



SNOMED CT Case Studies



SNOMED CT
The global language of healthcare

Case Studies

BARTS

Established in 2012, BARTS NHS Trust (BARTS) operates five hospitals throughout the City of London and East London for over 2.6 million people, in an area characterized by significant diversity and health inequalities. It is one of largest NHS Trusts.

Cerner

The BARTS SNOMED CT-embedded Cerner Millennium clinical information system was introduced in 2008, and subsequently expanded and enhanced, with a focus on a providing a single system, connectedness, and big data.

Economic Benefits

A Benefits Deep Dive of the CRS implementation was conducted in 2013. It identified many of the same benefits that we have seen in the other clinical information system implementation case studies such as:

- Emergency Department: More effective record storage and retrieval; less duplicate data entry; reduction in 4-hour breaches; improvements in ED efficiency and workflow from using an electronic whiteboard.
- Outpatient Clinics: More effective record storage and retrieval; reduction in paper referrals due to a centralized e-referral service; improved appointment booking; more effective patient communications by providing letters at the end of the consultation; and an increase in revenues due to improved coding the finished consultant episodes (FCE).

Infection Control Benefits

In 2016 BARTS did not meet national legislative requirement to isolate infectious patients appropriately. BARTS deployed a SNOMED CT-embedded system of infection control reporting using patient laboratory results data. Patient Safety Benefits achieved – A 30% reduction in the number of patients inappropriately located in open bays; reduced risk of exposure to infections and infection transmission; and reduction in time spent to locate and isolate infectious patients.

Smoking Cessation

Compared to national benchmarks, there are higher numbers of smokers in east London, especially among the South Asian community. This in turn, results in higher rates for smoking-related disease admissions to hospital and higher mortality rates for cancer and respiratory disease. BARTS uses SNOMED CT to record in the Cerner problem list those patients who smoke and/or chew tobacco. They are immediately referred to a smoking cessation program, which is a requirement for payment under NHS commissioning arrangements.



Case Studies



ELHCP

BARTS is also part of the East London Health and Care Partnership (ELHCP), a region with the highest population growth in London. The population is diverse, with a high percentage of the population relying on benefits, experiencing unemployment, plus living in poor housing and environment. Poor health outcomes for its population including obesity, cancer, mental health, and dementia, with a high reliance on emergency services, access to services issues, particularly in primary care.

East London Patient Record

The ELHCP East London Patient Record (eLPR) is a consolidated, read only view of a patients' health record, covering a population of about 1.5 million. The eLPR is created and shared among clinicians via two independent Cerner health information exchanges (HIEs), with over 150,000 eLPR views occurring per month in late 2020. Interoperability is achieved within East London by standardizing data entry and coding care using SNOMED CT standards.

Benefits

A 2017 an eLPR Benefits Study Evaluation of clinician users found improvements in:

1. Efficiency - 48% of clinicians felt the amount of **paperwork had been reduced**, 63% felt there had been a **reduction in records notes going missing** and 42% recorded a **reduction in the number of orders**. About 80% of the clinicians stated that the **number of phone calls answered or made were reduced**.
2. Referrals - Based on the responses to the survey it was concluded that **1,233 referrals are avoided** across Waltham Forest, East London and City (WELC) each year. This equates to an **annual saving of £133k**.
3. Patient Engagement - 62% of clinicians felt that the **patient engagement and relationship was improved** with eLPR.
4. Clinician Satisfaction - Overall, 81% of clinicians felt **eLPR had a positive effect** on their working day.

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Discovery East
London

Discovery East London was first established in 2016 to create a linked dataset of real-time clinical data from a myriad of care settings, including BARTS, that has now been scaled across all of London. The ELHCP Discovery program publishes primary care, secondary care (e.g. BARTS), mental health and other care data in a common health data platform so that it can be used for clinical analytics, population analytics, management analytics and research purposes. The data in the Discovery data platform is all encoded in SNOMED CT. At this time there are over 25 projects that are either live or in progress. By way of example eight of these twenty-five projects are sourced from the BARTS NHS Trust and includes: Serious Mental Illness; BARTS Pancreas Tissue Bank; NHS 111 Discovery Frailty Flagging; Childhood Immunizations and 6-Week Check; and East London Genes and Health.

