Environment template (REF5)

Institution: Queen Mary University of London

Unit of assessment: A2 (Public Health, Health Services Research and Primary Care)

A. OVERVIEW

Queen Mary has a tradition of socially relevant research in public health, health services and primary care that contribute to the wider knowledge base. The submitted groups are part of the School of Medicine and Dentistry (SMD), which consists of 4 Institutes plus a dental school on two sites (Whitechapel and Charterhouse Square). SMD has strengths in basic science and clinical and applied research oriented to NHS needs and priorities. Along with our local NHS trust, Barts Health, Queen Mary is a founding partner of *UCL Partners* Academic Health Sciences Network, reflecting the policy priority to integrate research, service delivery and education. Queen Mary is in the process of purchasing 4 acres of land in Whitechapel adjacent to existing SMD facilities for a cross-faculty Life Sciences Institute, intended to strengthen links between basic, clinical and population sciences and the humanities and social sciences.

Research within the remit of UoA2 takes place in the **Centre for Primary Care and Public Health (CPCPH)** in Blizard Institute; and the **Centre for Psychiatry (CP)** in Wolfson Institute. These centres have much in common empirically and methodologically. For example, the two centres jointly set up the **Pragmatic Clinical Trials Unit** [PCTU], with Eldridge (CPCPH) as Director and Priebe (CP) as Deputy. Other groups (leads) in CPCPH are: Translational Research (Griffiths), Health Policy and Innovation (Greenhalgh), Women's Health (Khan), Complex Interventions (Taylor), and Clinical Effectiveness (Robson). Groups in CP are Environmental and Cultural Psychiatry (Stansfeld/Bhui); Forensic Mental Health (Coid), Mind and Body Psychiatry (White) and Social and Community Psychiatry (Priebe). We also include the **Tobacco Dependence Research Unit** (TDRU, led by Hajek), based in Wolfson Institute.

B. RESEARCH STRATEGY

B1: STRATEGIC AIMS

In RAE 2008, in Epidemiology and Public Health, Queen Mary was ranked 2nd nationally. We have built on this success by undertaking research aimed at [a] understanding the upstream causes of illness; [b] developing and testing interventions to strengthen individual and organisational capacity to manage illness and risk, thereby improving health outcomes and reducing inequalities; [c] summarising and synthesising primary research; [d] following through to ensure findings influence practice, policy and public understanding; and [e] building the empirical and methodological knowledge base. From 2008 we adopted three broad **strategies**:

a. **Capacity building:** Expand successful research groupings. Attract world-class researchers in thematic areas (**Greenhalgh, Khan**). Develop young researchers (**Cooper, Bremner, Steed, Swinglehurst**). Secure significant income in large grants, especially from Research Councils, EU, NIHR and charities. Thus over the REF period (01/08 to 08/13) staff in this unit attracted awards of £35.5M with a spend of £27.8M.
b. **Collaboration:** Expand existing collaborations and establish new ones in areas of current and emerging strength. Improve infrastructure to promote internal collaboration. Extend cross-sector networks linking academic, NHS, local authority, industry and 3rd sector, including Academic Health Sciences Network (UCL Partners) and Collaboration for Leadership in Applied Health Research and Care (CLAHRC, City North and East).
c. **Dissemination:** Publish in high impact journals. Build our international reputation. Disseminate findings beyond academic audiences (see Impact Template for details).

Our socio-economically deprived and ethnically diverse inner-city location is the foundation and focus for much of our research. Such settings are often characterised by a high prevalence of mental health problems, with or without coexisting physical illness. Health outcomes depend at individual level on human predisposition and behaviour choices but also at societal level on determinants such as poverty, ethnicity, built environment, air quality, food outlets, accessibility of services and so on. A priority question driving our research is how to help individuals with low health literacy and weak self-management skills overcome the pervasive and often interacting effects of social determinants. Multi-morbidity and other complex health and care needs demand theory-driven, interdisciplinary, multi-level, empirically tested solutions.

All submitted groups have prioritised applied research oriented to NHS needs and priorities, with a particular focus on reducing inequalities, knowledge translation and research implementation. Strong leadership and investment of >£40M to SMD since 2008 has ensured that we met specific strategic goals in 2008-13 (B2) and had a major influence on thinking, practice and policy (B4) and ongoing research plans (B5).

