A Herculean task for the Olympics borough

GPs in Newham are confronting their patients' poor health outcomes with a £2m research agenda. **Zosia Kmietowicz** finds out how

f you were choosing somewhere to launch a programme of work that embeds quality improvement into general practice it probably wouldn't be Newham. Simply keeping pace with the health demands of the population of this diverse and deprived east London borough may seem challenge enough. But that is exactly what Newham general practitioners are doing. Zuhair Zarifa, a local GP and chair of Newham Clinical Commissioning Group (CCG), told *The BMJ*, "Just treating people as they become ill was not an option. We had to work on a preventive agenda to stop people getting ill."

Zarifa was showcasing the group's plans for improving the health of the local population ahead of the annual meeting of the International Quality and Safety in Healthcare Forum in London in April internationalforum.bmj. com. With the help of UCL (University College London) Partners—set up to speed up the translation of academic health science into population benefits—the CCG is launching six streams of research that aim to drive better health for Newham's residents.

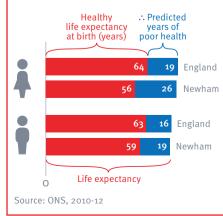
Last summer the CCG heard from researchers and stakeholders about how they could "help people living and working in Newham" and is putting £2m (€2.8m; \$3m) into the winning projects over the next two to three years. The money is coming from a surplus in its 2013-14 budget.

Judith Stephenson, Margaret Pyke professor of sexual and reproductive health and programme director for maternal health at UCL Partners, is running the research stream investigating why 10% of babies born in Newham have a low birth weight compared with the English average of 7.3%. She said that being funded by the CCG differentiates her work in Newham from other projects.

"It makes me feel more accountable. I am much more interested in getting involved locally. This is not about sitting in an ivory tower," she said. "The CCG also wants to help us to get local clinicians involved in the work, which should help them feel some ownership of the research and encourage them to translate the findings into public health messages for their patients."

NEWHAM'S KEY STATISTICS

- Life expectancy is rising, but healthy life expectancy is falling with an average of 19 years of ill health before death for men and 26 years for women
- Rate of premature deaths from cardiovascular disease is 112.7/100000 (compared with 83.1 for London)
- 9.9% of residents have diabetes, estimated to rise to 13.5% in 2030
- 27.3% of children are obese at age 11 (22.4% for London)
- 20.6% of residents are physically active (26% for England)
- Second highest birth rate in the country—80.1 births/1000 women aged 15-44 (English average 62.4)
- Second worst one year survival rate for cancer in England
- Third most deprived borough in England
- 72% of population from black and ethnic minorities
- More than 200 languages and dialects spoken
- 26.4% of Newham's children live in families receiving key benefits (22.4% for London)
- 35% of residents move into or out of borough every year





The need for health improvement in Newham is urgent. The borough has above average prevalence of diabetes, child obesity, and heart disease (box). Despite hosting the Olympic and Paralympic Games in 2012 Newham has the unenviable accolade of being the most inactive borough in London. Evidence so far is that people in Newham who were physically active before the Games are slightly more active now, but that those who were less inclined to exercise are still inactive.

Add to this Newham's higher than average rates of unemployment and deprivation, its multiethnic and highly transient population and the task to improve population health may seem insurmountable.

Signs of revitalisation

But Zarifa's vision is to match the revitalisation of the borough's infrastructure with a better life for the local population. Looking around the Olympics site you cannot help but feel that change.

According to Paul Brickell, director of regeneration and community partnerships at the London Legacy Development Corporation, new opportunities for London's East End began to spring up in the late 1980s when the city was expanding and Canary Wharf, in neighbouring borough Tower Hamlets, was developed into the capital's second business centre.

"But the financial services that grew there did nothing for the local population. People were cynical and bruised and sceptical about what was happening," said Brickell. "We didn't want to repeat that experience here [in Newham with the Olympics legacy]."