OneLondon

OneLondon is a partnership of NHS organizations and local government across all of London, working together with citizens to transform London's health and care services by integrating information to support patient care. Both BARTS and the East London Health and Care Partnership are part of the OneLondon program. In short, the OneLondon program will take the digital health successes from the likes of BARTS and the East London Health and Care Partnership and extend that across the entire the City of London and the 32 boroughs with its combined population of over 9 million people.

For example, the OneLondon Patient Record (as per the eLPR), as well as a OneLondon data platform (as per the ELHCP Discovery platform) is being deployed. Currently, the OneLondon Patient Record provides clinician access to the health records of 6 million patients in 3 of the 5 zones within London.

For the detailed BARTS and ELHCP Case Study see Appendix 5 [here](#).

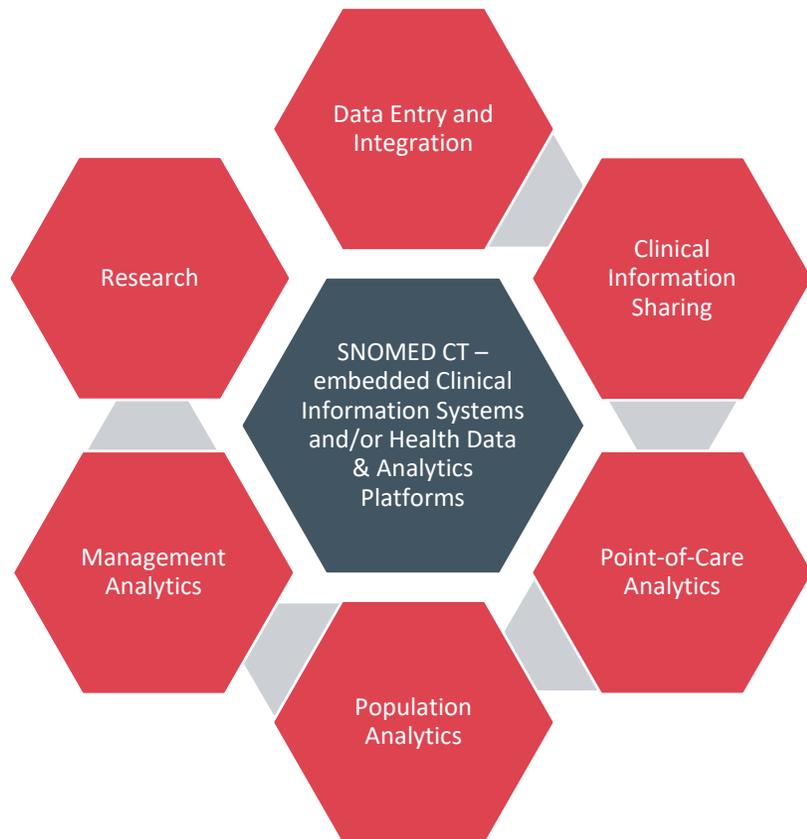


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BARTS NHS Trust
and the ELHCP

Case Study #4

A Regional Digital Health Initiative



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A Regional Digital Health Initiative

United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

BARTS NHS TRUST

- Established in 2012, BARTS NHS Trust (BARTS) runs five hospitals throughout the City of London and East London. The trust provides community, acute care and specialist services to a population of over 2.6 million people, in an area characterized by significant diversity and health inequalities. The health profile and health needs vary significantly between, and within, individual boroughs, with a distinct difference between the Inner and Outer London boroughs. It is one of the largest NHS trusts in England, and accounts for 1.5% of all hospital activity in the country. It runs the largest cardiovascular centre in the United Kingdom, the second largest cancer centre in London, as well as the leading stroke and renal units.
- While BARTS uses a single instance of its **SNOMED CT**-embedded Cerner Millennium clinical information system across its five hospitals it is also a key player in the broader East London and London digital health initiatives. This case study will highlight the use of **SNOMED CT** across the six use domains for:
 - The BARTS clinical information system implementation,
 - The East London Patient Record (EHR) implementation,
 - The East London Discovery program, and
 - The OneLondon program.



