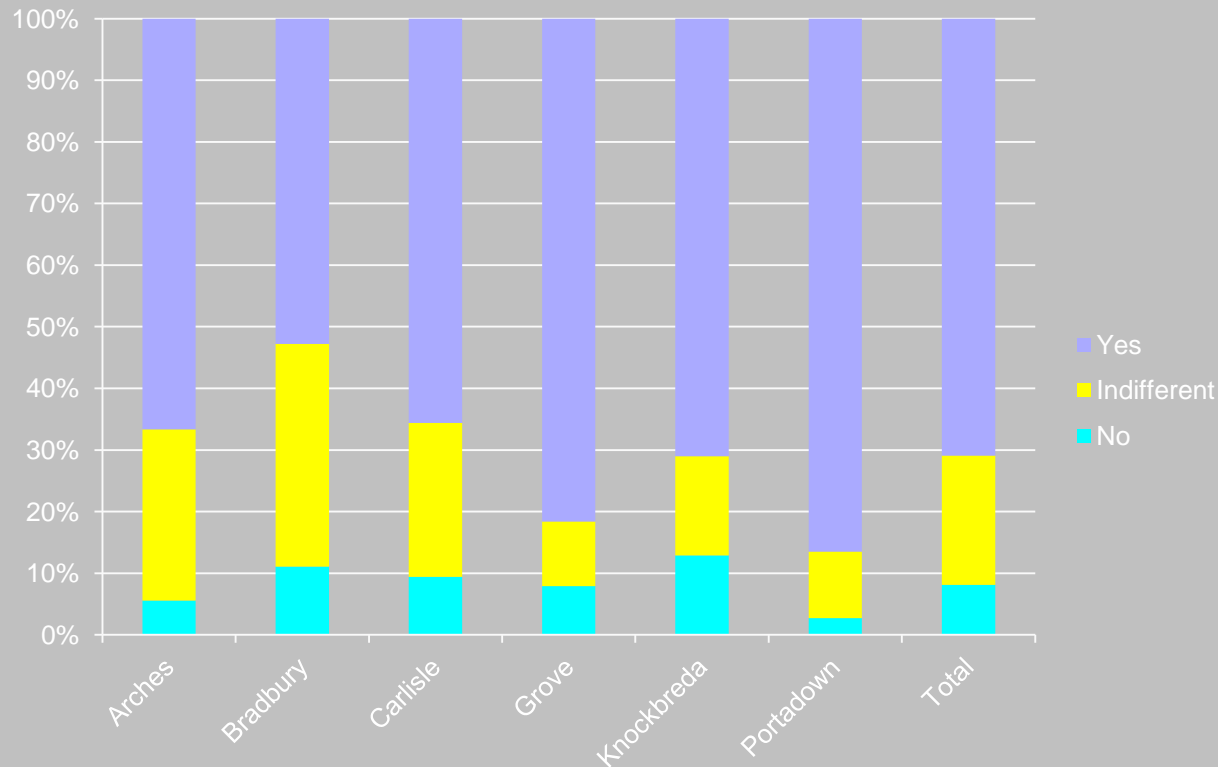
NEGATIVES

3% of respondents made negative comments and the main themes were:-

- Provision of a multi-use facility in isolation does not necessarily encourage multi-disciplinary interaction
- More car park provision is required (Arches, Bradbury, Carlisle)

STAFF SURVEY – ABOUT THE SERVICE

Do you feel that working alongside other health & social care staff results in a more integrated service being delivered?



71% - YES

8% - NO

21% - NO DIFFERENCE

STAFF SURVEY – ABOUT THE SERVICE

Do you feel that working alongside other health & social care staff results in a more integrated service being delivered?

REPLIES 71% - YES 8% - NO 21% - NO DIFFERENCE

REASONS WHY

59% of staff passed comment regarding this question.

POSITIVES

89% of respondents made positive comments and the main themes were:-

- 80% - greatly encourages team working across the disciplines for the benefit of patients (centres with GPs scored higher inferring that they were more successful in achieving an integrated service than those centres without GPs)
- 5%- assists the delivery of an improved service for the benefit of patients.
- 4% - assists staff appreciate the roles of fellow health professionals in the treatment of patients

