Gemma Clayton recently passed her PhD viva following full time HTMR Network PhD study at the University of Bristol. Gemma’s PhD project title was ‘Incorporating external evidence syntheses in the analysis of a clinical trial. Here Gemma describes her experiences as a HTMR Network PhD

During my PhD, I have had the opportunity to present at international conferences such as the Society for Research Synthesis Methodology in Florence (2016) and the International Clinical Trials Methodology Conference (ICTMC) in Glasgow (2015) and Liverpool (2017), meeting leading experts in my field and enabling discussion of my work. At the ICTMC in Glasgow I took the lead of several other PhD students involved in the HTMR Evidence Synthesis Working Group to conduct the INVEST (INVestigating the use of Evidence Synthesis in the design of clinical Trials) survey. The main aim of the survey was to investigate the current use of evidence synthesis in the design and analysis of clinical trials in practice. This work, on which I am lead author, has now been published in *Trials* and enabled collaborations across many trials units in the Network.

During the second year of my PhD, the hub supported my three-month research internship at Novartis in Basel. I used Bayesian multilevel modelling to estimate the incidence of safety events, from a large collection of placebo arm data in first in human studies. Whilst there, I learnt to program in R, enabling greater flexibility for me to switch between different software such as R, Stata and WinBUGS, depending on which is most suitable. I have since published this work in *Clinical and Translation Science* on which I am lead author.

I have had the opportunity to attend annual meetings and student symposiums. At the first student symposium in Birmingham I took away many things to implement in my PhD, such as, making an excel document summarising each paper I’ve read. This has been invaluable and played a huge role in helping to organise my PhD. Lastly, I had the opportunity to attend the BMJ annual editor’s meetings which is only open to BMJ editors and BMJ statisticians; I observed how they decided which papers would go on to be published. This was a great opportunity to see what the BMJ looks for in papers they want to publish, and to meet the late Doug Altman.