



Closing The Gap in NEL ICB

Reducing health inequalities and improving cardiovascular disease outcomes with Suvera's Proactive Model of Care

Contents



01 Introduction

03 The challenge in TNW

04 Suvera's solution

06 Patients managed by Suvera

07 Key achievements in TNW by Suvera

08 Clinical impact on patients in TNW

10 Patient Experience

11 Economic modelling

14 Conclusion

CHAPTER 1

Introduction

North East London Integrated Care Board (NEL ICB) engaged Suvera to support management of patients with hypertension across eight practices in **Tower Hamlets, Newham and Waltham Forest boroughs (TNW)**.

The programme was strategically designed to target **1,800 patients** with previously sub-optimal hypertension management, working with an innovative virtual care partner, Suvera, to improve cardiovascular health outcomes and address systemic health disparities in high-deprivation urban communities.

The contextual challenge is familiar in many parts of England: in areas of highest deprivation, patients **face four times higher risk** of premature cardiovascular disease (CVD) mortality and are **30%** more likely to develop hypertension compared to those in least deprived areas. Recognising these profound health inequalities, the pilot leveraged a **novel virtual care model** to enhance patient engagement, implement proactive health management, and provide personalised cardiovascular risk interventions.

Launched in **June 2023**, this initiative represents a forward-thinking approach to localised healthcare, demonstrating the ICB's commitment to data-driven, innovative solutions that directly address community health needs. By targeting hard-to-reach populations and implementing a novel Virtual proactive care approach, the programme demonstrates how strategic, technology-enabled interventions can potentially transform public health outcomes in challenging urban environments.

The pilot in TNW in NEL ICB

NEL ICB tasked Suvera to deliver the following key activities:

- Undertake a **case finding exercise** in the selected pilot practices to identify high-risk patients with a diagnosis of hypertension including those who have not engaged with their GP practice for an extended period of time, e.g. 12 months or more, who also meet the following criteria for each borough:

Tower Hamlets

Co-morbidity of Chronic Kidney Disease + BP <180 systolic

Newham

BP <180 systolic

Waltham Forest

**No BP taken in last 12 months
BP <180 systolic**

The aim...

- To use data to identify these patients
- To pre-book patients into appointments
- To conduct telephone consultations
- To link into BP@home service and resources, where available, to expand its reach including logistics of device delivery and patient education

System context

Primary care is under significant strain. In 2022, consultations rose by 10%, while the clinical workforce diminished with **850 fewer GPs**. Increased demand has been exacerbated by an ageing population with multiple co-morbidities. In England, **twenty-six million people now live with at least one chronic condition**, a number that continues to grow each year. Chronic diseases account for half of all primary care appointments and **70% of NHS expenditure on long-term condition-related illnesses**.

High blood pressure and cholesterol are leading causes of heart attacks and strokes, contributing to a quarter of premature deaths from cardiovascular disease (CVD) in England. **CVD is closely associated with health inequalities and is responsible for 20% of the life expectancy gap** between the richest and poorest communities.

While effective treatments exist to prevent these costly and life-altering events, many people remain untreated, increasing their risk of heart attack or stroke. The growing prevalence of multi-morbidities, combined with budget constraints and staff shortages is also overwhelming primary care and adding pressure to secondary care.

With the annual cost of CVD to the economy said to be £15.8 billion, investing in prevention could deliver significant returns to the health system and is part of Labour Government's Health strategy. ([Link](#))

The NHS Long Term Plan emphasises prevention, focusing on tackling obesity, alcohol use, and smoking. **A key goal is to prevent 150,000 strokes and heart attacks over the next decade** by improving the treatment of high-risk conditions like hypertension, high cholesterol, and atrial fibrillation.



CHAPTER 2

The challenge in TNW

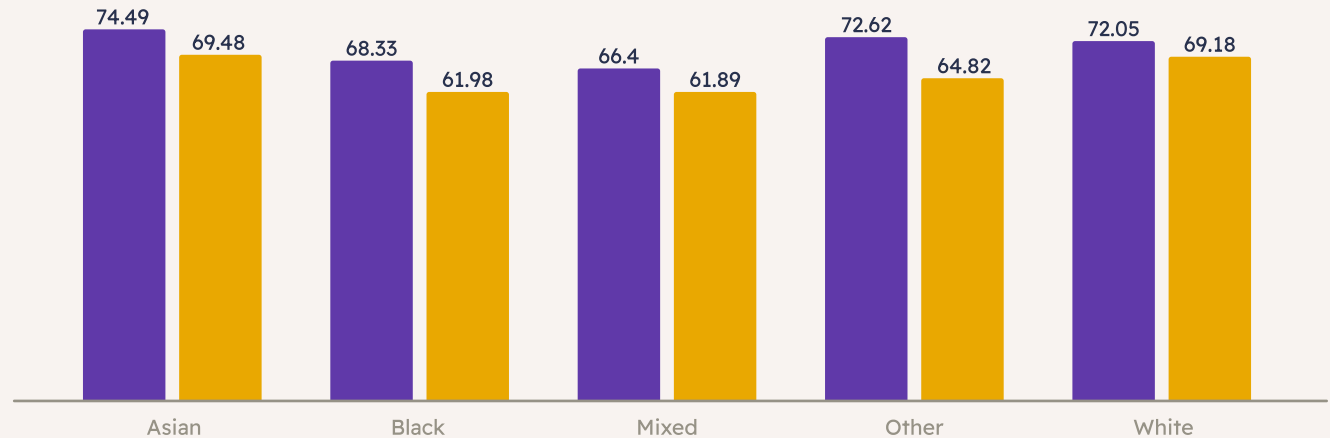
Generally, NEL had a higher proportion of adults with GP recorded hypertension (compared with England) in whom the last blood pressure reading is below the age-appropriate treatment threshold, although all below the national ambition of 77%. People from an Asian background had the highest proportion (74.5%) in NEL, with black and mixed ethnic groups experiencing lower levels, at **68.3%** and **66.4%** respectively.