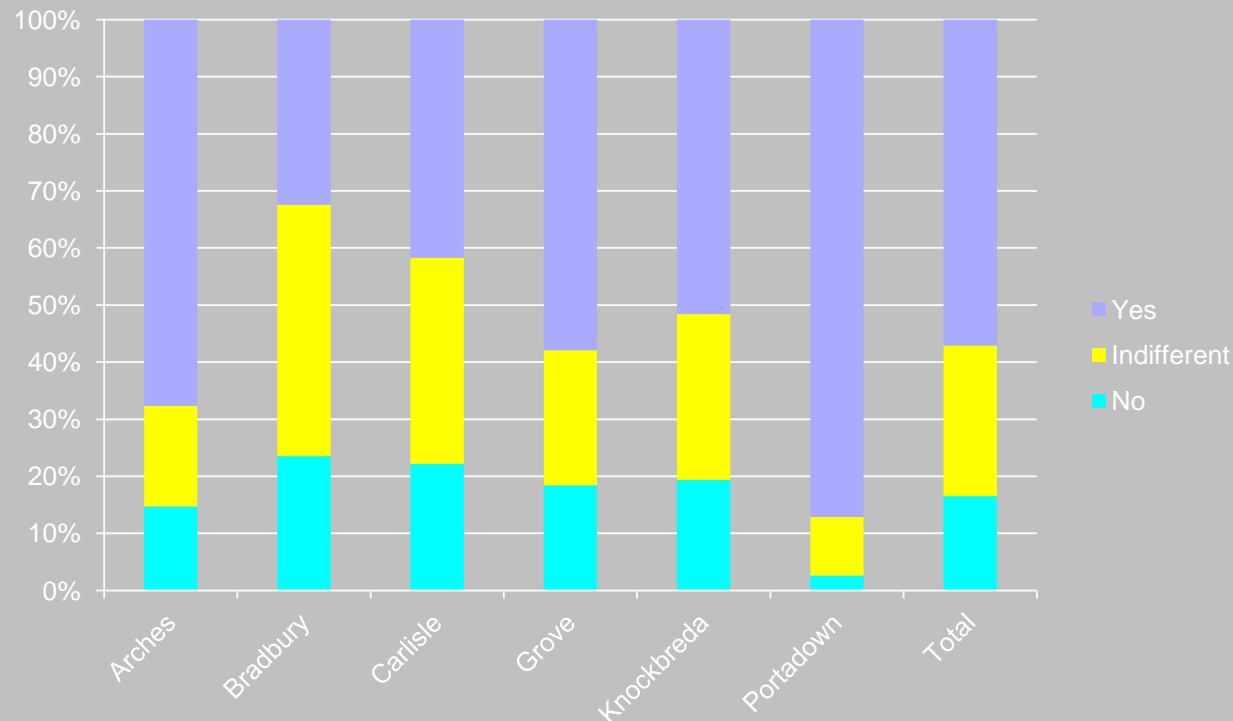
NEGATIVES

11% of respondents made negative comments and the main themes were:-

- 8% - staff do not feel that they have successfully established an integrated team
- 3% - communication across the disciplines can be problematic

STAFF SURVEY – ABOUT THE BUILDING

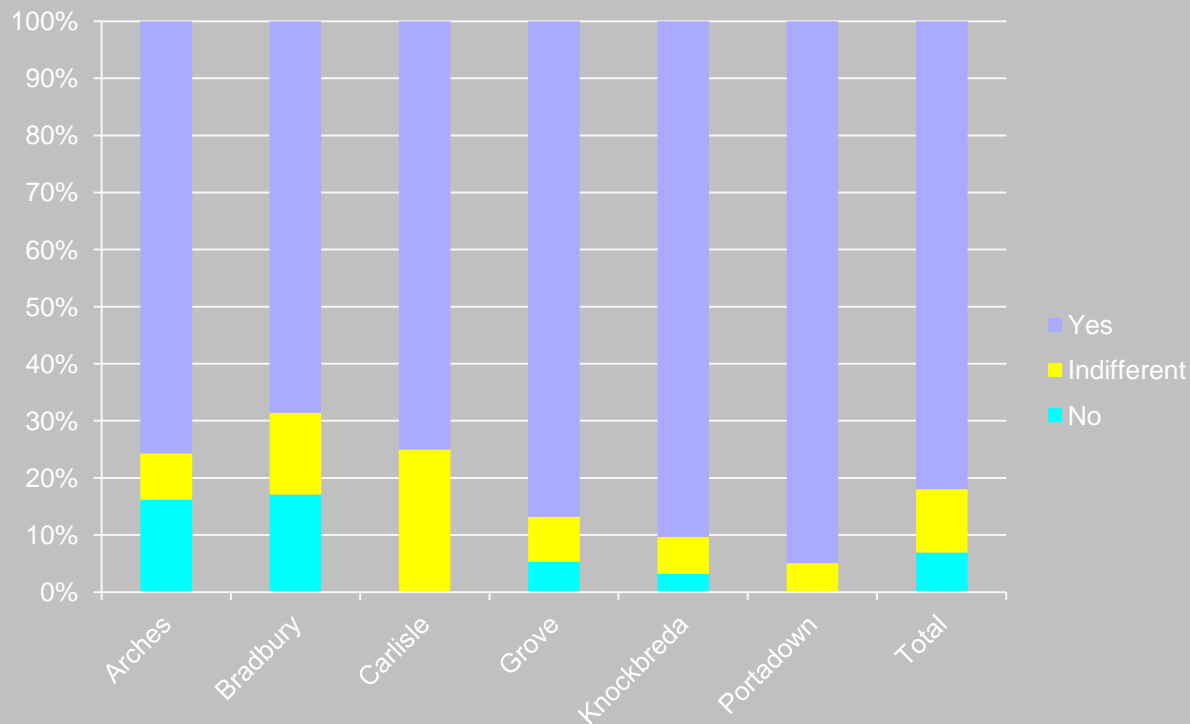
Does the building facilitate more efficient & effective working than in your previous workplace?