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A Regional Digital Health Initiative

United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

BARTS CLINICAL INFORMATION SYSTEM IMPLEMENTATION AND USE

- The BARTS **SNOMED CT**-embedded Cerner Millennium clinical information system (locally known as the Care Record System or CRS) was introduced in 2008, and subsequently expanded and enhanced, with a focus on
 1. **Single System** - where all BARTS patient data is recorded in a consistent and coherent format, that is easily shareable among clinicians and is open to analysis,
 2. **Connectedness** - where the Trust's Electronic Health Record (EHR) data is available in real-time to primary care, community care and mental health clinical professionals thereby enabling coordinated health care, and
 3. **Big Data**, the sharing of data enables the creation of central data repositories from which structured analysis is possible across a wide spectrum of circumstances, e.g. patient outcomes, satisfaction, performance monitoring, genomics and research.

- A “Benefits Deep Dive”¹ of the CRS implementation was conducted in 2013. It identified many of the same benefits that we have seen in the other clinical information system implementation case studies such as:

Emergency Department: More effective record storage and retrieval; less duplicate data entry; reduction in 4-hour breaches; improvements in ED efficiency and workflow from using an electronic whiteboard.

Outpatient Clinics: More effective record storage and retrieval; reduction in paper referrals due to a centralized e-referral service; improved appointment booking; more effective patient communications by providing letters at the end of the consultation; and an increase in revenues due to improved coding the finished consultant episodes (FCE).

1. Overton et al., “Benefits Deep Dive into Cerner Millennium Implementation July 2013 to January 2014”, Health and Social Care Information Centre (now NHS Digital), 2014
<https://confluence.ihtsdotools.org/display/CP/Clinical+Use+Cases?preview=%2F57808738%2F96810424%2FBarts+Health+Case+Study.pdf>



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BARTS CLINICAL INFORMATION SYSTEM IMPLEMENTATION AND USE

Infection Control Problem^{2,3}

- in 2016 BARTS was not compliant with national legislative requirement to isolate infectious patients appropriately. Clinicians were unable to obtain daily aggregate data for current inpatients showing: infections, infection status (active vs. inactive), and location (open bay vs. side room).
- A manual data collection process meant scrolling through bed boards and individual patient records. For a trust with 2,100 beds across 110 wards at five different sites, this process was both time-consuming and prone to human error.
- BARTS now has an automated system of infection control reporting using **SNOMED CT** terms, which pulls in data directly from every patient's laboratory results. As a result, clinical decisions are now better guided and supported by reliable, up-to-date information. It also allows nurses on the ward and the infection control team to instantly spot patients who should be moved to isolation, and it assists with contact tracing when needed.
- Patient Safety Benefits Achieved – A 30% reduction in number of patients inappropriately located in open bays; reduced risk of exposure to infections; reduced risk of infection transmission; and reduction in time spent by the Infection Control team to locate and isolate infectious patients.

2. Gutteridge C., "Speaking a common language: driving interoperability using SNOMED CT", September 2019. See <https://www.cerner.com/gb/en/blog/speaking-a-common-language-driving-interoperability-using-snomed-ct>

3. Gutteridge C., "Practical use of SNOMED CT- Real World Examples from BARTS Health" Presentation at SNOMED International Conference. Helsinki March 28th 2019

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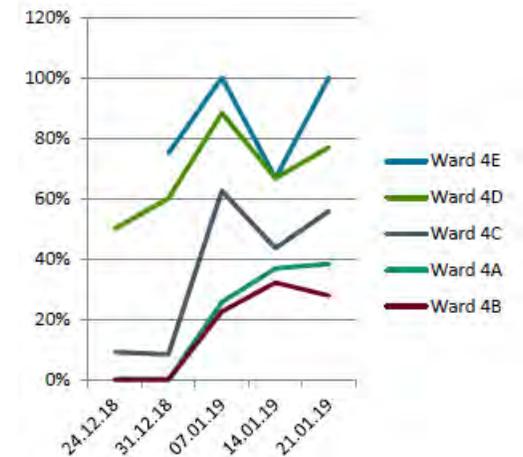
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United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