B2. ACHIEVEMENT OF STRATEGIC AIMS

The submitted groupings have won **£35.5M** in grants since 2008 including **7 programme grants** (NIHR, MRC), **7 further large clinical trials** (NIHR, EU) and developmental and evaluative studies (Department of Health, NIHR, Technology Strategy Board). The recently reaccredited **Pragmatic Clinical Trials Unit** has become one of the largest NIHR supported trials units in the UK, increasing its portfolio of trials from 11 to 36 (total £26M) and its NIHR support funding from £150K to £250K pa, with a renewal in 2013 of a further 5 years at £1.25M. This has led to a step change in the quality and quantity of pragmatic trials, particularly those testing complex interventions. **New research leaders** have established strong Women's Health (**Khan**) and Health Policy and Innovation (**Greenhalgh**) groups and strengthened our capacity in evaluating complex interventions, clinical trial methodology, evidence synthesis, qualitative research and new technologies. Through increased research income, institutional investment, and efforts to bring in funding for **trainee and fellowship posts**, we met our 2008 goals to appoint new senior staff (sociology & health services), and new academic staff/post-docs; and substantially exceeded expectations for junior research capacity growth. (Section C). We have also met or exceeded our strategic goals for **collaborations**. Many of our large grants (eg CLARHC, PCTU expansion – see B3) resulted from internal collaborations among our research groups and/or our strong NHS links. For example, CPCPH now hosts the east London spoke of the **Primary Care Research Network**, one of the highest contributors of patient accruals to NIHR portfolio studies. This success was instrumental in the selection of Central and east London CLRN as the pilot for a national shift to Local Clinical Research Networks. In our numerous **external collaborations** (Section E), we have prioritised **leadership of international research networks** in our key strengths.

B3: RESEARCH CULTURE

Our research culture is interdisciplinary, outward looking and organised into thematic research groups, each led by a senior academic who balances existing strengths with responsiveness to emerging service needs and funder-led calls. Clinical academics work alongside triallists, statisticians, social scientists, psychologists, economists, informaticists and data managers. Our research is methodologically diverse: we have strengths in the basic science underpinning disease risk and/or new therapies; systematic review and meta-analysis; cohort studies; complex intervention development; methodological aspects of clinical trials (especially pragmatic clinical trials, for which we established the PCTU, and in cluster randomised trials, for which we are internationally known); qualitative research (especially ethnography and case study); and research implementation. Specialist staff (eg statisticians, economists) provide expertise across all groups. Primary studies are routinely preceded by secondary research; we published 68 systematic reviews or meta-analyses in 2008-13.

B4: RESEARCH GROUPINGS

Clinical Effectiveness Group, CEG (**Robson**)**:** This group is led by an academic GP. In partnership with local general practices, CEG developed the EMIS-web electronic resource, unique in the UK, containing 800,000 patient records in real time, directly accessible to the research team. This dataset has been tapped for large quantitative studies on health risks and the impact of inequalities. It is transforming the commissioning, design and evaluation of health interventions (these can now be closely tailored to population needs). Impact case study CS2 describes how the Q-Risk tool, linked to EMIS-web, improved targeting of cardiovascular risk assessment and management and informed the NHS Health Checks programme nationally.

Complex interventions (**Taylor**)**:** This unit led the HTA-funded OPERA trial of exercise for depression in care home residents (negative findings); and IRIS, a domestic violence intervention targeted at GPs (increased rates of identification and referral for victims). Ongoing studies include an NIHR-funded trial of self-management in chronic pain. The MESH (Multi-disciplinary Evidence Synthesis Hub) within CPCPH is led by this group and Women's Health.

Environmental and Cultural Psychiatry (**Stansfeld**, **Clark**, **Bhui**, **White**). This inter-disciplinary group studies physical and sociocultural risk factors for mental health and illness, using a life course approach and epidemiological and qualitative methods. Themes include transport noise and air pollution; differences in presentation, assessment and management of mental disorders by ethnic group (see impact case study CS1, which describes significant changes to national policy on cross-cultural mental health); exploring the link between work and mental health using the 1958 birth cohort and Whitehall II datasets; and mixed methods studies funded by the Department of Health on work stress. Several large cohort studies are exploring the epidemiology of first-onset psychosis and violent extremism.