Almost 60% of respondents felt that the new centres assisted in the improving their effectiveness & efficiency

STAFF SURVEY – ABOUT THE BUILDING

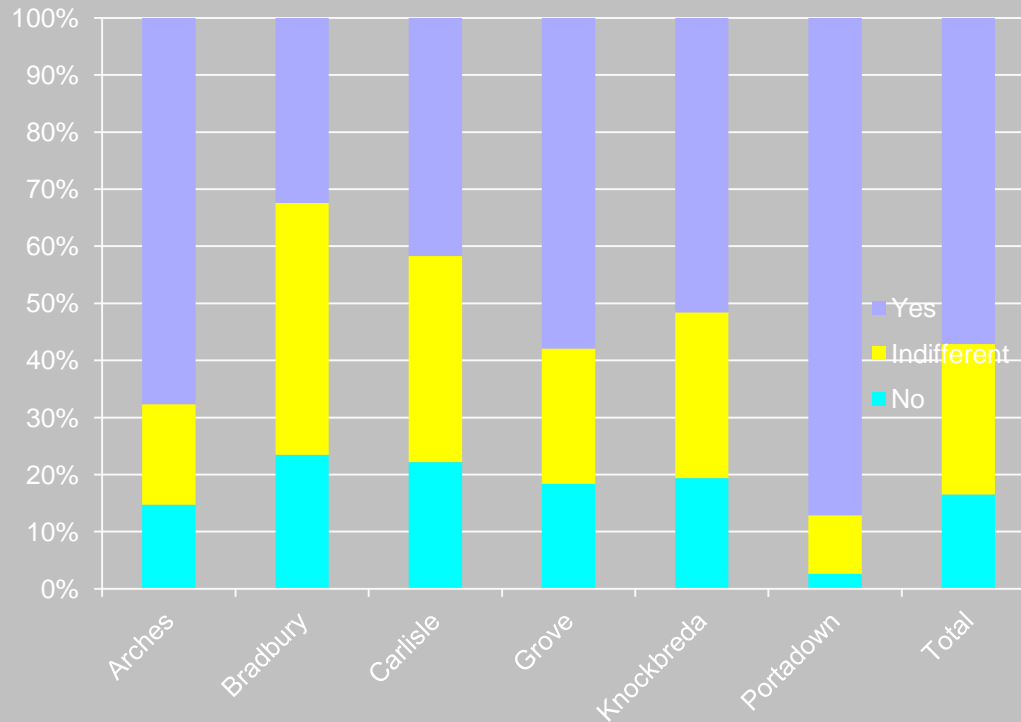
Do you enjoy working in the building?



Over 92% of those respondents felt that they enjoyed working in the building.

STAFF SURVEY – ABOUT THE BUILDING

Does the building facilitate more efficient & effective working than in your previous workplace?