Health inequalities in the area impact performance outcomes and were a key driver for this project. This is because the proportion of patients with GP recorded hypertension, in whom in the last blood pressure reading is below the age-appropriate treatment threshold with hypertension is higher (75.1%) in the least deprived quintile than more affluent populations (See graph on right). All populations were **below** the national ambition of 77% but well above rates for England.



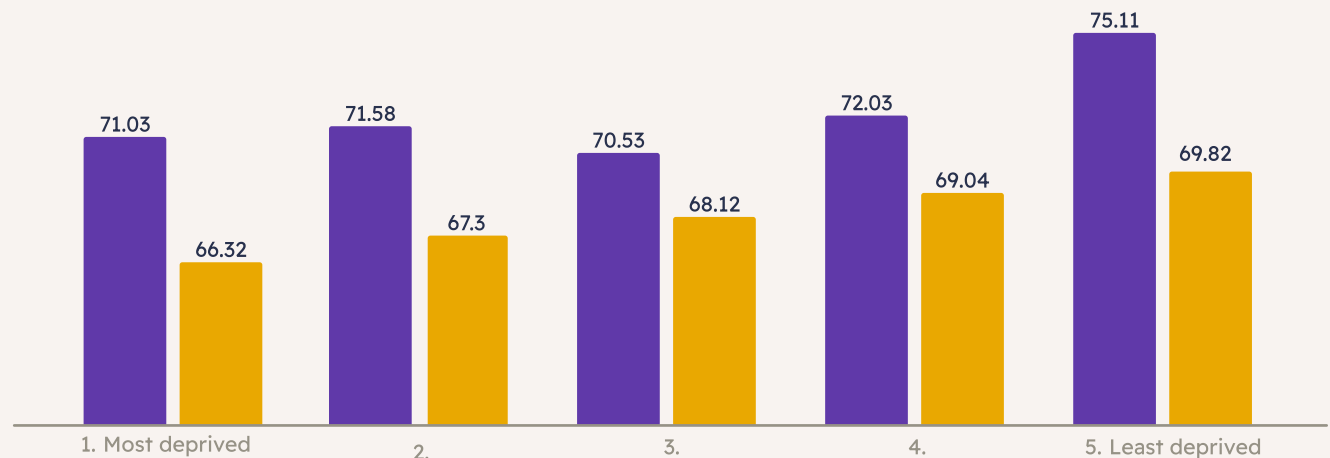
CVDP007HYP by ethnicity

CVDP007HYP = Percentage of patients by ethnicity aged 18+ with GP recorded hypertension in whom the last blood pressure reading (measured in the preceding 12 months) is below the age-appropriate treatment threshold



CVDP007HYP by deprivation

Percentage of patients by deprivation aged 18 and over with GP recorded hypertension, in whom the last blood pressure reading (measured in the preceding 12 months) is below the age-appropriate treatment threshold



CHAPTER 3

Suvera's solution

Suvera, a population health service, specifically designed to address health inequalities and support primary care to manage long-term conditions by providing both a clinical workforce and an integrated technology platform to deliver a new model of care.

Approved by the CQC and NHS Digital, Suvera's holistic, virtual service is designed to coordinate care for GP practices, streamline management of complex patients and provide significant efficiency gains compared to traditional general practice.

Suvera's in-house analytics team identifies at-risk patients, and then invites individuals to a user-friendly, accessible platform. A specialist cardiovascular team manages patients from the comfort of their own home. The service facilitates early detection and prevention, and enables care to be provided with fewer clinical resources.

Key features include



A **patient web app** that enables remote submission of clinical data and reduces 'white-coat syndrome' (increase in anxiety/stress when recording blood pressure in a medical setting, skewing results)



Coordinated workflow tool that automates scheduling multi-condition holistic appointments with specialist cardiovascular clinicians



Suvera Planner (practice facing dashboard) provides GP staff full visibility of patients managed and targets completed



Dynamic scheduling that matches appointment duration with patient complexity

Key benefits to patients and staff

Achieving condition target control

Timely access to care

User-friendly interface

Efficient triage system

Increased capacity

On-demand referrals

Increased patient engagement with translation services

Automated and streamlined call and recall

Reduction in staff workloads

How Suvera's proactive virtual care model works successfully as an extension to General Practice

Dedicated Team

Suvera's clinical pharmacists all have prescribing expertise with extensive general practice experience to deliver truly holistic chronic care. Supported by dedicated analysts and recall specialists, our comprehensive team provides end-to-end condition management.