Forensic Mental Health (**Coid**, **Ullrich**). This group, led by a forensic psychiatrist, takes an epidemiological / life course focus and explores (eg) development of delinquency, predictors of risk of violence in psychosis and the general population, intergenerational transmission of psychopathy and first episode psychosis and long-term sequelae of war and trauma.

Health Policy and Innovation (**Greenhalgh**, **Swinglehurst**, **Russell**)**:** Led by a GP academic and including clinicians, social scientists and computer scientists, research has included evaluation of the National Programme for IT; ethnographic studies revealing 'hidden work' by administrative staff as a key contribution to patient safety; studies of assisted technology use by people with multi-morbidity (with collaborative design workshops for patients and industry); and ethical decision-making in resource allocation (the deliberative work of 'rationing').

Mind and Body Psychiatry (**White**, **Bhui**). A prominent theme in this group is chronic fatigue syndrome. The PACE trial showed that graded exercise therapy is effective, safe and cost effective in this syndrome (see impact case study CS3). Ongoing studies are looking at the biomolecular causes and markers of chronic fatigue syndrome and whether inflammatory biomarkers mediate the link between fatigue and depression in cancer patients.

Pragmatic Clinical Trials Unit (**Eldridge**, **Priebe**). Described in Sections B2 and B3.

Social and Community Psychiatry (**Priebe**)**.** This group, led by an academic psychiatrist, links closely with teams in CPCPH to study social interactions in mental health care, evaluate models of care for marginalised groups, and develop and test novel complex interventions. The group has particularly extensive international links. The FIAT trial showed that offering modest financial incentives significantly improves adherence to maintenance antipsychotic medication.

Tobacco Dependence Research Unit (Hajek). This group, led by a clinical psychologist, researches the efficacy of pharmacological, behavioural and other therapies for supporting cessation in intractable smokers. Their work is part of the Public Health Centre of Excellence and UK Centre for Tobacco Control Studies (funding UK Clinical Research Collaboration); it has major impact on the NHS Smoking Cessation Programme (impact case study for UoA1).

Translational Research (**Griffiths**)**.** Led by an academic GP with an interest in basic science, this unit has undertaken trials of Vitamin D supplementation in pulmonary TB (speeds cure and has an immunomodulatory role) and asthma (helps reverse steroid resistance). The group leads a major MRC-funded trial of vitamin D supplementation for TB prevention in India.

Women's Health (**Khan**, **Thangaratinam**, **Cooper**). Led by clinical academics linked to Barts Health, this unit prioritises research arising in clinical practice: non-invasive perinatal screening (eg for congenital heart disease); uterosacral nerve ablation for pelvic pain; and community based peer support in breastfeeding. Its multicentre trials network has >50 centres, covering nearly half of the UK obstetric offering. It leads national and international collaborative studies of common conditions, (eg pelvic pain, obesity in pregnancy) and 'hard to research' groups (eg epilepsy in pregnancy). A significant strength is advanced systematic review capability eg synthesis of individual patient data and diagnostic results, and network meta-analyses.

B5: RESEARCH PLANS

2008-13 has been a period of expansion, innovation and developing internal and external collaborations. We have matured from a collection of small units undertaking relatively simple, topic-based studies (epidemiological, clinical, sociological) to a richly interconnected network of research groups who share a common ethos, commitment and infrastructure and who are increasingly focusing on collaborative studies of more ambitious scale and scope. Such studies include bold hypotheses about the factors and interactions that lead to disease and/or affect risk behaviour; development and testing of theory-driven complex interventions;

methodologically innovative trials to test the efficacy of these interventions; and implementation and evaluation in real-world settings. Our priorities for 2014-20 are:

[1] Consolidation for newly expanded groups. Following rapid expansion and recruitment of young academics, many groups (especially those set up post-2008) plan a period of consolidation and maturation to build a cadre of strong independent researchers, gain mid-career fellowship funding and support these researchers to establish a firm career track.