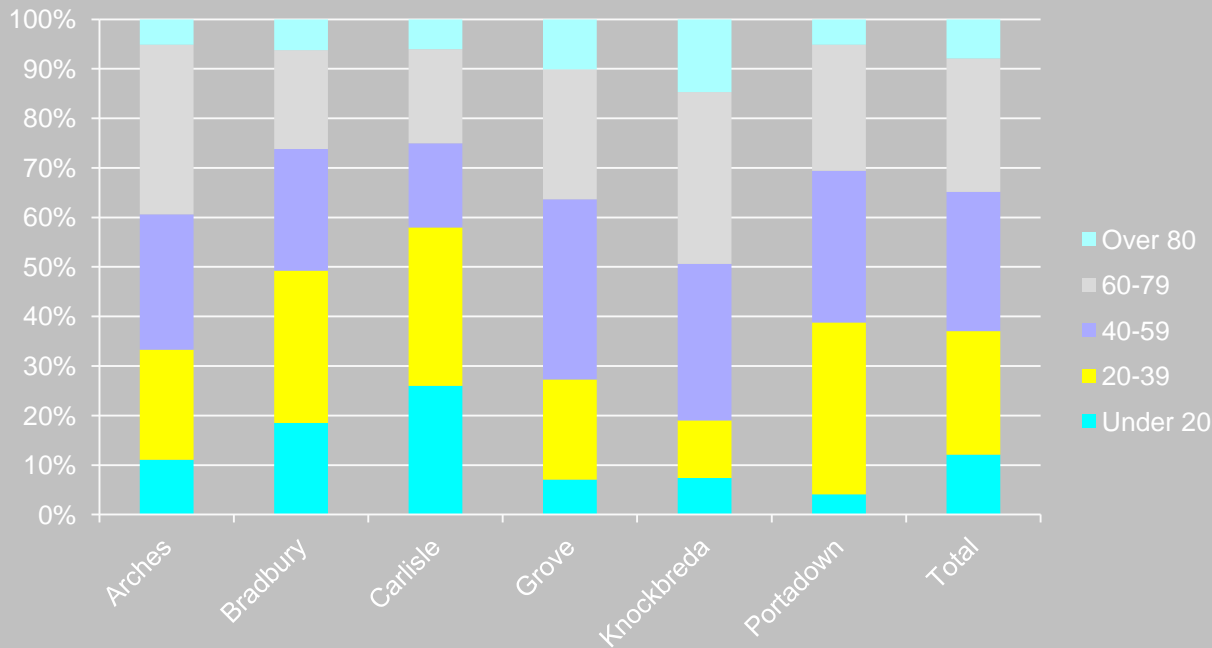
Almost 60% of respondents felt that the new centres assisted in the improving their effectiveness & efficiency

WORKING IN THE BUILDING

- A key objective of the survey was to ascertain whether staff felt that the bringing of these services together was beneficial to the way care was delivered
- An over whelming 91% of staff felt that bringing together services into the one building was beneficial to users with 73% feeling it was better for staff
- The main comments;
 - more convenient access to services for patients
 - improved communication
 - ability to have informal discussions
 - improved working relationships
 - greater understanding of each others roles, resulting in a more integrated service for patients

SERVICE USERS – USER PROFILE

Demographics:- Age Profile

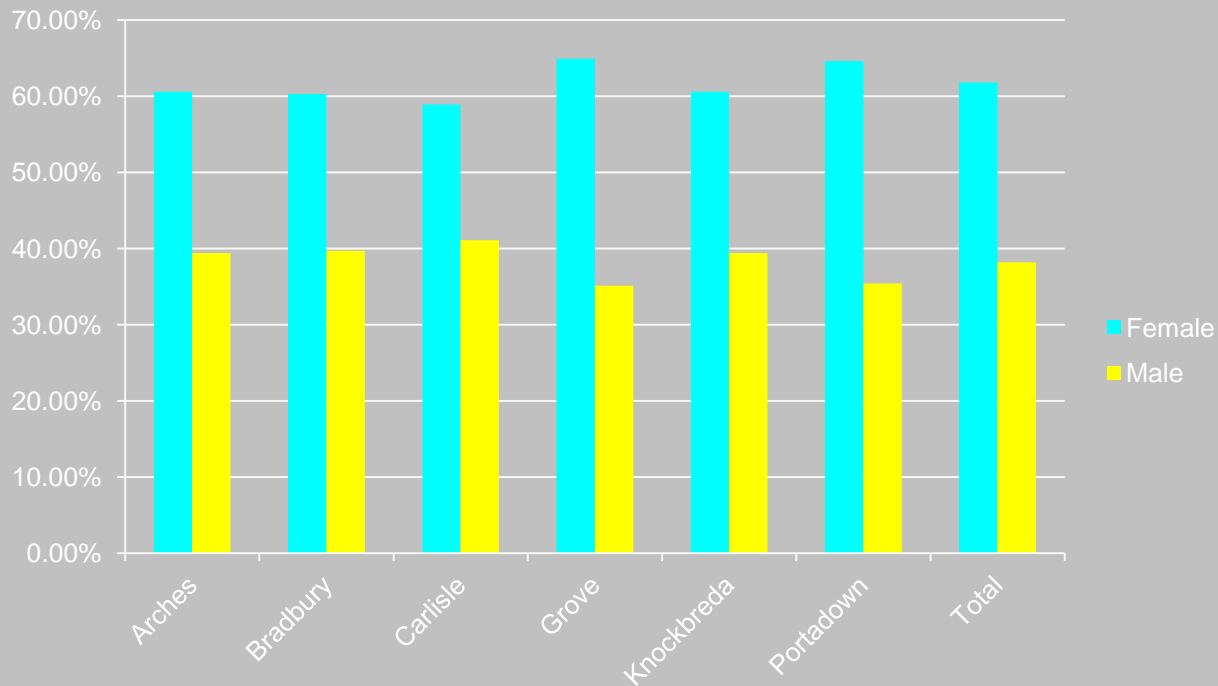


Trends:

- **80% of all service users were in the 20-69 years age category**
- **The largest number of under 20 years old patients were at inner city centres (Bradbury & Carlisle) and the largest number of over 80 year old patients were in suburban centres (Knockbreda & Grove) - reflecting population demographics.**

SERVICE USERS – USER PROFILE

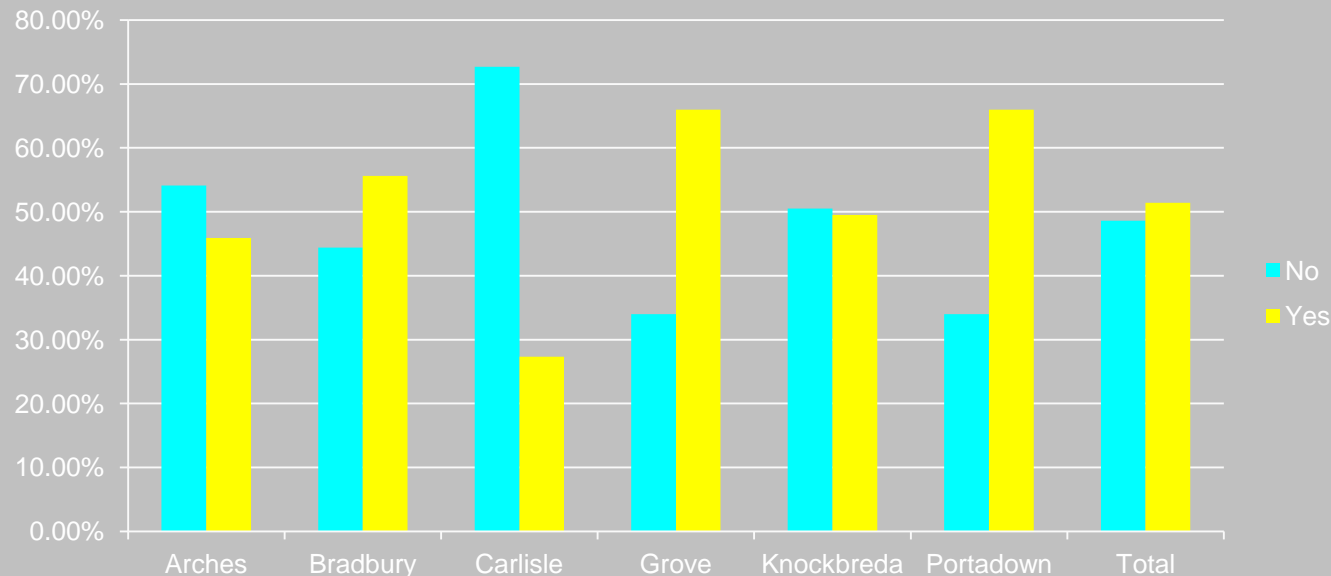
Demographics:- Gender Profile



Gender profile – 61.8% female, 38.2% male

SERVICE USERS – ABOUT THE SERVICE

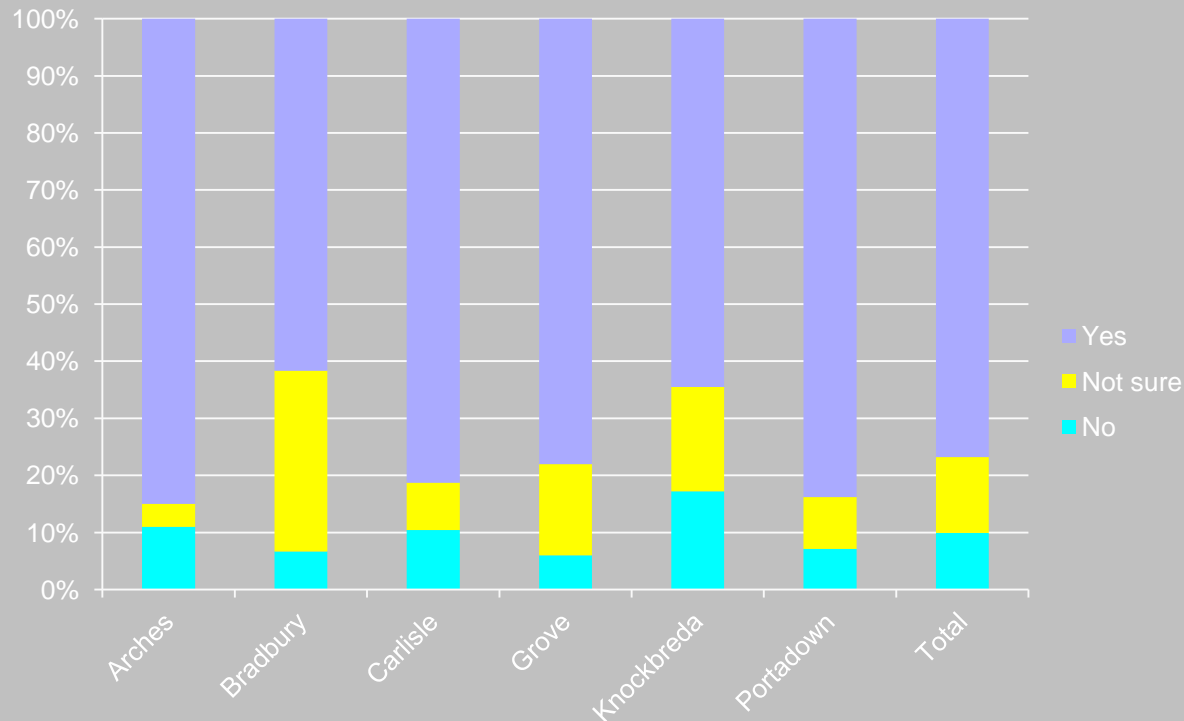