Bespoke Technology

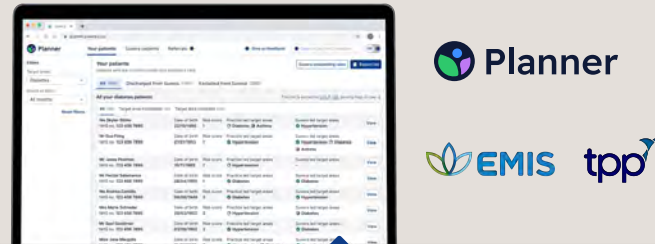
Suvera's bespoke technology suite ensures comprehensive end-to-end long-term condition management. Seamlessly covering patient coordination and interactions as well as clinician dashboards, Suvera's system integrates with 98% of GP Practices across England.

Fully Regulated




Suvera's GPs provide rigorous clinical supervision and oversight, conducting regular audits in full compliance with CQC regulations. Our robust internal processes ensure patient decisions are covered by Suvera's indemnity. Suvera truly lifts workload burden from GP practice staff.

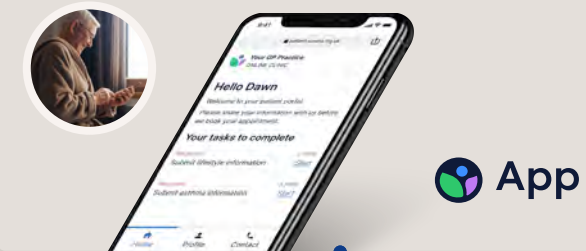
1. Plan

-  Suvera analysts sync health records with the Planner.
-  Suvera's Planner automates risk stratification and care prioritisation.
-  Suvera's governance team ensures patient care eligibility to the clinic.






2. Engage

-  Suvera's recall team boosts engagement with scheduled calls.
-  Suvera's Web App personalises questions for multi-conditions.
-  Clinical Product safety ensures the web app detects submission errors






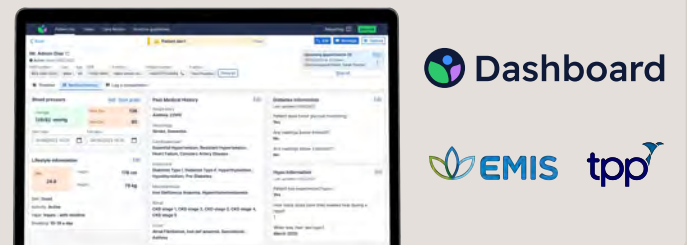
4. Care

-  Complete patient care with consultations, prescriptions, and follow-ups to target range.
-  Automated platform matches patients with multiple conditions to clinicians with the right skillset.
-  Suvera's dedicated GP supervising team ensures safe, seamless care delivery, unburdening the practice.



3. Automate

-  Asynchronous care, where appropriate delivered by senior clinical pharmacists
-  Seeing the right patient at the right time is possible with Suvera's bespoke dashboard
-  Suvera's governance team sets guidelines to ensure patients are eligible for care