[2] Focused expansion in priority areas: We aim to expand strategically in five linked areas of research strength, building both our internal capacity and our external collaborations:

a. **Respiratory research.** With our Asthma UK Centre for Applied Research (a network infrastructure of 14 HEIs) and MRC Asthma UK Centre in Allergic Mechanisms of Asthma, we are well placed to lead multi-centre studies and expand our translational work (linking studies of the molecular and cellular basis of asthma aetiology to trials of treatment) in SMD's planned Life Sciences Institute (**Griffiths**).

b. **Self-management and behaviour change**. Linked to the above, we will continue our programme of research into self-management of chronic illness, linking service users, computer scientists and industry, and incorporating our expertise on new technologies. We will focus on pain and respiratory conditions (**Taylor, Griffiths**), multi-morbidity (**Greenhalgh**), fatigue (**White**), weight management (**Hajek**, **Thangaratinam**) and smoking cessation (**Hajek, Griffiths)**. Our smoking cessation work has attracted major NIHR Programme Grant funding for the next REF period: *Optimising pharmacist-based treatment for smoking cessation* £1.65M 2012-2015 and *A randomised trial of nicotine patch preloading for smoking cessation* £2.7M 2012-15. Our future smoking cessation work will also incorporate genetically informed personalised medicine (**Hajek**).

c. **Mental health.** We continue to lead the field in **large international collaborative studies** of mental health. We have won a €5M EC grant 2014-8 to compare functional and integrated mental health care systems across Europe (**Priebe**). We will utilise the Unit for Social and Community Psychiatry's WHO Collaborating Centre status to lead and develop European networks and expand our research programmes, especially to take advantage of EU Horizon 2020 funding. In **prevention of mental ill-health**, we will continue to develop work-based interventions and focus on issues for younger workers and extending working lives (**Stansfeld**, **Clark**, **Russell**), supplemented by qualitative studies of working environments and health (**Bhui**). In our **lifecourse research on adolescent mental health**, we will extend our investigations of risks for examining trans-generational inequalities in the 'Understanding Society' cohort (**Clark**), gang membership and young men's risk of violence (**Coid**), and internet interventions for socio-emotional problems, a CLAHRC collaboration with UCL (**Stansfeld, Russell**).

d. **Pragmatic trials and methodological research**. We anticipate that our Pragmatic Clinical Trials Unit (**Eldridge, Priebe**) will continue to expand to support high-quality trials in topics of NHS priority and pursue its unique methodological work on cluster randomised trials and risk of bias (at least 20 multi-centre RCTs supported by PCTU are due to report in the next 5 years). As we extend our international links in the methodology of pragmatic clinical trials, we will seek WHO Collaborating Centre status.

e. **Clinical and organisational studies aligned to local NHS**. A local clinical priority is infectious diseases. We plan new trials of TB prevention and screening, implementation of HIV and hepatitis testing in primary care, including the ongoing £2M NIHR-funded *HepFREE* study of hepatitis testing in minority ethnic groups **(Griffiths, Greenhalgh),** and evaluation of new models of HIV care. Via the new CLARHC, and contributing particularly to its organisation and delivery work package, we will lead studies of system-wide change and quality improvement along with academic and NHS partners.

[3] Developing the infrastructure and capacity for research impact: See REF3a. We will prioritise developing our links beyond academia, especially ensuring proactive representation of users on our steering groups; secondments to industry especially in ICTs (eg assisted living technologies). Building on our CLAHRC links with the NHS, we will seek to extend our collaborative links for applied research with local trusts, general practice (especially Clinical Commissioning Groups), specialist services (eg smoking cessation) and the lay public. We will continue our wide representation on national policymaking groups (eg NICE, PHIAC, DH).

