

## Qualitative research update

- \* Qual team have met with Martin-SS (NIHR) to establish best method for NIHR agreeing to an amended protocol.
- \* Keira is currently engaging with teams where the research will be focused.
- \* We will escalate getting HRA sign-off, as required.
- \* Agreed on the three sites for observation: all three are lower IVT rate units. Also interview one or more higher IVT rate units.

Post-meeting note: Ethics submission has been made to university, and amended protocol has been lodged with NIHR.

## Quantitative research update

- \* HQIP have approved new data request. We are hoping SSNAP will run the query in February.

### SHAP summary:

- \* The XGBoost/SHAP model revealed that the odds of receiving thrombolysis:
  - \* Reduced with increasing arrival-to-scan time.
  - \* Varied 30 fold depending on stroke severity.
  - \* Reduced with imprecisely known onset time.
  - \* Fell with increasing pre-stroke disability.
  - \* Varied 15 fold between hospitals.
- \* The hospital identification (hospital SHAP value) explained 58% of the variance in between-hospital thrombolysis use.
- \* Compared with hospitals with higher thrombolysis use, hospitals with lower use were particularly less likely to give thrombolysis to patients with milder strokes, prior disability, or patients with imprecise onset time.

Feedback from the SHAP presentation was used to refine a presentation planned for the Patient and Carers Involvement group.

Discussion is needed on how best to make results available to all teams (e.g. do we use a code for unit names, and let each team know their code?).

**ACTION:** Submit SHAP work to European Stroke Organisation Conference.