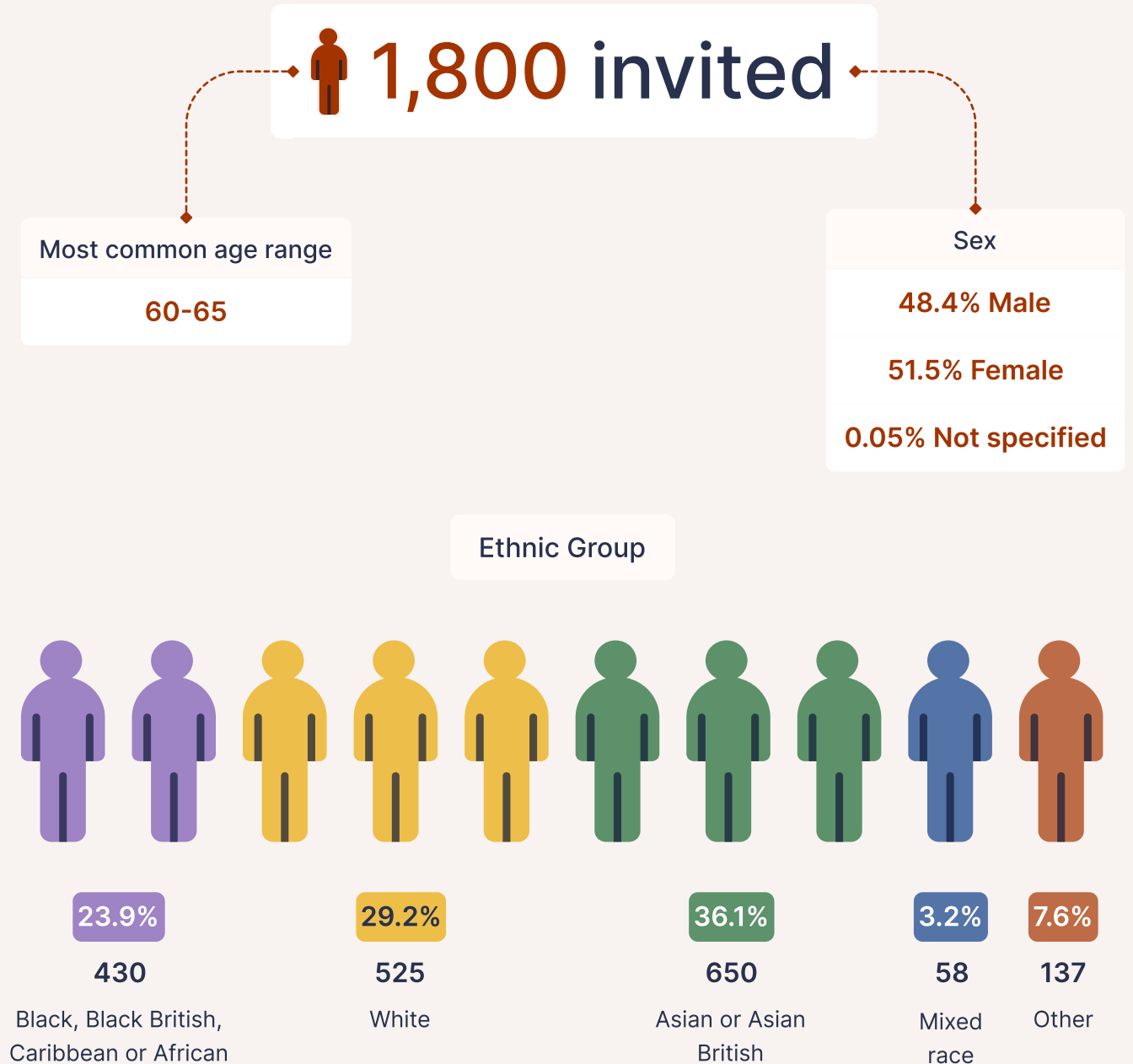
CHAPTER 4

Patients managed by Suvera

A key goal for the NEL ICB programme was to successfully engage TNW's **CORE20PLUS5** patient population and individuals living in deprived localities.

Suvera provided end-to-end support, from patient outreach through to coordinating call and recall of patients. The pathway has been designed and user-tested to ensure optimal engagement throughout and empower patients to be involved in management of their condition. This includes automated outreach and pre-scheduled appointments (which have been statistically validated to result in higher engagement rates and lower "Did Not Attend" (DNA) rates, as supported by research in the referenced paper [Link](#)).

Patients are invited with an initial SMS followed by a reminder SMS. If further follow-up is needed, patients receive letters and an automated pre-scheduled phone call to ensure uptake. Additionally, patients can use the Suvera Patient Web Application at any time to submit blood pressure readings, which a clinician then reviews based on risk level. This comprehensive approach significantly boosts patient participation and ensures timely management of health.



CHAPTER 5

Key achievements in TNW by Suvera



79%

patients referred or urgent BP reviewed within 24 hours

3,458

BP submissions

2,788

web app submissions

670

care team submissions

81.4%

engagement rate with the service

855 patients completed lifestyle questionnaires on smoking and alcohol status

140 patients submitted urgent reviews



14,117

Total clinician contacts



6,288

Reviewing patient data



199

Care coordinator rescheduling to suit the patient



4,327

Telephone consultations



3,303

SMS Messaging to the patient

Engagement by age group

Under 35 **82.4%**



>= 35 and <50 **78.9%**



>= 50 and <75 **78.7%**



Over 75 **82.7%**



CHAPTER 6

Clinical impact on patients in TNW

The virtual clinic saw significant improvements in patients' blood pressure in TNW. The graph below demonstrates that upon enrolment in the programme, Suvera's Virtual Clinic reduced patients' systolic blood pressure **by an average of 8.8 mmHg**.

81.4% of patients improved blood pressure control in just **under 41 days** of engaging with the service.

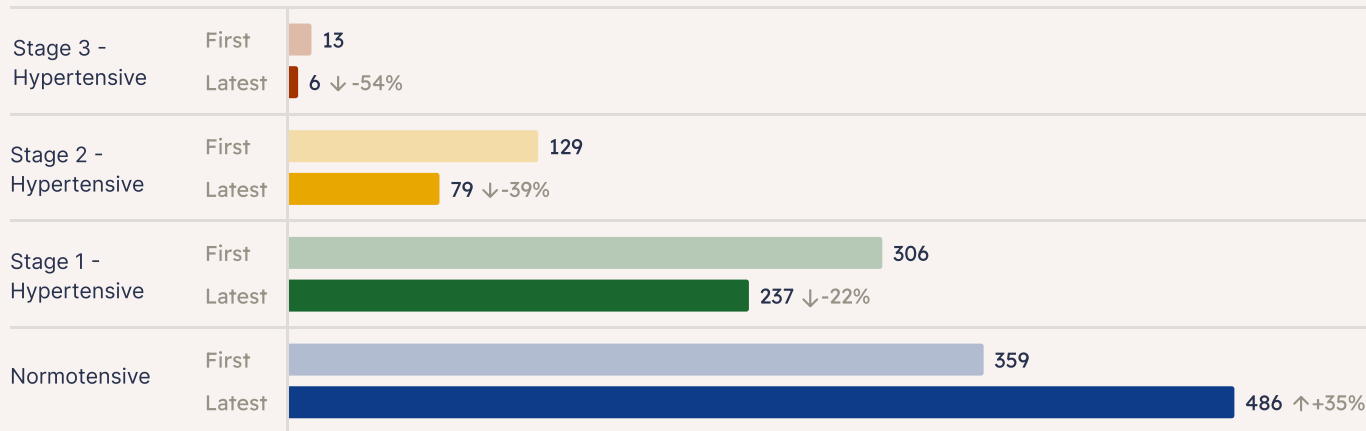
The findings indicate that utilising Suvera's platform can enable clinical staff to manage