C. PEOPLE

C1. STAFFING STRATEGY AND STAFF DEVELOPMENT

Our approach to staffing and staff development, shaped by **Queen Mary's strategic plan**, focuses on investing in excellence, equal opportunities and career development. The college has a *Concordat Implementation Plan* developed after a positive 2011 review of policies and practices on the Concordat to Support the Career Development of Researchers. Queen Mary won the *European Commission 'HR excellence in research'* award in January 2012 for researchers' career development provision that is fully aligned with The European Charter for Researchers. Queen Mary was shortlisted for a *Times Higher Award* in 2011 for 'outstanding support to early career researchers'. College level support includes an Annual Fellowship Day, support for transition to independent researcher, and leadership training. **SMD's** career development activities mirror the College's strategic plan, being strongly inter-disciplinary and prioritising support for ECRs including grant-writing clinics, fellowships applications, mentoring and mock-interviews from experienced staff. SMD holds an Athena Swan bronze award and is working towards the silver level, for which champions have been appointed in each institute. At **centre** level, more personalised strategies are in place (described below, this section).

Since 2008 we have invested HEFCE funding in strategic senior appointments in areas that build and extend our research base. New professors have gained substantial external grant funding, expanded our internal and external collaborations, encouraged interdisciplinary research and developed junior staff. Junior research active staff in the submitted groups increased from 75 to over 130 from 2008-13. SMD has invested in high quality accommodation to accommodate this expansion (see section D). We have been awarded 9 Academic Clinical Lecturers (mostly NIHR), 9 Academic Clinical Fellows and 4 NIHR In-Practice Fellows (GPs), reflecting our goal to attract young doctors into research. We have also had 19 Non-clinical Fellows (mostly NIHR), 3 MRC post-docs, 1 Marie Curie Fellow, 10 general practice ST4s and 17 FY2s in Primary Care, Public Health and Psychiatry. We have attracted excellent non-clinical early career researchers (eg two lecturers in medical statistics to support our methodological work in PCTU). Our approach to staff development includes:

- **Personal guidance/mentoring**. Academics are appointed on 3-year probation with named mentors to help develop independent research careers, including publications and moving from co- to principal investigator. Appraisal is taken seriously and researchers are encouraged to work towards promotion by publishing in high-quality journals, building their CV and gaining leadership experience. Since 2008, two researchers have gained personal chairs, six readerships and two senior lectureships by internal promotion.
- **Learning sets.** In 2010 CPCPH set up a learning set to encourage strong applications for fellowships for junior staff. We have had particular success at securing NIHR Fellowships over this period (see data above). This year the set has been rolled out across the medical school, and 16 early and mid-career academics are working on applications for 2014.
- **Lectures and seminars.** Three general **internal lecture/ seminar programmes** are held (weekly in CPCPH and fortnightly in each of two groups in CP, with cross-attendance), offering a mix of guest speakers and internal presentations, allowing young academics the opportunity to observe experts in the field and present their work in a 'high challenge, low threat' environment. Themed interdisciplinary seminars (each approximately monthly) include **Social Science Forum** (qualitative and mixed-method research, well attended by academics from all the London universities); **Technology Health and Society** (spanning SMD, Electronic Engineering and Computer Science, and Business and Management as well as external participants), **Statistics Reading Group**, **Respiratory Research Group**, **Evidence Synthesis Group** (from which emerged our Multidisciplinary Evidence Synthesis Hub), **Global Health Forum** (linking with our Masters Programme in Global Health and strong interest from undergraduate medics) and **Forensic Mental Health**.
- **Equality and diversity**. Over half our academics are women and/or from minority ethnic groups; some have disabilities or significant caring responsibilities. In order to support every researcher to achieve their potential, we follow College equality and diversity policies (eg all staff must undertake equality and diversity training; regulations and handbooks are in place and regularly updated to address particular needs of staff with disabilities and

sexual minorities). We offer **flexible working** to enable staff to pursue part-time degrees; five of our current NIHR fellows are part-time. Cognisant that a major block to career progression for part-time and contract researchers is getting onto the first rung of the ladder, we take a **person-centred approach**, use bridging funding judiciously and identify PhD and postdoctoral opportunities within existing research projects.

