**Online-only Supplemental Material Files**

Supplementary Figure S1. Flow of practices and patients through trial.

Practices assessed for eligibility (n=24)

Excluded (n=0)

  Not meeting inclusion criteria (n=0)

  Declined to participate (n=0)

  Other reasons (n=0)

Practices allocated to intervention (n=12)

Patients included (n=1422)

 Received allocated intervention (n=10 )

 Did not receive allocated intervention (give reasons) (n=2 )

* 2 practices taken over by larger consortia, existing patient list could no longer be accessed.

Practices allocated to control group (n=12)

Patients included (n=1299)

## Allocation

24 Months

Practices lost to follow-up (n= 0)

Practices discontinued intervention (n= 0)

12 Months

Practices lost to follow-up (n= 0)

Practices discontinued intervention (n= 0)

12 Months

Practices lost to follow-up (n= 0)

Practices discontinued intervention (n= 0)

24 Months

Practices lost to follow-up (n= 0)

Practices discontinued intervention (n= 0)

Practices randomized (n= 24)

## Enrollment

## Follow-Up

Supplementary Figure S2. Forest plot of the intervention at 24 months by subgroup. ****

Supplementary Table S3 Cardiovascular outcomes for patients with microalbuminuria and type 2 diabetes allocated to a software based intervention or to usual care (control).

|  |  |  |
| --- | --- | --- |
|  | **Number of patients****(Percentage)** | **Model summary†** |
| **Outcome** | **Control group** | **Intervention group** | **Hazard Ratio (95% CI)ⱡ** | **P values§** |
| Composite outcome a | 33 (2.55) | 35 (2.47) | 0.96 (0.65 to 1.43) | 0.843 |
| Nonfatal myocardial infarction | 6 (0.46) | 7 (0.49) | 0.81\* (0.31 to 2.08) | 0.660 |
| Nonfatal stroke | 19 (1.47) | 20 (1.41) | 0.94\* (0.56 to 1.56) | 0.812 |
| Death from cardiovascular causes | 9 (0.69) | 9 (0.63) | 0.91 (0.36 to 2.29) | 0.842 |
| Death from any cause | 30 (2.31) | 23 (1.62) | 0.67 (0.35 to 1.29) | 0.235 |

\* Results are adjusted for baseline values

†Estimates are derived using Cox proportional hazards model. Results are adjusted for cluster effect.

§Significance of intervention term in model

a The composite outcome was the first occurrence of death from cardiovascular causes, nonfatal myocardial infarction, or nonfatal stroke.

Supplementary Table S4 Drug prescriptions used by eligible study participants with type 2 diabetes and microalbuminuria at follow-up.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Drug** | **Total n (%)** | **Control n (%)** | **Intervention n (%)** | **P-values** |
| **ACE** |  |  |  |  |
| 12 months | 1241 (45.61) | 599 (46.11) | 642 (45.15) | 0.614 |
| 24 months | 1143 (42.01) | 543 (41.80) | 600 (42.19) | 0.836 |
| **ARB** |  |  |  |  |
| 12 months | 642 (23.59) | 317 (24.40) | 325 (22.86) | 0.342 |
| 24 months | 574 (21.10) | 288 (22.17) | 286 (20.11) | 0.189 |
| **Anti-hypertensives** | 2044 (86.72) | 1005 (88.47) | 1039 (85.09) | 0.016 |
| 12 months | 2158 (79.31) | 1054 (81.14) | 1104 (77.64) | **0.024** |
| 24 months | 1982 (72.84) | 964 (74.21) | 1018 (71.59) | 0.125 |
| **Lipid lowering** |  |  |  |  |
| 12 months | 1922 (70.64) | 893 (68.75) | 1029 (72.36) | **0.038** |
| 24 months | 1769 (65.01) | 825 (63.51) | 944 (66.39) | 0.116 |
| **Anti-platelet** |  |  |  |  |
| 12 months | 957 (35.17) | 443 (34.10) | 514 (36.15) | 0.265 |
| 24 months | 843 (30.98) | 393 (30.25) | 450 (31.65) | 0.433 |
| **Oral antidiabetics** |  |  |  |  |
| **12 months** |  |  |  |  |
| Mono therapy | 954 (49.90) | 454 (48.66) | 500 (51.07) | 0.292 |
| Dual therapy | 650 (34.00) | 329 (35.26) | 321 (32.79) | 0.254 |
| Triple therapy | 289 (15.12) | 142 (15.22) | 147 (15.02) | 0.901 |
| >=four therapies | 19 (0.99) | 8 (0.86) | 11 (1.12) | 0.558 |
| **24 months** |  |  |  |  |
| Mono therapy | 881 (50.00) | 404 (46.92) | 477 (52.94) | **0.012** |
| Dual therapy | 585 (33.20) | 312 (36.24) | 273 (30.30) | **0.008** |
| Triple therapy | 277 (15.72) | 139 (16.14) | 138 (15.32) | 0.633 |
| >=four therapies | 19 (1.08) | 6 (0.70) | 13 (1.44) | 0.130 |
| **Insulin** |  |  |  |  |
| 12 months | 499 (18.34) | 225 (17.32) | 274 (19.27) | 0.190 |
| 24 months | 469 (17.24) | 201 (15.47) | 268 (18.85) | **0.020** |

Supplementary table S5: Incidence rate per 1000 person-year by treat group

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Total** **IR(95% CI)** | **Control****IR(95% CI)** | **Intervention** **IR(95% CI)** | **IRR** **(95% CI)** | **p-value** |
| Myocardial infarction | 2.40 (1.38 to 4.15) | 2.32 (1.12 to 4.80) | 2.47 (1.09 to 5.59) | 1.06 (0.37 to 3.09) | 0.908 |
| Acute coronary syndrome | 4.42 (3.03 to 6.46) | 5.03 (2.93 to 8.63) | 3.87 (2.32 to 6.45) | 0.77 (0.37 to 1.59) | 0.479 |
| Angina | 4.80 (3.24 to 7.12) | 3.87 (1.85 to 8.12) | 5.65 (3.55 to 9.01) | 1.46 (0.62 to 3.43) | 0.387 |
| Ischemic heart disease | 18.40 (14.86 to 22.79) | 19.36 (12.83 to 29.21) | 17.54 (14.71 to 20.92) | 0.91 (0.58 to 1.40) | 0.659 |
| Transient ischemic attack | 3.13 (1.90 to 5.16) | 3.47 (2.23 to 5.39) | 2.82 (1.14 to 6.96) | 0.81 (0.31 to 2.16) | 0.677 |
| Stroke | 7.23 (5.43 to 9.63) | 7.40 (5.00 to 10.94) | 7.08 (4.64 to 10.81) | 0.96 (0.55 to 1.68) | 0.878 |
| PVD | 4.24 (2.97 to 6.06) | 4.25 (2.65 to 6.82) | 4.23 (2.44 to 7.34) | 0.99 (0.49 to 2.02) | 0.992 |
| Revascularisation procedure | 2.21 (1.07 to 4.57) | 1.93 (0.88 to 4.20) | 2.47 (0.77 to 7.85) | 1.28 (0.33 to 4.98) | 0.722 |
| Bypass graft | 1.66 (0.74 to 3.72) | 0.77 (0.23 to 2.57) | 2.47 (1.14 to 5.33) | 3.21 (0.79 to 12.98) | 0.102 |
| CKD Stages | 19.08 (13.69 to 26.59) | 19.31 (11.99 to 31.11) | 18.87 (11.61 to 30.70) | 0.98 (0.50 to 1.90) | 0.947 |

Supplementary figure. Cardiovascular risk factor treatment algorithm S6.