



Figure 3: Example of a Timeline cluster diagram for a cluster trial with prevention of recruitment bias: The ELECTRA trial, evaluating a specialist nurse intervention to reduce unscheduled asthma care in a multi-ethnic area¹⁴

1	Cluster identification All the 42 general practices (GPs) in the London borough of Tower Hamlets plus 2 practices in the neighbouring borough of Newham, which serve populations surrounding the Royal London Hospital, where the specialist nurses are based, are approached.
2	Cluster recruitment All GPs receive an invitation to take part in the trial (with a letter and a phone call). They receive an information about the study and provide consent to take part.
3	Randomisation A senior researcher not involved in recruitment performs sequence generation. A minimisation programme is used to randomise all clusters at once using the following variables: partnership size, training practice status, hospital admission rate for asthma, employment of a practice nurse and whether the practice nurse is trained in asthma care.
4a	Intervention delivery at the cluster level GPs receive two 1-hour visits by the specialist nurses. No blinding for nurses and GPs.
4b	Intervention delivery at the cluster level GPs receive a single visit by the specialist nurses. No blinding for nurses and GPs.
5	Participant identification Blinded researchers monitor attendance at emergency department and GPs' out-of-hours service to identify eligible patients (prospectively or admitted in the previous 2 years).
6	Participant recruitment An invitation letter to attend a specialist nurse-run asthma clinic at the Royal London Hospital is sent to all eligible patients. At this clinic, blinded researchers inform the patient about the study and obtain written consent.
7	Participant baseline assessment A blinded researcher performs the participant baseline assessment in the clinic. After consent and baseline data are obtained, a different research nurse informs the patient of the arm assigned.
8a	Intervention delivery at the participant level Patients receive an intervention from asthma specialist nurses who use a liaison model of care. No blinding for nurses, GPs and participants.
8b	Intervention delivery at the participant level Standard asthma guidelines are applied and the inhaler technique of patients is checked. No blinding for nurses, GPs and participants.
9	Participant outcome assessment Unscheduled care for acute asthma over 1 year is extracted by a blinded researcher within the photocopied written and computerised general-practice records. To retain blinding during data extraction, a member of the study team removes any letters from the specialist nurse from the records. Another member of the study team extracts data outside the practice setting. Completeness and accuracy of extraction is validated by another blinded researcher, who checks 10 sets of records, chosen by using random numbers. No blinding for GPs who complete the records.