







Improving the uptake of NHS Health Checks in more deprived communities using 'outreach' telephone calls made by specialist health advocates from the same communities:

A quantitative service evaluation:

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# Rationale for alternative method of engaging

patients for an NHS Health Check

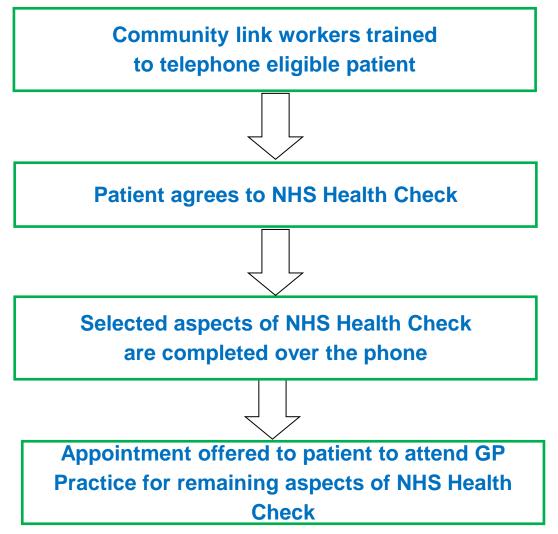
- Low uptake in areas with highest deprivation
- Patient population less likely to respond to a letter invite
- CVD related mortality and morbidity highest in these areas
- Method used to invite patients for an NHS Health Check has been shown to influence likelihood of attendance (Gidlow 2015)
- 2 models in Bristol developed to complement the existing General Practice model:
  - community outreach
  - telephone outreach
- Telephone outreach model: Piloted in one practice in Bristol funded by Public Health Bristol and offered to all GP Practices in the lowest super output areas (LSOA) in Bristol.





If you're due a I'll make sure you vou need.

### How does the telephone outreach initiative work?







### **Aim and Objectives**

#### Aim

To determine the efficacy of a telephone outreach service for inviting patients for an NHS health Check, in GP practices from the LSOA in Bristol

#### **Objectives**

#### **Primary outcome:**

Compare the rate of uptake of an NHS Health Check in the target population, in GP practices using the telephone outreach initiative, with the rate of uptake in comparison / control practices using traditional letter invite

#### **Secondary outcomes:**

- Investigate the relationship between attendance and patient demographics (age, gender, IMD and ethnicity) in both patients invited using:
  - telephone outreach initiative
  - traditional letter invite





### Methods



- **Study design:** quasi-experimental approach
- **Target Population**: adults eligible for an NHS Health Check and registered at one of 17 GP practices in the lowest LSOA's in the City of Bristol
- **Data:** Pseudoanonymised individual, patient level data from electronic medical records system, (EMIS)
- **Analysis**: data cleaned and analysed using STATA v13.1
  - Descriptive statistics to explore population demographics
  - Binary logistic regressions using a forced entry method, to look at associations and potential predictors for making an appointment and for attending for an NHS Health Check

#### Flow chart of invites - attendances **Health Check** Completed **Appointment** n=587 (79%) made n=741 (71%) No HC completed Contact n=154 (21%) n=1038 (43%) No appointment Calls made made n=2399 n=213 (16%) No contact n=1361 (57%) % of completed Checks as a proportion of invites / calls Health Check Completed **N=12 Intervention Practices (24%)** Letter Sent n=1117 (34%) (57% from contact) (?other methods of invite) N=5 Control Practices (34%) **HC Not** n = 3279