a **patient register 31% larger** than one without access to Suvera's automated technology platform.

This achieves the triad of better clinical outcomes, at lower cost in a more productive and efficient manner.

Change in BP Stages in patients in TNW with Suvera's Virtual Clinic

Stage



n = 808

Most recent BP stage

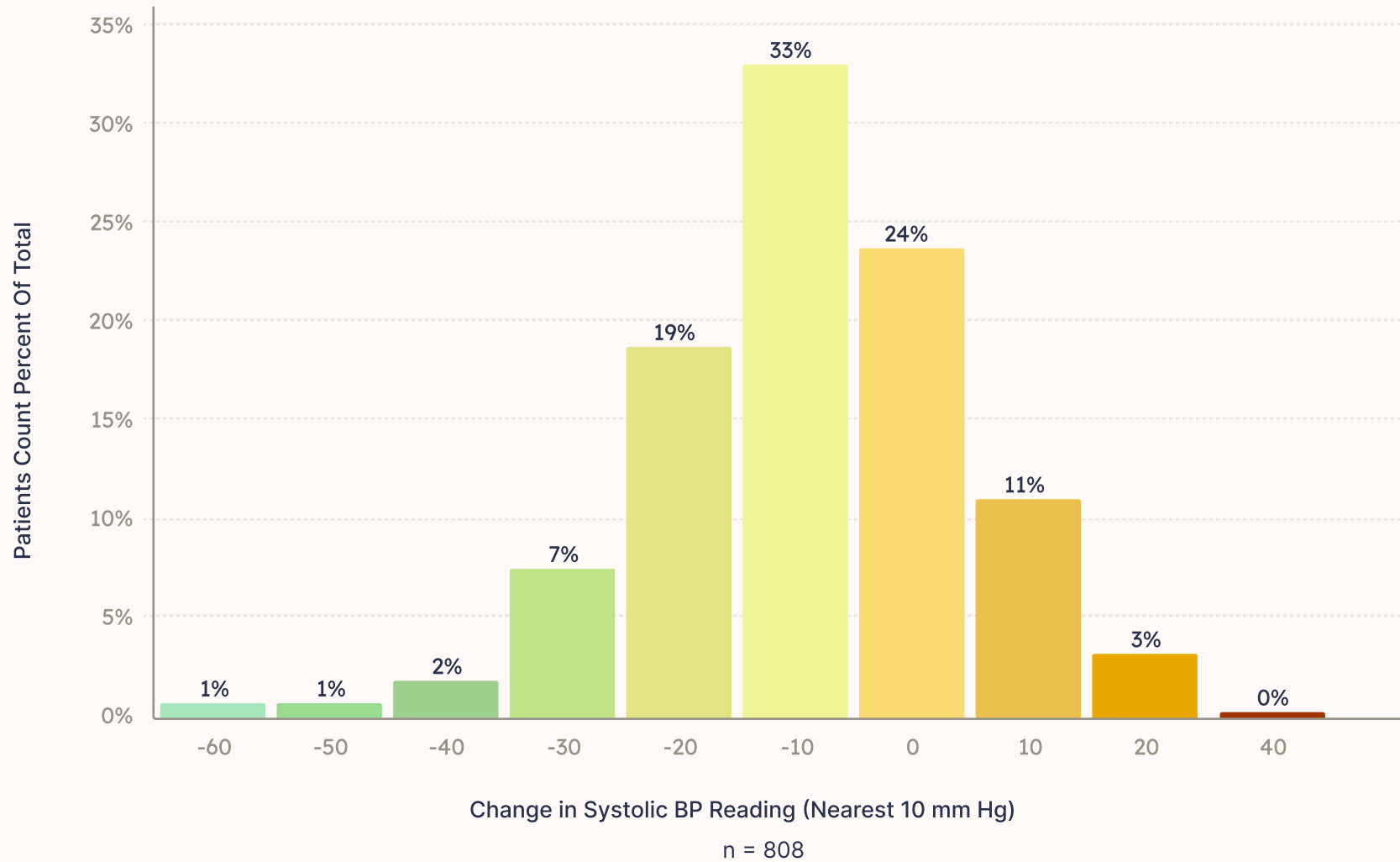
- Stage 3 -Hypertensive**
≥ 175 mmHg Systolic and/or ≥115 mmHg Diastolic
- Stage 2 -Hypertensive**
≥ 150 mmHg Systolic and/or ≥95 mmHg Diastolic
- Stage 1 -Hypertensive**
≥ 135 mmHg Systolic and/or ≥98 mmHg Diastolic
- Normotensive**
< 135 mmHg Systolic and/or ≥85 mmHg Diastolic