C2. PEOPLE: RESEARCH STUDENTS

Queen Mary's **Doctoral College**, established 2012, provides the focal point for supporting doctoral students, supervisors and postdocs; its remit includes setting and monitoring College policy on doctoral training, supervisor training, quality assurance, administrative support and coordination. It includes the **Centre for Academic and Professional Development**, which offers an extensive range of workshops and training courses, arranged under four themes: intellectual attributes; core skills; research governance / organisation; engagement and impact. Doctoral training within SMD is underpinned by high quality initial and refresher (every 3 years) **supervisor training**, transparent **progression procedures** (milestones at 9, 18 and 30 months involving review by a panel external to the student's Institute), electronic **monitoring** of progression and devolved **student support** appropriate to discipline. To promote a strong research student culture, SMD organises informal presentations and social events to develop students' communication and networking skills, such as the popular "Junk the Jargon" contest. Regular meetings of the **Graduate Studies Committee** ensures that student progress is reviewed periodically in a way that supplements formal progression reviews; additional support or training is put in place quickly if needed. Thirty-one students **completed their PhD or MD** within the REF period; more than half stayed in academia or took academic-related posts. Currently, 34 PhD/MD students are enrolled.

D. INCOME, INFRASTRUCTURE AND FACILITIES

Annual research spend by staff in this Unit has almost doubled between 2008 and 2012 (**from £3.1M to £6.1M,** data for 2013 are until July 31 so are incomplete). The number of research projects has doubled to 148. We have been successful in attracting income streams designed to support infrastructure and sustainability (eg NIHR Clinical Trials Unit support funding, NIHR Senior Investigator Award) and/or act as a springboard for further income generation (Asthma UK Centre, CLARHC). The medical school has invested strategically in community-based research over the past 5 years, providing funding for senior appointments.

Queen Mary has invested substantially in **buildings** (over £40M for SMD), **library and e-journal** provision (£11.2M) and **IT infrastructure** (£21M) over the REF period to ensure an environment fit for world-leading research. In 2011 CPCPH moved to purpose refurbished offices with significant space for staff growth and a layout designed to promote interaction, with common meeting spaces and a state of the art seminar room with commercial quality videoconferencing facilities enabling remote-delivery of international lectures. CPCPH is based within, and is physically adjacent to, the Blizard Institute (whose main focus is on cell and molecular science), enhancing collaboration between basic and community-based researchers in **translational research**. We have a highly successful Clinical Trials Unit, the unique EMIS-web dataset (set to expand as more GP practices adopt this system), the Asthma UK Centre, new opportunities for linking with UCL and local NHS trusts via the CLARHC and the additional major strategic opportunities offered in the medium-term future by the Life Sciences Institute.

Clinical (NHS-funded) researchers in **local acute, community and mental health trusts** work in partnership with Queen Mary academics, e.g. via a newly established **partnership board** and with some common management infrastructure. Additional infrastructure for applied research is co-located at Whitechapel and includes the **Primary Care Research Network** offices and East London branch of **Research Design Service** (headed by **Eldridge**), which is now extremely well placed to support **CLAHRC-linked studies** across north and east London.

E.1 CONTRIBUTION TO THE DISCIPLINE AND RESEARCH BASE

International and national recognition of research excellence (excluding grant giving panels):

- **World Health Organisation:** The Centre for Social and Community Psychiatry became the only WHO Collaborating Centre on mental health service development (2012). **Coid** is on *WHO Violence Prevention Alliance* (2011-present), **Stansfeld** is a WHO adviser on *Noise*

and Health (2008-present) and chairs the *Noise Guideline Development Committee* (2013). **Taylor** was a WHO advisor on "*Self-Care for Non-communicable Diseases*" (2011-12).

