Vascular risk informatics using epidemiology & the web 2020 (VIEW2020)

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Year: 2016 Duration: 60 months Approved budget: \$4,976,577.16 Researchers: Professor Rodney Jackson Health issue: Cardiovascular/cerebrovascular Proposal type: Programme

Lay summary

Readily available treatments can halve the risk of premature vascular disease but under- and over-treatment is common and there are substantial ethnicity- and deprivation-related inequities in vascular disease burden. The effectiveness of most treatments depends on patients' risks of developing vascular disease but estimating risk is difficult without risk prediction algorithms and few valid algorithms have been developed. We have established three large overlapping cohort studies (primary care, hospital and national) linked to the same investigation, treatment and outcome datasets, to: i. develop new risk prediction algorithms to assist clinicians estimate vascular risk in multiple high-risk populations; ii. determine in whom, where and why, under- and over-treatment and inequities in vascular risk and risk management occur; iii. develop and implement a multi-algorithm risk prediction engine and a 'bigdata' vascular health information platform to support initiatives to increase appropriate treatment, reduce inequities in vascular disease outcomes and improve overall vascular health.