Change in systolic blood pressure reading

Measured from the first blood pressure reading to the latest blood pressure reading

-8.8 mmHg Improvement in Systolic BP Reading Average

40.32 Days average to Achieve BP Control Average



CHAPTER 6

Patient Experience

Accessibility is central to the design of the Suvera Patient Web App, which has been user-tested to ensure it accommodates individuals who may be colour blind or shortsighted. Furthermore, all communications are crafted to be easily understood, with a reading level tailored to a 9-year-old's comprehension, ensuring clarity and inclusivity for a wider audience. Finally, full live-language-translation services are available on all our consultations.



63 years of age

is the average age of patients that use the Suvera Virtual Clinic across all our practices (N=180 GP practices)



88% of patients

would recommend the service to a family or friend (N=423)



Multiple languages offered

numerous languages have been requested and translated for patients in live while on the phone or on video



52 minutes

Average response time to an urgent clinical reading



5 minutes

fastest response time to an urgent clinical reading



I can only highly rate this service as I felt properly monitored and the response was immediate. As a result my medication has been changed controlling my BP efficiently. Thank you SUVERA!

- Patient testimonial

CHAPTER 7

Economic modelling

The Lancet highlights several key findings on preventing strokes and heart attacks related to reduction of systolic blood pressure.

Reduction in cardiovascular events:

A 10 mmHg decrease in systolic blood pressure lowers the risk of major cardiovascular events by 20%, coronary heart disease by 17%, stroke by 27%, and heart failure by 28%. It also reduces all-cause mortality by 13%.

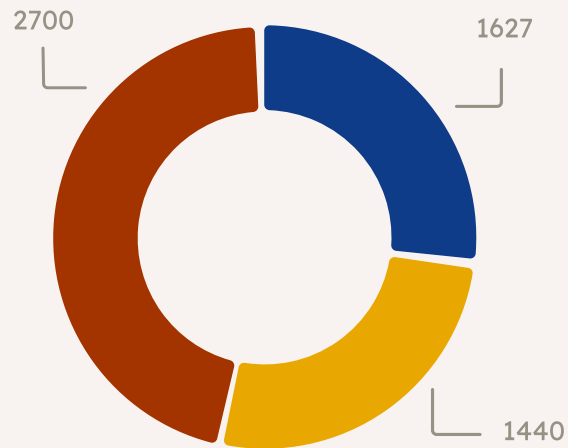
Impact across different conditions:

The benefits of blood pressure reduction were consistent across different baseline levels and high-risk groups, such as those with diabetes and chronic kidney disease, though slightly smaller in these groups.

These findings support the use of treatments to reduce systolic blood pressure to below 130mmHg to significantly lower the risk of cardiovascular events and mortality. [Link](#)

Primary care savings

Total hours in appointments saved as a result of the Suvera Service



- Number of GP appointments saved (with medication review)
- Number of clinical (non-GP) appointments saved
- Number of asynchronous submissions

Secondary care savings & beyond

Projected impacts in secondary care

Preventing hospital admissions has numerous benefits. Beyond immediately reducing pressure on hospital beds, we avoid the substantial costs of comprehensive in-patient care such as rehabilitation services like physiotherapy and speech therapy. Furthermore, keeping people healthy means also avoiding lost productivity costs for both patients and their employers.

In our cohort, 808 patients experienced on average more almost an 8.8 mmHg reduction in systolic blood pressure. Based on the Lancet data, we can model that over the coming years in our treatment cohort (with the first event prevented as soon as year 3):



Heart attacks avoided from the blood pressure improvement of 808 patients



Strokes avoided from the blood pressure improvement of 808 patients

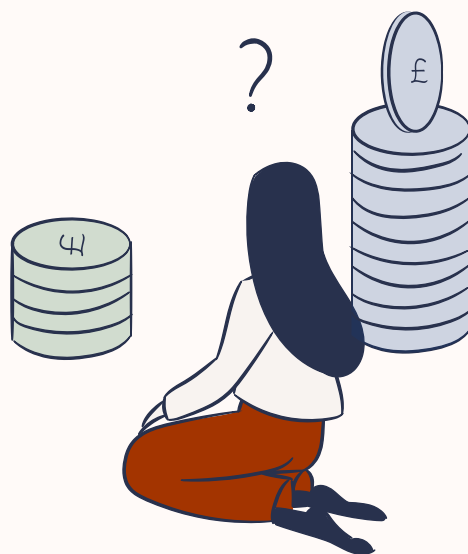
We know that patient demand within an overstretched primary care system spills into secondary care. This is a financially critical position to avoid, as the cost of care delivery in secondary care significantly exceeds primary care. If we look at overspill of non-urgent minor illnesses, the cost of the exact same level of care provision is typically 5x that of what the appointment would cost in general practice. That's £30 per GP appointment compared to an A+E visit which costs £150. This figure is equivalent to the cost of care for a patient in general practice for an entire year.