- **UK Research Excellence Framework: Greenhalgh** is Deputy Chair of Main Panel A and member of REF National Equality and Diversity Panel.
- **International guideline panels: Eldridge** chairs *CONSORT guidelines* development group for pilot studies, 2011-present (Nat Med 2013;19:795–6); and an expert contributor to the *Ottawa statement* on ethics of cluster RCTs (2011). **Greenhalgh** led development of *RAMESES guidelines* for realist/meta-narrative reviews (BMC Med 2013; 11: 20-21). **Stansfeld** chairs the *International Commission on Biological Effects of Noise* (2008-14).
- **International committees and benchmarking groups: Priebe** is on *National Panel for Evaluation of Psychiatric University Departments in Italy* (2012-present). **Stansfeld** is Director of *European Network on Noise and Health (2010-14)*. **Greenhalgh** is international advisor to Swedish equivalent of REF (2012-present) and to *Australian Government: Primary Health Care Research Evaluation and Development Strategy Committee* (2013-15). **Bhui** is *President, World Association of Cultural Psychiatry* (2012-2015).
- **Research Councils, NIHR:** Griffiths is on *MRC Population Health Scientist Board* (2008-13) and *HTA Primary Care Board* (2013-present). **Greenhalgh** was on *Medical Research Council (MRC) Committee for Good Research Practice* (2011-12); she gained *NIHR Senior Investigator Award* 2010, renewed 2013. **Eldridge** (2012-present) and **Greenhalgh** (2010-present) are *NIHR Senior Leaders*. We are well represented on NIHR grant panels including *Programme Grants for Applied Research* (**Eldridge** 2007-present, **Taylor** 2009-13, **Priebe** 2010-present); *Research Methods Programme* (**Eldridge** 2009-present); *HTA Programme* (various subpanels: **Khan** 2006-12, **Priebe** 2013-present, **Griffiths** 2008-13); *Mid-Career Awards Panel* (**Greenhalgh** 2009-present).
- **Learned societies: Eldridge** chaired the Primary Health Care Study Group, *Royal Statistical Society* (2008-11), and is on executive of *Society for Academic Primary Care*; she co-leads *Primary Health Care Scientist Group* (2011-present). **Bhui** is Public Health Lead for *Royal College of Psychiatrists* (2010-present), **Greenhalgh** is a Council member of *Royal College of GPs* (2012-present). **Khan** is on Congress Committee (2012-present), Academic Committee (2008-10) of *Royal College of Obstetricians and Gynaecologists*.
- **National policymaking bodies:** *NICE: Subcommittee on Resource Allocation Decisions*: **Greenhalgh** [chair], **Russell** [member] (2011-12); *Guideline Panel CG67*: **Robson** [chair] (2006-9); *Public Health Interventions Advisory Committee:* **Taylor** (2008-13); *NHS England: Pandemic Flu Committee*: **Greenhalgh** (2009-present).

International and national keynote lectures include:

- **Greenhalgh:** Opening keynotes at *North American Primary Care Research Group* 2011, *International Forum for Quality Improvement in Health Care* 2008, *World Association of Family Doctors* Europe 2009. *RCGP* (several, including William Pickles Lecture 2008).
- **Khan:** *EBM-Connect and EU FP7* funded international seminar series on methodological advances in systematic reviews for evidence-based practice 2010-13.
- **Priebe:** *European Network of Mental Health Service Research* 2009 and 2013.

Contribution to peer review, academic journals and examining

- **Editorships:** *British Journal of Obstetrics and Gynaecology* (**Khan**, editor 2008-12, editor-in-chief 2012-present); *Evidence-Based Medicine* (**Khan**, associate editor 2008-present); *British Journal of Psychiatry* (Bhui, editor-in-chief 2013-present); *Primary Care Respiratory Journal* (**Griffiths**, associate editor 2008-present).
- **Editorial boards: Greenhalgh** *Health Services Research* (2010-present), *Annals of Family Medicine* (2012-present), *Health Informatics Journal* (2010-present), *BMJ Primary Care Advisory Board* (2008-present). **Shaw** *Sociology of Health and Illness* (2013-present), *Thorax* (**Griffiths** 2006-present).
- **Peer reviewing:** In total 50+ academics have reviewed for over 100 journals. More than 30 of our academics have reviewed grant applications in UK (eg MRC, NIHR, ESRC) and abroad (eg EU, Canadian Health Services Research Foundation, Australian Health and MRC, Health Research Council of New Zealand).
- **PhD examining:** Our senior staff have examined over 50 PhD/MDs since 2008 including examinations in Australia, New Zealand, Canada, Sweden and Norway.