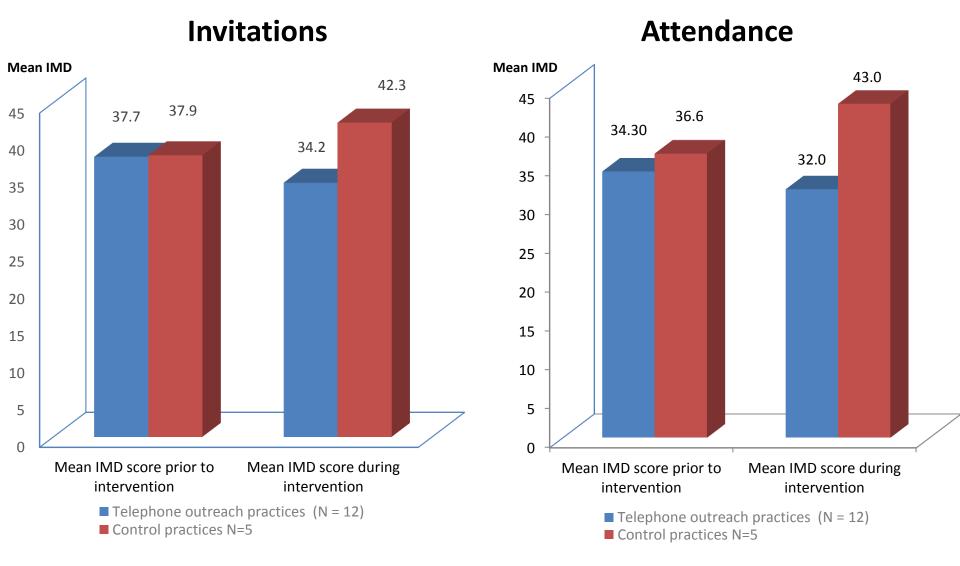




completed

2162 (66%)

### **Index of Multiple Deprivation (IMD)**

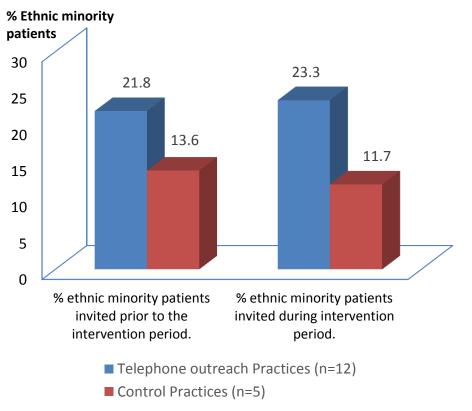




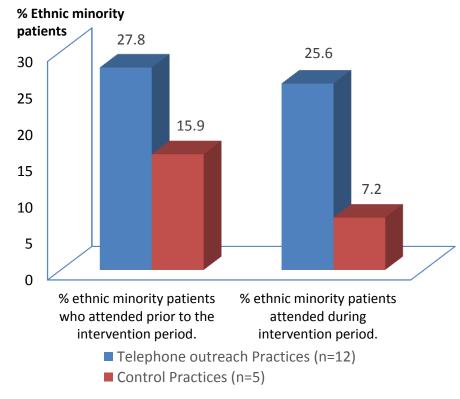


### **Ethnicity**

#### **Invitations**



#### **Attendance**





### Completion of an NHS Health Check

controlling for gender, age, IMD quintile, telephone contact made, (intervention practices only) letter sent (intervention only), start date of intervention (intervention practices only)

### Intervention

- Men less likely to attend (OR 0.78) than women
- Decreasing likelihood of attendance with age
- Patients located in the 3<sup>rd</sup> national quintile for IMD most likely to attend (OR 1.08) \*
- Letters sent within 2 weeks of phone call significantly reinforced the intervention (OR 3.26)
- Letters sent up to 9 months prior to phone call less likely to result in a completed NHS Health Check (OR 0.57)

### Control

- Men significantly less likely to attend then women (OR 0.82)
- Patients aged 70-74 more likely to attend then those aged 40-69 (OR 2.09) (increasing likelihood of attendance with age)
- Patients located in 1<sup>st</sup> national quintile for IMD most likely to attend





<sup>\*</sup> Only controlling for gender, age and IMD quintile

# **Summary**



- Intervention practices more successful at attracting ethnic minority patients to complete their NHS Health Check (26%), compared to non-telephone outreach practices (7%).
- Statistical modelling showed that intervention practices were more likely to complete an NHS Health Check on more deprived patients compared to the control practices.
- All practices completed more NHS Health Checks on patients from IMD quartiles 3-4 compared to 1-2.
- Patients more likely to attend their GP practice to complete their NHS Health Check, following their phone call if they were female, over aged 70 and less deprived.

a free health check

## Acknowledgments



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