If we are to move beyond the example of non-urgent minor illnesses and contextualise the cost differences to the system when looking at poor management of long-term conditions, the financial costs are even more exaggerated.

When long-term conditions deteriorate due to late intervention, consider the following: Each preventable stroke caused by poor control of high blood pressure costs the NHS £45,000 in the first year alone, encompassing A+E admission, multi-disciplinary team support, and rehabilitation. However, if every patient with hypertension maintains 10mmHg better control of their systolic blood pressure, this reduces strokes by 27%, and equates to a £50,000 net

saving to the system per patient, as reported by Public Health England. Suvera's entire virtual care service (including clinicians and technology) costs £25 per patient per year to achieve normal blood pressure control, which occurs in 3-months which will prevent adverse cardiovascular events.

Given the current NHS financial constraints, any proactive, preventative initiative must demonstrate rapid returns to ICBs. Suvera has designed its service to be instantly scalable across large populations within ICBs and to reduce clinical risk in patients within the first three months of enrolment. The return on investment to ICBs and the healthcare system is calculated in months, not years, for enhanced long-term care delivery.



ICB Roll Out Cost savings: Targeting out of range hypertension patients

The financial analysis demonstrates in-year and multi-year efficiency benefits when comparing Primary Care delivery costs against Suvera's Virtual Clinic.

The Virtual Clinic model continues to deliver sustained cash-releasing savings, with a clear growth trajectory as indicated.

Within Year-1 Position

- 110% return on investment in cash-releasing savings within 12 months
- Repeatable, scalable swift onboarding within M2, to enable M3 (Virtual Clinic go-live), and M6 (realised clinical outcomes)
- Immediate efficiency gains enable GP workforce capacity to address acute demands in Primary Care

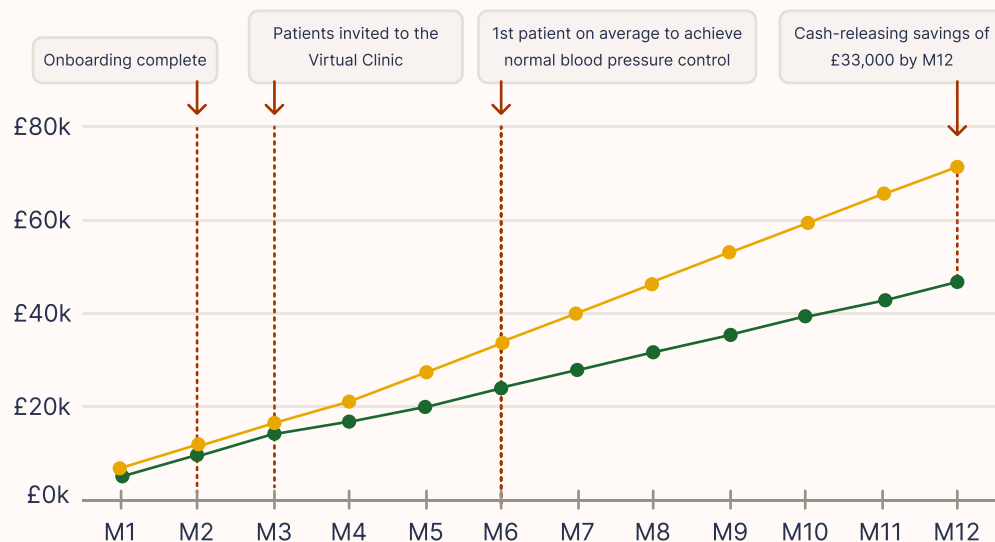
Year 1-5 Position

- ~300% increase in cash-releasing savings between Y1-Y3
- Widening cost differential between traditional and Virtual Clinic delivery models
- Additional productivity benefits anticipated through multi-condition management pathways

■ Cost for Primary Care to deliver CVD management

■ Cost for Suvera to deliver CVD management

Savings in Primary Care within Year 1



Savings in Primary Care in Year 1-5



The Suvera model is intentionally designed to deliver a dual benefit: **immediate cash-releasing savings in primary care coupled with substantial cost avoidance from preventable hospital admissions.**

Year 1-5

- Significant cost avoidance demonstrated from Y3 in secondary care from reduction in preventable hospital admissions
- By Y4/5, delivering £154k secondary care cost avoidance alongside £152k primary care cash-releasing savings
- By Y5, total ICS benefit of £306k. Representing a 300%+ return on initial investment, a material impact on ICS financial position.

