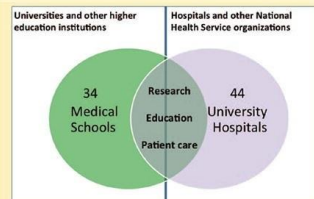


## AM Last Page: Funding of Academic Research in Clinical Medicine in the United Kingdom

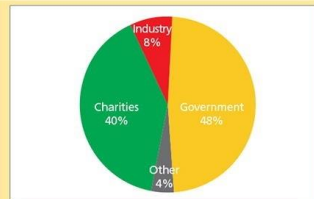
Pavel V. Ovsieko, DPhil, senior research fellow in health policy and management, University of Oxford, Stephen M. Davies, MSc, doctoral student, London School of Hygiene and Tropical Medicine, and Alastair M. Buchan, MD, DSc, dean of medicine, University of Oxford

All medical schools and teaching hospitals in the United Kingdom – England, Scotland, Wales, and Northern Ireland – operate as academic health centers (AHCs) under an “unlinked partners” model, characterized by minimal structural integration.<sup>1</sup> Despite a need for high functional integration, UK medical schools do not own or govern teaching hospitals and faculty practice plans (as in US and Canadian AHCs); thus, UK medical schools are unable to cross-subsidize research and education from patient care revenues. Instead, they must fully fund research through competition in three main funding sectors: government and its agencies, medical research charities (philanthropic foundations), and the pharmaceutical and medical device industries. Recent years have seen a growth in funding for UK clinical research; an increased share of funding by government; and continuing concentration of funding in the “golden triangle” formed by Cambridge, London, and Oxford.



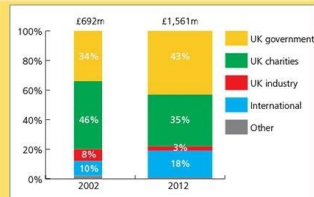
### The “unlinked partners” model of AHCs

- All 34 UK medical schools are part of universities – independent not-for-profit higher education institutions (HEIs) funded approximately equally by public and private sources.
- All 44 UK university hospitals are National Health Service (NHS) organizations – statutory public bodies accountable to government and funded almost entirely through general taxation.
- Medical schools employ some 3,500 academic physician-scientists<sup>2</sup> who have honorary contracts with the NHS and provide expert care to patients in affiliated NHS hospitals. In return, NHS physicians undertake the clinical teaching of undergraduate medical students. Under long-standing agreements, no payments are made between university and NHS institutions for these contributions.<sup>1</sup>



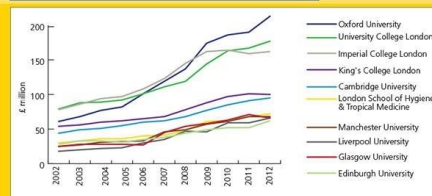
### Major funders of academic research

- As of 2012 (see notes below), funding of academic research in clinical medicine amounts to £1,561 million, i.e. 35% of HEIs’ total research income and 64% of HEIs’ research income in all pre-clinical and health-related subjects.
- Taxpayers fund 48% of academic research in clinical medicine via the governments of the UK countries and the European Union. Control of this funding is divided between central (“federal”) government (the National Institute for Health Research) and arm’s-length higher education and research funding councils. Among the latter, the most important for clinical research is the Medical Research Council.
- Historical endowments and current giving by the public funds 40% of academic research in clinical medicine via medical research charities, of which the Wellcome Trust, Cancer Research UK, and the British Heart Foundation are the largest.



### Trends over the last decade

- The funding of academic research in clinical medicine has more than doubled over the last decade.
- The main source of funding has shifted from UK charities to UK government, predominantly owing to an increased investment in translational research in NHS/university partnerships by the National Institute for Health Research.
- UK industry’s investment in academic research and development has flattened, and its share has more than halved.
- UK medical schools have strengthened their international competitiveness as indicated by the growth of funding from global industry and other international sources.



### Geographical concentration of research

- Over the last decade, the 10 most research-intensive medical schools in south-east England, north-west England, and Scotland (as depicted on the graphic) have attracted two out of every three pounds of funding for academic research in clinical medicine.
- This funding predominantly covers the direct costs of research, such as consumables and researcher salaries, and has an element of indirect (overhead) costs recovery, which varies from grant to grant and from university to university.
- The highest geographical concentration of academic research in clinical medicine is clustered in south-east England – in the “golden triangle” of Cambridge, London, and Oxford.

Notes: All funding data are from the Higher Education Information Database for Institutions (heidi). Research grants and contracts, 2013. Available online with registration at <https://heidi.hesa.ac.uk/>. Clinical medicine is defined by heidi as “The observation, diagnosis and treatment of an illness or disease through direct interaction with human patients.” All years are financial years, ending 31 July. All currency is the British pound sterling (£) with the average exchange rate of \$1.7 per £1 between 2002 and 2012.

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2. Medical Schools Council. A survey of staffing levels of medical clinical academics in UK medical schools as at 31 July 2012. London: MSC; 2013.

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