BARTS CLINICAL INFORMATION SYSTEM IMPLEMENTATION AND USE

Smoking Cessation⁴

- Compared to national benchmarks, there are **higher numbers of smokers in east London** – this in turn, results in **higher rates for smoking-related disease admissions to hospital and higher mortality rates for cancer and respiratory disease**.
- East London, also has a large South Asian Community. Tobacco chewing is common because tobacco is often added to paan (betel nut, herbs & spices wrapped in betel leaf and chewed). In the local Bangladeshi community, 60% of men and 50% of women use chewing tobacco. Tobacco +/- paan is a public health issue because it **increases the risk of oral cancer, cardiovascular disease and adverse pregnancy outcomes**.
- BARTS uses **SNOMED CT** to record patients who smoke and/or chew tobacco on their problem list. They are **immediately referred to a smoking cessation program**, which is a requirement for payment under NHS commissioning arrangements.
- BARTS also does data extraction from the Cerner clinical information system using **SNOMED CT** to determine the number of inpatients on each ward who smoke and/or chew tobacco and have cancer (i.e. 30% to 100%). In the first 8 months the recording of smoking status by clinicians **increased from 5% to 50% of patients**.



4. Gutteridge C., "Practical use of SNOMED CT- Real World Examples from BARTS Health" Presentation at SNOMED International Conference. Helsinki March 28th 2019



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BARTS CLINICAL INFORMATION SYSTEM IMPLEMENTATION AND USE

Chronic Obstructive Pulmonary Disease (COPD) Clinical Audit⁵

- An estimated 3 million people in the UK have COPD, and it is the second most common cause of emergency hospital admission. Further, about a third of those admitted to hospital as a result of their COPD are readmitted within a month of discharge. The total annual cost of COPD to the NHS is over £800 million.
- BARTS is required to collect clinical audit data on COPD patients. It had an opportunity to **gain £1.8 million** and improve its reputation with funders by bringing COPD emergency spending in line with the best 5 hospitals in its NHS peer group.
- BART's respiratory clinicians and the ICT team moved from a paper-based system, to continuous data collection using a hybrid of paper-based and **SNOMED CT** encoded electronic methods, including clinical documentation.
- The next stage is a move to a fully integrated system that will pull data from respiratory teams in all of the Trust's hospital and community sites, based on **SNOMED CT** terminology agreed with clinicians. Collaboration with other departments, including acute medicine and mental health, is also vital.

5. Gutteridge C., "Practical use of SNOMED CT- Real World Examples from BARTS Health" Presentation at SNOMED International Conference. Helsinki March 28th 2019

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EAST LONDON HEALTH AND CARE PARTNERSHIP