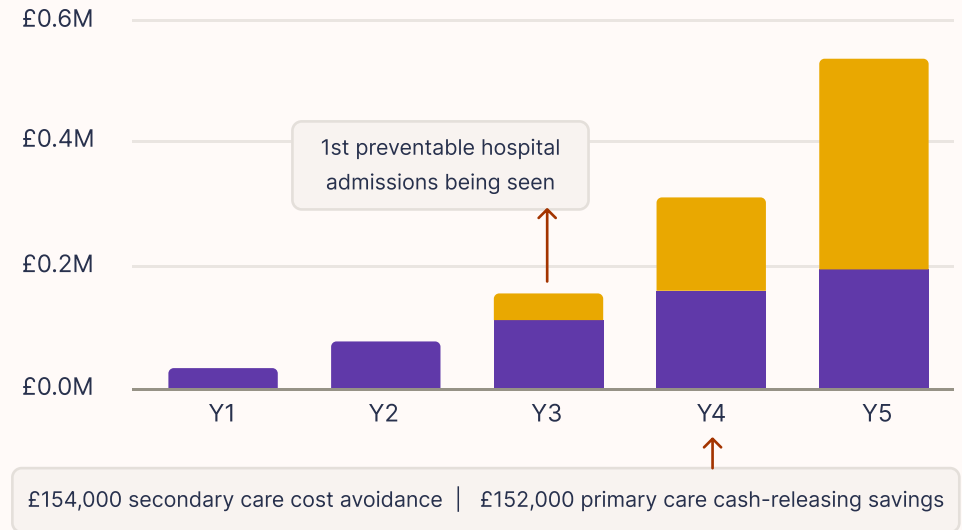
The prevention-focused model is in line with ICS and NHS objectives, with Suvera uniquely delivering immediate system relief with the greatest longer-term financial sustainability over the Y5+ horizon as indicated below:

10-Year Financial Profile:

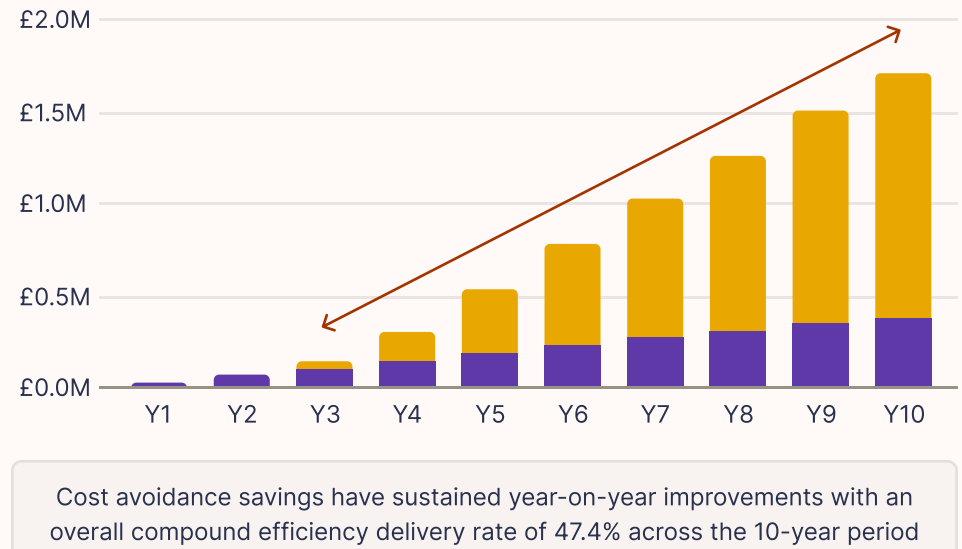
- Cost avoidance savings increased by compound rate of 47.4%
- Secondary care savings outpace primary care benefits from Y3 onwards
- Supports system-wide elective recovery by reducing preventable acute demand
- Aligns with ICS strategic objectives for left-shift of care and prevention

- Secondary Care Cost Avoidance
- Primary Care Cash Releasing Saving

Primary & Secondary Care Savings | Year 1-5



Primary & Secondary Care Savings | Year 1-10



CHAPTER 8

Conclusion & Next Steps

This evaluation demonstrates how Suvera has achieved ambitions set by NEL ICB, meeting the triple aim of improved care experiences and population health at reduced cost.

Suvera's work across eight practices has improved blood pressure management and reached patients in our most deprived communities – directly addressing healthcare inequalities in North East London region.

The impact has been promising. An 8.8 mmHg average reduction in systolic blood pressure, combined with clear financial benefits. By Year 5, the service delivers £306,000 in total system savings - split between £154,000 in secondary care cost reductions and £152,000 in direct primary care savings. This represents more than a 300% return on investment, with benefits growing substantially each year. The impact becomes even more significant over a 10-year period, with savings increasing at a compound rate of 47.4% annually.

With a solution already proven and deployed, rapid scaling across NEL ICB could deliver immediate benefits for both additional long-term conditions and patients with complex health needs. Suvera's integrated platform can holistically manage conditions including hypertension, diabetes, asthma, cholesterol, and COPD and more.

By building on existing infrastructure and proven workflows, Suvera and NEL ICB can expand while maintaining cost-effectiveness and maximising value across primary and secondary care.

Looking ahead, NEL ICB has the opportunity to build on these proven results – reaching more patients, further reducing health inequities, and delivering even greater system-wide savings through economies of scale. The data shows new models are not just meeting current needs; but establishing a financially sustainable model for future healthcare delivery across North East London and beyond.





Providing NHS services

Thank you for reading, contact us on:
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