Bespoke database for CRA

The Airways Disease Database (ADD) was designed within the IT section of the Leicester NIHR Respiratory biomedical research unit (BRU) for clinical research data management and to support clinical phenotyping in specialist multi-disciplinary respiratory clinics. The web based interface was designed through dialogue with clinicians, specialist nurses and other staff within the unit to meet both staff role and clinic specific needs. The platform and clinic specific modules were designed employing software available in the public domain (open source tools including PHP, MySQL).

To provide contemporaneous electronic data capture for the CRA, a bespoke ‘complex COPD’ ADD module was created to facilitate structured data entry on symptoms, exercise, exacerbations, prognostic indicators, quality of life and outcome. In addition generic modules within the database framework provide the ability to capture related data such as longitudinal medication records (supplement figure 1) and ICD10 coded comorbidity recording. CRA letter templates are populated from the completed data set, thereby saving substantial admin time associated with specialist clinic delivery.

Example screenshots from the database are shown in supplement figures 2 and 3.