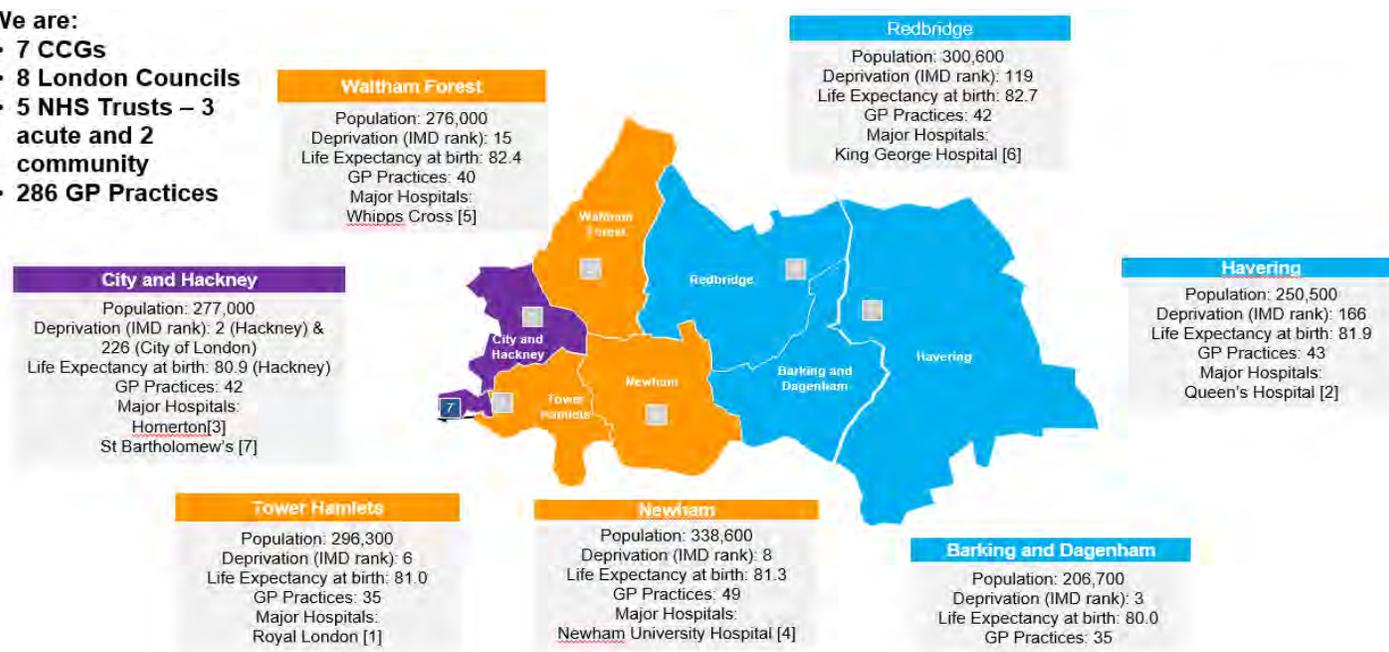
- BARTS (see the purple and orange boroughs) is also part of the East London Health and Care Partnership (ELHCP).

The ELHCP region has:

- The highest population growth in London.
- A changing population with increasing diversity.
- A high percentage of the population relying on benefits, experiencing unemployment, plus living in poor housing and environment.
- Poor health outcomes for its population including obesity, cancer, mental health, and dementia.
- Service quality issues including a high reliance on emergency services, late diagnoses and treatment and access to services issues, particularly primary care.
- Further, there is significant variation between each borough/place in health and care outcomes, available services, and resources.

We are:

- **7 CCGs**
- **8 London Councils**
- **5 NHS Trusts – 3 acute and 2 community**
- **286 GP Practices**





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A Regional Digital Health Initiative

United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

ELHCP EAST LONDON PATIENT RECORD⁶

- The ELHCP East London Patient Record (eLPR) has been in place since 2014. It is a consolidated, read only view of a patients' health record, and has more detailed clinical data than the national Summary Care Record. The record is sourced from 4 Clinical Commissioning Groups (CCGs), 5 BARTS acute hospital sites, 2 mental health trusts, three sets of community services and almost 200 GP practices, covering a population of about 1.5 million.
- The eLPR is created and shared among clinicians via two independent Cerner health information exchanges (HIEs), with over 150,000 eLPR views occurring per month in late 2020. Interoperability is achieved within East London by standardizing data entry and coding care, pathway by care pathway, using **SNOMED CT** standards.
- In 2017 an eLPR Benefits Study Evaluation⁷ was conducted, where clinician users of the eLPR in both primary and secondary care settings were surveyed and interviewed.

Key Benefits Identified

- **Efficiency** - 48% of clinicians felt the amount of **paperwork had been reduced**, 63% felt there had been a **reduction in records notes going missing** and 42% recorded a **reduction in the number of investigations ordered**. Similarly, 78% of hospital clinicians state that they could **better handle the speed and quality of treatment** in their department. About 80% of the clinicians stated that the **number of phone calls answered or made were reduced** because the information is available in eLPR thereby reducing the need to call a colleague for further information.