Did you previously attend another facility for the services which you now receive in the building?



- **Approx 50% of patients previously received services at another centre.**
- **Of those patients who attended other facilities, 85% received services at Primary Care / Community Centres and 15% received services in the Secondary Care sector.**

SERVICE USERS – ABOUT THE SERVICE

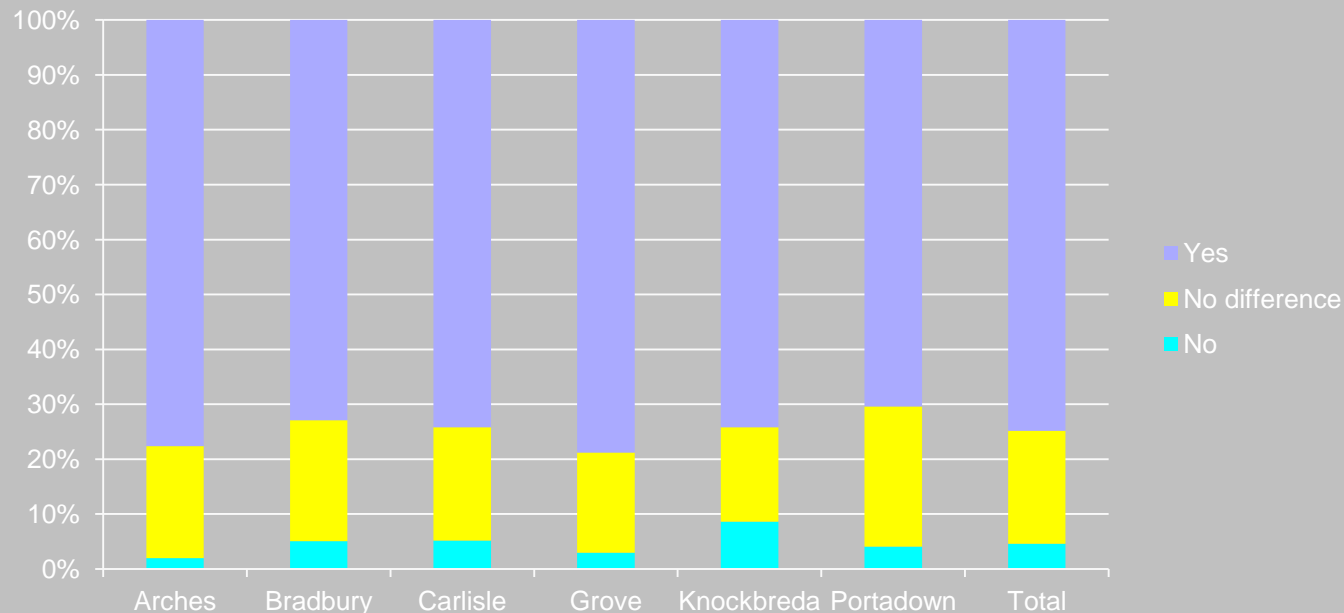
Has the bringing together of services into this building been beneficial to you?