REGENERATION



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Brickell says it is thanks to Richard Sumray, who has chaired numerous health, sports, and education bodies, that London won the Olympics bid in 2005, prompting the transformation of the polluted and derelict wasteland that made up a large part of Stratford on Newham's western flank.

"The Games were the best opportunity to get the world to see what was here ... and also that people could see the change was for them," said Brickell.

And to Newham the world has come, or is coming. There are five new residential neighbourhoods either built or planned for East Village—the area of Newham that housed the Olympic village. A cultural centre that

will feature annexes of Washington DC's Smithsonian museum and the Victoria and Albert museum as well as a second home for dance theatre Sadler's Wells, is

also mapped out. The area will also be home to three universities (UCL, Birkbeck, and East London) and three business centres. And in the building where drug tests were conducted on athletes there is now the Sir Ludwig Guttman Health and Wellbeing Centre, named after the man who inspired the Paralympics, which houses among other things a shiny new general practice.

Early research

Some of the work with UCL Partners has already begun. Stephenson has started to customise growth charts to the local population to identify how many of the low birthweight babies are inappropriately small and not just that size because their mothers are small. She suspects that it is natural for many women from the Indian subcontinent to have small babies, and that classifying them as small for gestational age may be harmful.

"If you try to feed up these babies too quickly you may be causing more problems. For example, rapid weight catch-up is linked to greater risk of cardiovascular disease in later life. This could be a new public health message that is particularly important for the population of Newham," Stephenson said.

She is also assessing the effect of having a low birthweight baby on mothers. "Women's

groups have been set up to help us understand what it means to women in Newham to have a baby that has a low weight at birth. I suspect that this means different

things to women from different cultures," said Stephenson.

For Shanti Vijayaraghavan, consultant diabetologist at Barts Health NHS Trust who is leading the work on diabetes risk in the borough, the unique feature of the Newham research is its wide reach. "It is something that the CCG and GPs are actively involved in and it has been codesigned with them. But other multisector leads who are not usually part of the care driven pathway—including employers, the food industry, council officers, leisure industry, and voluntary groups—have also bought into the agenda," she said.

SIX WORK STREAMS IN NEWHAM

Identifying patients at risk of developing diabetes and interventions to reduce risk

Early diagnosis and treatment of cardiovascular disease by integrated use of electronic health records

Interventions to improve health outcomes in low birthweight babies

Improving vulnerable and young people's mental health by promoting emotional resilience using mentors and providing training for parents, school staff, and volunteers

Developing general practice by promoting leadership, identifying goals, testing new evidence based care practices in small cycles, ring fencing times to reflect on progress, analysing data Mitigating the effect of a high population turnover

Diabetes has always been high on the priority list for Newham CCG. In some parts of the borough diabetes affects 13% of the population, significantly higher than the 4-6% average for England. The research programme has identified 38 940 Newham adults (aged 25 to 79)—17.6% of the GP registered population—who are at high risk of developing diabetes because they have a QD score >20%,¹ and is reviewing the literature to determine the best preventive strategies.

"Providing a lifestyle preventive programme for all those at increased risk of diabetes may be very difficult and expensive so we are looking at the most high risk groups initially, such as women who have had gestational diabetes," said Vijayaraghavan. "But some practices are also interested in a more bespoke model, looking at their local population and modifying what they offer in terms of prevention, so that is another approach we are investigating."

Other streams of work will examine cardiovascular disease, mental health in young people, the highly transient nature of the population, and evidence informed improvement in general practice.

But an over-riding priority for Zarifa and others is that the drive for improvement must reach every part of the borough and not stay confined to East Village.

Satbinder Sanghera, director of partnerships at the CCG, said, "We have to make sure we don't create new health inequalities within Newham. Stratford is where it is starting, and we have to make sure that the health gains we make here spread across the borough." **Zosia Kmietowicz** news editor, *The BMJ*, London, UK zkmietowicz@bmj.com

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