

UK BIOBANK

Assessment Centre Environment

Version 1.0

<http://www.ukbiobank.ac.uk/>

13th May 2011

This manual contains background information on the computing system, facilities and history of changes at UK Biobank Assessment Centres

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1. History of changes to UK Biobank

Since the Pilot study in March-June 2006, some enhancements and additional measures were introduced to the UK Biobank Assessment Visit. The timing of these introductions is reflected in the number of data points available for each field. Table 1 shows the Version History of UK Biobank, listing the dates and measures introduced. Since each version was rolled out to Assessment Centres gradually the dates they were in use may overlap.

Table 1: History of changes to Assessment Visit:

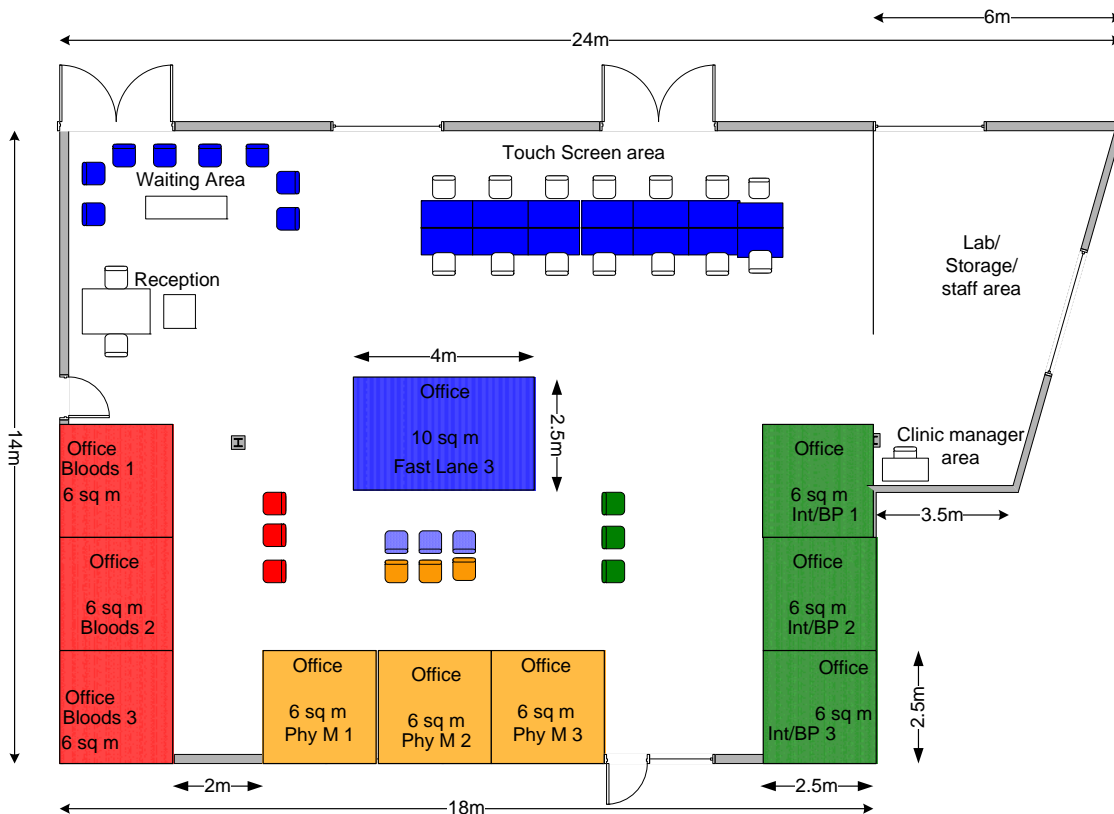
Version	When in use	Changes from previous version
Pilot	March - June 2006.	
V1.2.3	April to September 2007.	<ul style="list-style-type: none"> • Revisions to questionnaire • Windows visual memory test removed • Snap duration reduced • Verbal fluency replaced with equivalent test • Spirometry enhanced, with added demo video • Blood station enhanced with alert for processing
V1.3.3	July to September 2007.	<ul style="list-style-type: none"> • Participants able to correct details during Welcome/Consent • Staff able to make notes resulting from Physical Measures, Blood, and Conclude stations
V1.4.01	April to July 2009.	<p>Touch screen questionnaire:</p> <ul style="list-style-type: none"> • Added questions on Depression & Bipolar disorder; Self-reported happiness; Domestic Heating, Private healthcare, Claudication, Number of older siblings; Sudden death in family; Alcohol in average month; Email address check; Cochlear implant • Removal of questions on Parents' 1st name and month/year of their birth <p>Category 1 enhancements:</p> <ul style="list-style-type: none"> • Hearing test using touchscreen questionnaire introduced • Numeric memory test introduced • Fluid intelligence test introduced • Prospective memory test introduced • Pulse wave velocity (arterial stiffness) measured • Heel bone ultrasound changed from one to both feet