77% - Yes 10% - No 13% - not sure

SERVICE USERS – ABOUT THE SERVICE

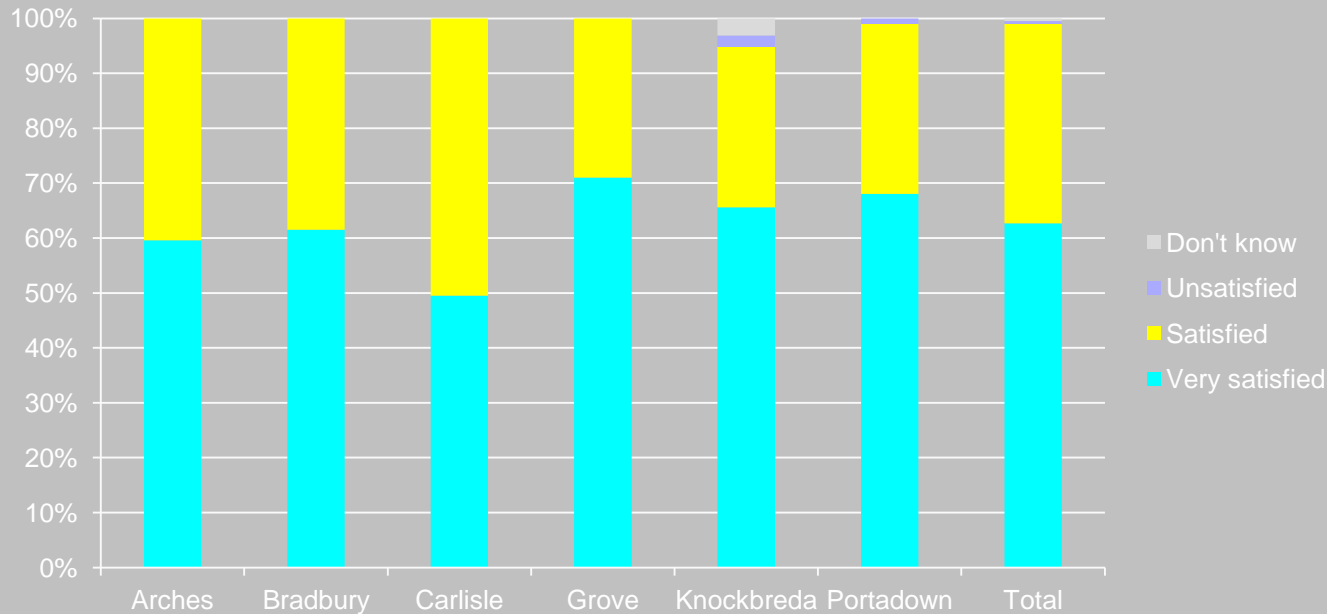
Has the new building helped improve your experience as a service user?



Centres providing GP services (96%) had higher approval ratings than centres without GP services (74%).

SERVICE USERS – ABOUT THE BUILDING

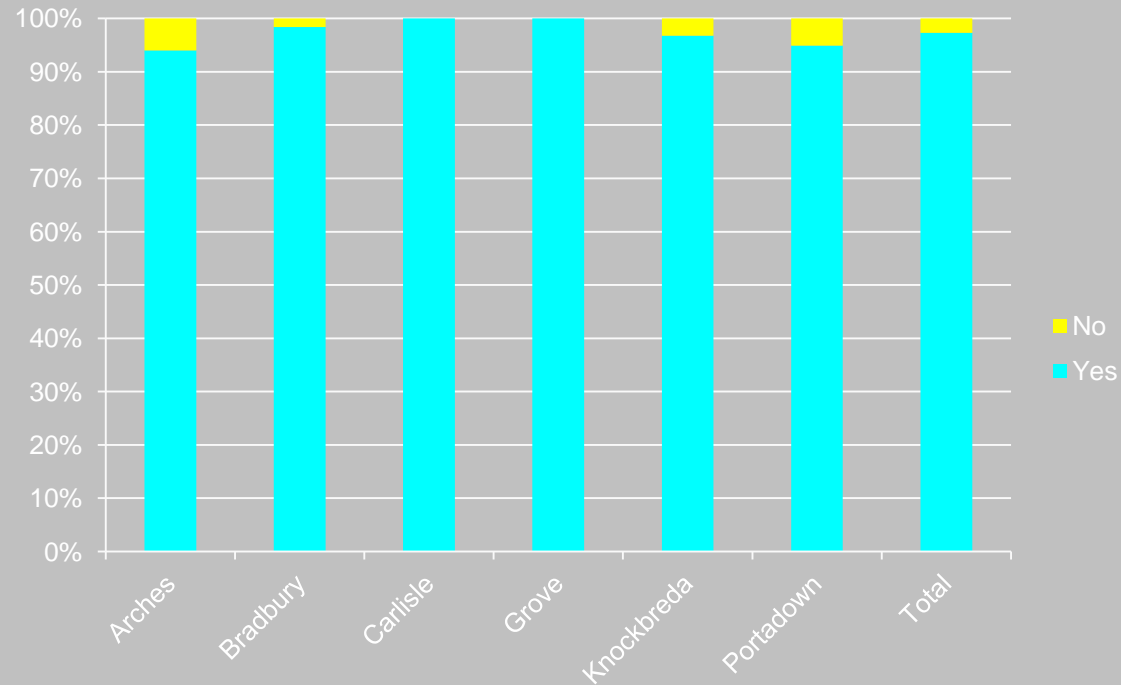
How satisfied are you with the quality of the building itself and the range of facilities within the building?