6. See <http://www.cityandhackneyccg.nhs.uk/about-us/elpr.htm>

7. Readman et al, "East London Patient Record Benefits Study Evaluation", 2018. See <https://www.eastlondonhcp.nhs.uk/downloads/ourplans/digital/East%20London%20Patient%20Record%20Benefits%20Report%20DIGITAL%20FINAL.pdf>



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EAST LONDON PATIENT RECORD con't

Key Benefits Identified con't

- **Referrals** - Based on the responses to the survey it was concluded that **1,233 referrals are avoided across Waltham Forest, East London and City (WELC) each year**. Taking the cost of first referral, single professional for the lowest cost treatment function (Anesthetics) and a market forces factor of 1.2 (just under both Homerton and Barts Health's figure), i.e. £111, this **equates to an annual saving of £133k**.
- **System Consolidation** - In 2017 the Newham Hospital Urgent Care Centre was able to **consolidate its use of systems through the eLPR**. This brought a number of notable benefits including: elimination of dual-entry and associated training costs and time wasted entering data into multiple systems leading to savings in licensing and support costs. This will **save Newham CCG approximately £500k per year**.
- **Patient Engagement** - **62% of clinicians felt that the patient engagement and relationship was improved with eLPR**.
- **Clinician Satisfaction** - Overall, **81% of clinicians felt eLPR had a positive effect on their working day**.



Case Study #4

A Regional Digital Health Initiative

United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

THE ELHCP DISCOVERY PROGRAM⁸

- Discovery East London was first established in 2016 to create a linked dataset of real-time clinical data from a myriad of care settings, including BARTS, across five boroughs: City of London, Hackney, Newham, Tower Hamlets and Waltham Forest. The service has now been scaled across London, with a potential opportunity to scale it nationally, as part of the NHS Data Discovery Service⁹.
- The ELHCP Discovery program objective has been to publish primary care, secondary care (e.g. BARTS), mental health and other care data in a common health data platform so that it can be used for clinical analytics, population analytics, management analytics and research purposes. By implementing strict data governance and controlled technical access approved users of the data can subscribe to the service and use it for their approved purpose (e.g. research).
- The data in the Discovery data platform is all encoded in **SNOMED CT**. The data from the source systems either comes as **SNOMED CT**-encoded (e.g. data from GP systems and the BARTS secondary care system) or is transformed to **SNOMED CT** as part of the ETL process, if the source system does not use **SNOMED CT**.
- At this time there are over 25 projects that are either live or in progress. By way of example eight of these twenty-five projects are sourced from the BARTS NHS Trust. Examples of live projects are shown overleaf.

8. See https://www.eastlondonhcp.nhs.uk/downloads/ourplans/digital/Discovery_Programme-Annual_Report_Jan_2019.pdf

9. See <https://www.discoverydataservice.org/Content/Overview.htm>



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THE ELHCP DISCOVERY PROGRAM

Examples of Live Projects

1. **Serious Mental Illness (SMI)**, East London Foundation Trust (ELFT): The SMI query **reconciles ELFT secondary care mental health data with primary care serious mental health datasets**.
2. **BARTS Pancreas Tissue Bank**, BARTS: The Barts Pancreas Tissue Bank (BPTB) is a unique and vital resource for researchers to provide a multitude of **specimen types from pancreas disease and cancer patients** as well as healthy controls. The samples are mainly collected from the Royal London Hospital and curated at Barts Cancer Institute.
3. **NHS 111 Discovery Frailty Flagging**, Multiple Boroughs: The Discovery Data Service helps to **identify potentially frail patients** using a frailty algorithm and the results are provided to the NHS 111 London Ambulance Service clinician upon request.
4. **Childhood Immunizations and 6-Week Check**, NE London Child Health Immunization Service: The daily extract provides an **update on changes in all immunizations over the past 24 hours**, so the data platform and GP systems are in sync.
5. **East London Genes and Health**, Multiple Boroughs: The East London Genes and Health (ELG&H) study aims to **improve the health of people of Pakistani and Bangladeshi heritage** by **analyzing the genes and health of 100,000 local people**. **A more detailed description of this project is outlined starting on the next page.**



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ELHCP DISCOVERY: POPULATION HEALTH ANALYTICS and RESEARCH – East London Genes and Health Study¹⁰

