HIPS/16/42 - Component-resolved diagnostics for food allergy: a systematic review of test accuracy and cost effectiveness.

Food allergy is now a common condition in Scotland, particularly in children. Symptoms can be life-threatening. Accurate diagnosis is crucial. Food allergy is currently diagnosed based on clinical assessment and a blood or skin prick test, but these techniques can miss some cases and in other instances result in potential over-diagnosis. Furthermore, they also offer only very limited insights into the likely severity of a reaction if individuals are accidentally exposed. A more invasive technique known as an oral food challenge can be used, but this is time-consuming, expensive and can trigger very severe allergic reactions. A new diagnostic method – component- resolved diagnosis(CRD) – has been developed to try and overcome these limitations. CRD focuses on identifying specific molecules within foods. It is potentially more effective, but also more expensive than current approaches. We plan to systematically investigate the effectiveness and cost-effectiveness of CRD and understand its usefulness in NHS Scotland.