Exceptionally high levels of satisfaction recorded - almost 100% satisfied / very satisfied

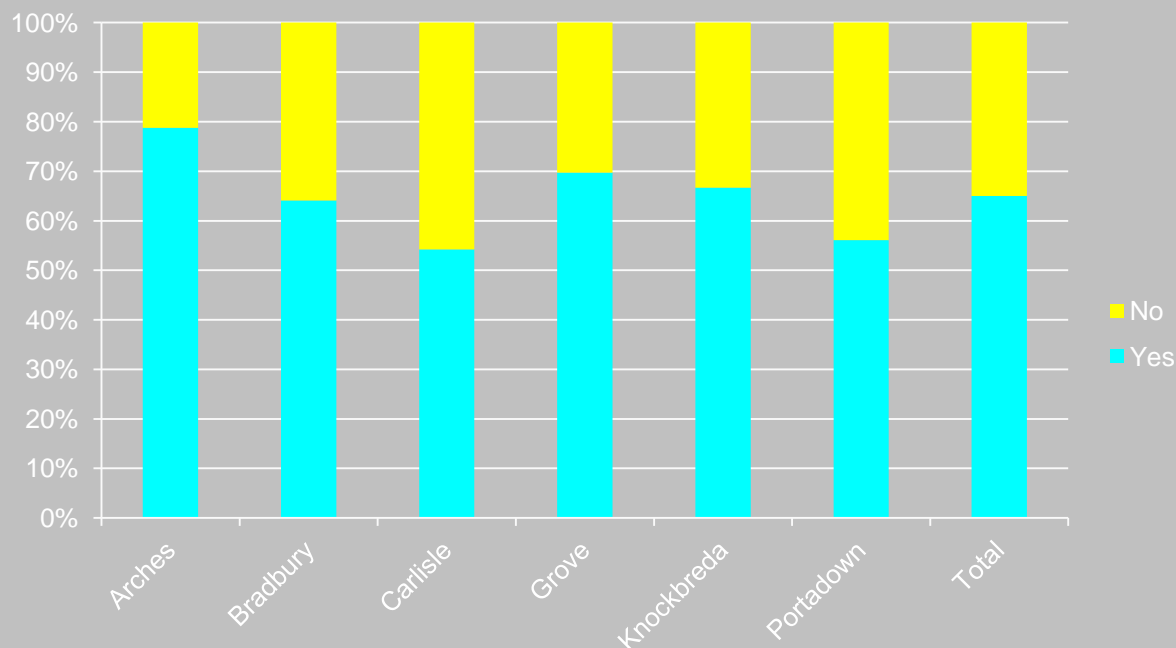
SERVICE USERS – ABOUT THE BUILDING

Is it easy to find your way around the building?



SERVICE USERS – ABOUT THE BUILDING

Have you noticed the inclusion of art in the building?



- **Overall 65% of patients were aware of the art and 35% were not.**
- **The centre with the greatest volume of art had the highest awareness levels – Arches 78.8%**
- **The centres with the lowest volume of art had the lowest awareness levels – Portadown 43.9% & Carlisle 45.9%**

ABOUT THE SERVICE

- Over 80% of people thought there were benefits to service integration
- Centres with GP's scored higher than those without
- There was high satisfaction with the range of services
- People preferred receiving services in the new centres to the previous arrangements
- A small number of negative comments mainly related to inadequate car parking

CONCLUDING REMARKS

- Next steps more detailed survey of individual services in these Community Settings
- Programme of next 17 Health and Care Centres shortly to proceed to procurement
- Similar approach underway for psychiatric services in Northern Ireland with a programme of small scale community – based early interventional psychiatric units reducing need on Acute Hospital sites