- Recent genomic advances offer the potential to better understand the genetic causation of disease, and to direct pharmacotherapy to rare loss-of-function gene variants.
- East London Genes & Health (ELGH) is a community based, long-term study of health and disease in British-Bangladeshi and British-Pakistani people in east London. ELGH has a population-based design incorporating cutting-edge genomics with **SNOMED CT**-embedded electronic health record (EHR) data linkage and targeted recall-by-genotype (RbG) studies. ELGH has >34,000 volunteers with funding to expand to 100,000 volunteers by 2023.
- Almost a quarter of the world's population, and 5% of the UK population, are of South Asian origin. The risk of coronary heart disease is 3-4 times higher, and type 2 diabetes (T2D) 2-4 times higher in UK South Asians compared with Europeans. East London incorporates one of the UK's largest South Asian communities (29% of 1.95 million people), of which 70% are British-Bangladeshi and British-Pakistani, and its population live in high levels of deprivation (Tower Hamlets, Hackney, Barking and Dagenham are the 9th, 10th and 11th most deprived local authorities in England).
- Compared to White Europeans, South Asians living in east London have a two-fold greater risk of developing T2D, nearly double the risk of non-alcoholic liver disease, and over double the risk of multimorbidity, with the onset of cardiovascular disease occurring 8 years earlier in men. Determinants of poor cardiometabolic health start early in the life course, with higher rates of overweight and obese children in east London compared to the UK average.

10. Finer et al., "East London Genes & Health (ELGH), a community based population genomics and health study of British-Bangladeshi and British-Pakistani people.", bioRxiv preprint, February 2019. See <https://www.biorxiv.org/content/10.1101/426163v2.full.pdf>

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ELHCP DISCOVERY: POPULATION HEALTH ANALYTICS and RESEARCH – East London Genes and Health Study con't

- ELGH¹¹ combines health data science using linked NHS **SNOMED CT**-embedded EHR data, BARTS **SNOMED CT**-embedded EHR data as well as local GP systems data (now with **SNOMED CT**-embedded data) with exome sequencing and SNP array genotyping to elucidate the genetic influence on health and disease, including the contribution from high rates of parental relatedness on rare genetic variation and homozygosity (autozygosity), in the two understudied ethnic groups. Linkage to longitudinal health record data enables both retrospective and prospective analyses.
- **Stage 1** entailed the development of the study cohort. ELGH invited voluntary participation of all British-Bangladeshi and British-Pakistani individuals aged 16 and over, living in, working in, or within reach of, east London. Recruitment is largely undertaken by bilingual health researchers, and takes place in: (a) community settings, e.g. mosques, markets and libraries, supported by a third-sector partner organization (Social Action for Health), and (b) healthcare settings, e.g. GP surgeries, outpatient clinics. Stage 1 volunteers complete a brief questionnaire, give consent to lifelong EHR linkage, and donate a saliva sample for DNA extraction and genetic tests. Between April 2015 and January 2019, ELGH has recruited 34,482 volunteers to Stage 1 (currently ELGH has ~50,000 volunteer recruits).
- Through **Stage 2** studies, ELGH now offers researchers the opportunity to undertake recall-by-genotype and/or recall-by-phenotype studies on volunteers. Sub-cohort, trial-within-cohort, and other study designs are possible. ELGH is a fully collaborative, open access resource, open to academic and life sciences industry scientific research partners. Eight approved Stage 2 research studies using the ELGH Stage 1 cohort data have been published and sixteen are underway.

11. See <http://www.genesandhealth.org/>



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ELHCP DISCOVERY: POPULATION HEALTH ANALYTICS and RESEARCH – East London Genes and Health Study con't

By way of example, the ELGH Stage 2 Studies Published to Date¹² include:

1. Trans-ethnic and ancestry-specific blood-cell genetics in 746,667 individuals from 5 global populations. Cell 2020 Sept 3. DOI <https://doi.org/10.1016/j.cell.2020.06.045>
2. Genomewide Association Study of Severe Covid-19 with Respiratory Failure. New England Journal of Medicine 2020 Jun 17. DOI <https://doi.org/10.1056/NEJMoa2020283>
3. Evaluating potential drug targets through human loss-of-function genetic variation. Nature 2020 May;581(7809):459-464. DOI <https://doi.org/10.1101/530881>
4. Characterizing a healthy adult with a rare HAO1 knockout to support a therapeutic strategy for primary hyperoxaluria. eLife 2020;9:e54363. DOI <https://doi.org/10.7554/eLife.54363>
5. Effects of autozygosity on a broad range of human phenotypes. Nature Communications 2019 Oct 31;10(1):4957. DOI <https://doi.org/10.1038/s41467-019-12283-6>
6. Formalising recall by genotype as an efficient approach to detailed phenotyping and causal inference. Nature Communications 2018 Feb 19;9(1):711. DOI <https://doi.org/10.1038/s41467-018-03109-y>
7. Estimating the human mutation rate from autozygous segments reveals population differences in human mutational processes. Nature Communications 2017 Aug 21;8(1):303. DOI <https://doi.org/10.1038/s41467-017-00323-y>
8. Health and population effects of rare gene knockouts in adult humans with related parents. Science 2016 Apr 22;352(6284):474-7. DOI <https://doi.org/10.1126/science.aac8624>
12. See <http://www.genesandhealth.org/about-study/scientific-publications>



Case Study #4

A Regional Digital Health Initiative

United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

ELHCP DISCOVERY: POPULATION HEALTH ANALYTICS – COVID-19 in Ethnic Minority Populations¹³

- The first wave of the London COVID-19 epidemic peaked in April 2020. Attention initially focused on severe presentations, intensive care capacity, and the timely supply of equipment. While general practice saw a rapid uptake of technology to allow for virtual consultations, little was known about the pattern of suspected COVID-19 presentations in primary care.
- A cross-sectional study was undertaken using ELHCP Discovery. Utilizing anonymized data from the **SNOMED CT**-encoded primary care records of approximately 1.2 million adults registered with 157 practices in four adjacent east London clinical commissioning groups (note: all GP EMRs use **SNOMED CT** in the UK). The study population includes 55% of people from ethnic minorities and is in the top decile of social deprivation in England.
- General Practitioners recorded 8,985 suspected COVID-19 cases between 10 February and 30 April 2020. Univariate analysis showed a **two-fold increase in the odds of suspected COVID-19 for South Asian and black adults compared with white adults.**
- Using data from GP primary care records, black and South Asian ethnicity is a predictor of suspected COVID-19, with levels of risk similar to hospital admission reports.

13. Hull et al., "Prevalence of Suspected COVID-19 Infection in Patients from Ethnic Minority Populations: a Cross-Sectional Study in Primary Care.", British Journal of General Practice, Online First 2020. See <https://bjgp.org/content/early/2020/09/07/bjgp20X712601>



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United Kingdom – BARTS NHS Trust and the East London Health and Care Partnership, London, England

ONELONDON PROGRAM¹⁴

- OneLondon is one of the country's first Local Health and Care Record Exemplars (LHCRE), designated by NHS England. The OneLondon LHCRE is a partnership of NHS organizations and local government across all of London, working together with citizens to transform London's health and care services by integrating information to support patient care.
- Both BARTS and the East London Health and Care Partnership are part of the OneLondon program. In short, the OneLondon program will take the digital health successes from the likes of BARTS and the East London Health and Care Partnership and extend that across the entire the City of London and the 32 boroughs with its combined population of over 9 million people.
- For example the OneLondon Patient Record (similar to eLPR), as well as a OneLondon data platform similar to the East London Health and Care Partnership Discovery platform is being deployed. Currently, the OneLondon Patient Record provides clinician access to the health records of 6 million patients in 3 of the 5 zones in London.
- The first step in the OneLondon program has been citizen engagement which occurred over the 12 month period starting in June 2019. This process resulted in the recent publication of the *"Public Deliberation in the Use of Health and Care Data"*¹⁵.



14. See <https://www.onelondon.online/>

15. See <https://www.onelondon.online/wp-content/uploads/2020/07/Public-deliberation-in-the-use-of-health-and-care-data.pdf>



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