# South Asian Biobank- Collaboration to implement a preventative strategic project investigating lifestyle, environmental, genomic, and molecular factors underlying cardiovascular health outcomes in South Asians.

Mrs Nicola Bowers Head of Research and Innovation Buckinghamshire Healthcare NHS Trust (BHT), Dr Piers Clifford Consultant Cardiologist and BHT Cardiac Research Team. No Conflict of Interest.

President Elect – British Association for Nursing in Cardiovascular Care (BANCO), British Society of Heart Failure (BSH) Research Committee Nurse Researcher, Senior Research Fellow Buckinghamshire New University (BNU).

A quarter of all deaths in the United Kingdom (UK) are attributable to cardiovascular (CV) disease, equating to around 170 000 per year [2]. Approximately 80 % of cardiovascular disease, including stroke and heart disease is preventable, [5] implying that there is a clear opportunity to prevent numerous deaths over the next 10 years, in line with the NHS Long Term Plan [3].

Research has indicated that people of South Asian heritage have a significantly higher risk of developing cardiovascular disease and diabetes compared to people with European backgrounds [4].

Professor Jaspal Kooner collaborated with the National Institute for Health and Care Research (NIHR), the Welcome Trust and Imperial College, London to deliver a primary intervention project aimed at people of South Asian ethnicity.

#### Objectives

- To open a local site to provide a preventative strategic project investigating lifestyle, environmental, genomic and molecular factors underlying CV outcomes in our local South Asians population.
- Gather data to support sustainable CV
  preventative investigations required to prevent
  disease in known high risk population groups.
- To bridge the gap between primary and secondary care [1].



#### Methods

London Science Prospective Population Study (LOLIPOP) is an observational, longitudinal population study involving up to 200,000 individuals of South Asian heritage.

Using a systemic approach, this organisational change initiative involved sourcing funding, location, staff, equipment, and training as part of this program. Many appropriate stakeholders were consulted and BHT is working collaboratively with primary care, currently recruiting from over 60 GP surgeries.

- Funding sourced from a successful business case, using funds from commercial CV clinical trials.
- Training and competency programme created and introduced.
- Successful contractual agreement for the lease of equipment.

#### Results

#### **WORKFORCE OPPORTUNITIES:**

This study has provided career development opportunities for BHT staff and helped embed research activity into everyday standard of care, reducing the current post code lottery to healthcare some individuals face.

#### **PREVENTATIVE CONSULTATIONS:**

Approximately 4925 individuals have been reviewed to date at BHT.

These participants have consented to being followed up for many years for their cardiovascular health outcomes.

#### LOCAL BHT RECRUITMENT

- O APPROX. 10 % OF NATIONAL RECRUITMENT
- APPROX 20 % NEW CASES OF HYPERTENSION
- APPROX 40 % OF HIGH CHOLESTEROL

#### **Conclusion and Vision**

Our vision for the future is introduce these preventative CV Investigations as part of standard of care. Also to widen the scope of the project to include the Black population, who are at increased risk of hypertension, stroke, diabetes, renal failure, and heart failure. The reasons for this increased risk are not known. Some potential funding has currently been sourced but is not sustainable, without further large-scale investment.

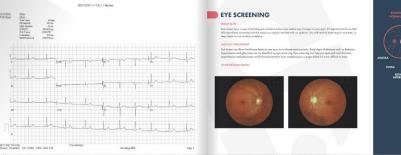
Due to the success of LOLIPOP, innovative initiatives for the local community are being created, more grant applications are being formulated and written to build funds to support mobile clinics so that these and future projects can be delivered on a bus.

These buses can carry everything required, once appropriately staffed, to offer life-changing health screening and an evidence base for early preventative intervention in our more deprived and harder to reach individuals who are at known high risk.

## LOLIPOP AIMS TO RECRUIT 200,000 PEOPLE OVER THE NEXT THREE YEARS

A full view of the Biobank Lollipop study

### Examples of a page in the health assessment report



#### References

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