Version	When in use	Changes from previous version
		<ul style="list-style-type: none"> • Web-based diet questionnaire introduced
V1.5.04	August 2009 to February 2010	<ul style="list-style-type: none"> • Numeric memory test removed • Linkage made from employment question (D9) in Touch screen to Interviewer Questionnaire • Additional questions relating to eye conditions and disease: Which eye affected and age when affected <p>Category 2 enhancements:</p> <ul style="list-style-type: none"> • Eye related measures introduced: Refraction, IOP, Visual acuity • RNA analysis of extra blood sample introduced • Saliva sample introduced
V1.6.10	December 2009 to October 2010	<p>Category 2 enhancements:</p> <ul style="list-style-type: none"> • OCT eye measure introduced • Physical fitness (cardio station) introduced

2. Typical layout of Assessment Centre

A typical Assessment Centre contains the offices and stations shown in Figure 1:

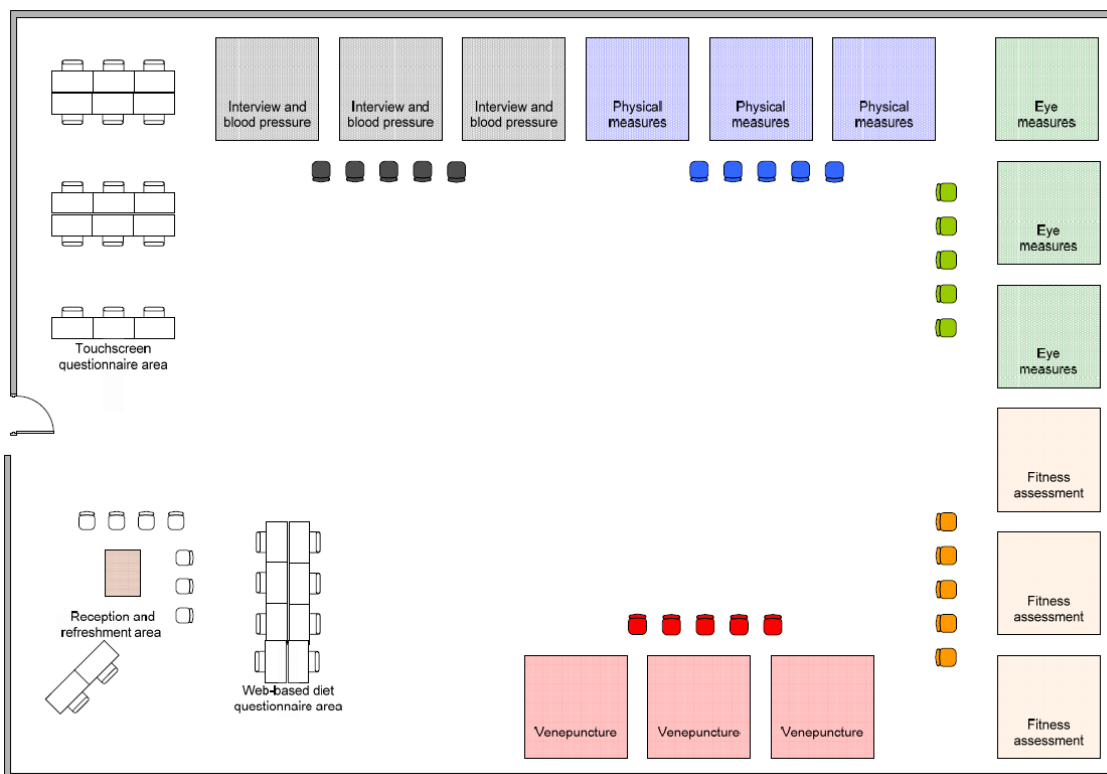
Figure 1: Typical layout of Assessment Centre



In addition, Centres contain a 'Super' station, which is an additional booth to facilitate wheelchair-bound participants and can be used for all stations except eye measurements. Also, a separate training booth is used to train staff, for all except eye measurements.

Following the Category 1 and 2 enhancements the number of offices and stations were increased to: 3-5 of each of the: Interview, Eye, Physical Measurements, Physical Fitness and Blood stations, and the added Web-based Diet Questionnaire station (figure 2):

Figure 2: Typical layout of Assessment Centre following Category 1 and 2 enhancements



3. Assessment Centre Environment (ACE) Software

Five separate 'configurations' of the ACE software each include different modules (table 2).

Table 2: ACE Functionality

Configuration	Stations	Modules included
Porto	Reception	Welcome Conclude Redo key Erase key
Tactus	Touchscreen	Cognitive Consent Questionnaire
Vox	Interview Ocular Biometrics Cardio (ECG) Blood collection	Interview & BP Ocular: - Visual acuity - Auto-refraction - Intra-ocular Biometrics Cardio Blood collection Urine collection Saliva collection
Spectare	Sample handling	Sample handling
Head	Head	Central synchronisation

4. Cleaning rules at Assessment Centres

At the end of the day all equipment and surfaces are cleaned with Azowipes.

If required to touch a participant the staff wear gloves, which are changed after each participant.