Contribution to local applied research and implementation:

- **Local research networks: Griffiths** is Clinical Director of East London grouping of *London Primary Care Research Network* (2010-present), and was part of *North East London Diabetes Research Network* (2008-10). The *East London Women's Health Research Network* was founded and led by **Khan** and **Thangaratinam** (2011-present).
- **Local research implementation: Griffiths** is on *London TB Control Board (*2010-present). **Greenhalgh** is on *Diabetes Service Development Group* at Barts Health (2012-present). Priebe is on the board of *East London NHS Foundation Trust* and is R&D Director (2006-present). **Robson** is cardiovascular lead for *Tower Hamlets Clinical Commissioning Group* (CCG) and Primary Care Lead for *UCL Partners* (2013-present).

E.2 COLLABORATIONS

There is insufficient space to list all our collaborations. We list those in which we have played a lead role nationally and internationally. All support our strategic aims (B2).

- Successful collaborations in **respiratory research** have led to funding (e.g. the £2M Asthma UK Centre, co-led by **Griffiths** with Sheikh from Edinburgh), linked programmes responding to national initiatives (e.g. with Biomedical Research Centres of Kings Health Partners including the EXHALE programme evaluating the London Low Emission Zone (£1.2M, 2008-12), and with UCL Partners including "LUNG SEARCH" lung cancer multi-centre screening trial (£1M 2008-10). CPCPH also provides the Translational Research Unit component of the MRC / Asthma UK Centre in Allergic Mechanisms of Asthma.
- **International collaboration in vitamin D trials** (Harvard, Netherlands, Finland, Belgium, New Zealand, Japan, led by **Martineau** [returned in UoA1]/ **Khan** / **Griffiths**) have resulted in the £3.4M MRC funded Trial of vitamin D to prevent TB in children in India (ViDiKids) .
- We have developed and led **international mental health collaborations** such as the *European Network on Noise and Health*, 33 centres from 16 European countries, 2009-11; *STOP* on war-related post-traumatic stress disorder (5 countries 2004-07); *EUGATE* on health care for immigrant groups (16 countries 2008-10); *PROMO* on mental health care for marginalised groups (14 countries 2007-10); *EUNOMIA* on coercive hospital treatment (11 countries 2003-7); *CONNECT* on mental disorders following war (8 countries 2004-08).
- A strong focus on **self-management and behaviour change** has emerged since the last RAE. Collaborations with 9 university partners in the *UKCRC Centre for Tobacco Control Research* (**Hajek**). With UK universities, programmes on self-management have led to significant NIHR funding for major trials and systematic reviews. For example, **Taylor** was awarded a NIHR Programme **"**Self management for Chronic Pain" (COPERS) £1.9M 2009-14, with Warwick, and from NIHR/HTA *"Self-Management education for adults with poorly controlled epilepsy, SMILE- A Randomised Controlled Trial"* £1.7M 2013-16, with KCL.
- The strategic expansion of the **Pragmatic Clinical Trials Unit** has been achieved through collaborations (a) listed above, (b) with UK universities (eg Kings, Warwick, Birmingham, St Georges, UEL), (c) within Queen Mary, leading to 15 multi-centre trials since 2008 (current portfolio of 35 studies), and enhanced NIHR support funding. Our **Multidisciplinary Evidence Synthesis Hub (MESH)** supports ongoing multi-partner systematic reviews including international collaborations with research teams in Canada and Australia.
- **Women's Health Research Unit** has international collaborations including HTA funded PREP study with Birmingham, Keele, Amsterdam, British Columbia and Utrecht (2011-15); NIHR HTA funded iWIP project with Birmingham and Centro Rosarino de Estudios Perinatales in Argentina (2013-15); EU FP7 funded EBM-Connect with partners in Argentina, China, Netherlands, Spain, Canada and UK (2010-14).
- **Local collaborations for applied NHS-linked research**. The £9M (+ £34M matched) CLAHRC grant is jointly led by academics at UCL and QMUL. **Eldridge**, **Greenhalgh**, **Griffiths** and **Robson** were co-applicants and play leading roles in work-streams covering self-management of chronic conditions, respiratory health, mental health, and care organisation. The CLAHRC is the first of what we anticipate to be several major applied research initiatives from our membership of our local AHSN. **Stansfeld** is Deputy Director of the "Mental Health" theme in UCL Partners and **Taylor** is Deputy Director of the "Optimising Behaviour and Engagement with Care" theme.