Heading	Subheading	Descriptor	Where reported/comments
Title		Identify study as a randomised trial	Title
Abstract		Use a structured format	Page 2
Introduction		State prospectively defined hyothesis, clinical objectives, and planned subgroup or covariate analyses	Page 6- outcomes and analysis
Methods	Protocol	P1: Planned study population, together with inclusion/exclusion criteria	Page5/6 & AI 1
		P2: Planned interventions and their timing	Page 5/6
		P3: Primary and secondary outcome measure(s) and the minimum important differences, and how the sample size was projected	Page 6/7 & AI 2
		P4: Rationale and methods for statistical analyses, detailing main comparative analyses and whether they were completed in an intention to treat basis	Page 6/7 & AI 3
		P5: Prospectively designed stopping rules	NA
	Assignment	A1: Unit of randomisation	Page 5
		A2: Method used to generate the allocation schedule	AI 4
		A3: Method of allocation concealment and timing of assignment	?
		A4: Method to separate the generator from the executor of assignment	?
	Blinding	Describe mechanism, similarity of treatment characteristics, allocation schedule control, and evidence for successful blinding among participants, person doing intervention, outcome assessors, and data analysts	AI 5
Results	Participant flow and follow-up	Provide a trial profile (figure) summarising participant flow, numbers and timing of randomisation assignment, interventions, and measurements for each randomised group	Figure
	Analysis	R1: State estimated effect of interventions on primary and secondary outcome measures including point estimate and confidence interval	Page 8 & Table 2 & 3 (I°) & Table 4 & 5 (2°)
		R2: State results in absolute numbers when feasible	Table 2 & 4
		R3: Present summary data and appropriate descriptive and inferential statistics in sufficient detail to permit alternative analyses and replication	Tables 1, 2 &4
		R4: Describe prognostic variables by treatment group and any attempt to adjust for them	Results page 8 and Table 3
		R5: Describe protocol deviations by treatment group and any attempt to adjust for them	NA
Comment		C1: State specific interpretation of study findings, including sources of bias and imprecision (internal validity) and discussion of external validity, including appropriate quantitative measures when possible	Page 9-10
		C2: State general interpretation of the data in light of the totality of the available evidence	Page 9-10

AI = additional information sheets

NA = not applicable

#### Additional information

### 1. Methods, Protocol, P1:

All practices in Avon using the EMIS and AAH Meditel computing systems were invited to participate in the study. All patients aged 60-80 years with a diagnosis of hypertension and a record of having been prescribed anti-hypertensive medication in the previous year were eligible. Thirty eligible patients were randomly sampled from each practice list using either the computer system's built-in sampling facility (EMIS practices) or a random sampling programme on a personal computer (AAH Meditel practices). Non-ambulatory patients, those suffering from a life-threatening illness or those who had recently undergone major surgery were excluded.

## 2. Methods, Protocol, P3:

The trial was designed to detect a difference between the two intervention arms of the main trial, CDSS plus chart guidelines versus chart guidelines alone. Based on previous work we estimated 55% of patients in this sample would have an absolute five-year cardiovascular risk of  $\geq 10\%$ . The sample size was designed to detect a difference between the main arms of the trial of 20% of patients at this risk level. A power of 80% and a two-tailed  $\alpha$  of 5%, along with an inflation factor of 2.05 since randomisation was by practice, resulted in a sample size of 190 in each of the intervention groups. The expectation was to recruit 20 practices with 20 patients in each.

## 3. Methods, Protocol, P4:

Data management and analysis was done using Stata Statistical Software. Analyses were by intention to treat. Multivariable logistic regression was used to test all the outcome variables. Although follow-up data were collected at 6 and 12 months, results for only 12-month data are presented here. Adjusting for the clustering effect of using practice as the unit of randomisation did not affect the conclusions so the unadjusted analyses are reported.

# 4. Methods, Assignment, A2:

The randomisation was performed using a table of random numbers by a researcher not involved in the study.

## 5. Methods, Blinding:

Blinding the health professionals to intervention group was not possible given the nature of the study. No attempt was made to blind the data analysts (TP, AM & TF) to the study group.