Women in Academic Medicine

Developing equality in governance and management for career progression

Full Report

April 2008

WASSET2006M

ATHENA PROJECT

HIGHER EDUCATION FUNDING COUNCIL FOR ENGLAND hefce

Imperial College London 100

MEDICAL WOMEN'S FEDERATION

Medical Schools Council

BMA

British Medical Association, BMA House, Tavistock Square, London, WC1H 9JP. www.bma.org.uk

Contents

Acknowledgments

The Women in Academic Medicine (WAM) Project was funded through the Higher Education Funding Council for England's (HEFCE) Leadership, Governance and Management (LGM) Fund, the British Medical Association's Health Policy and Economic Research Unit (HPERU) and the Medical Academic Staff Committee (MASC), Imperial College and the Medical Women's Federation. The Project was also supported by the Athena Project and the Medical Schools Council (formerly Council of Heads of Medical Schools).

The Women in Academic Medicine project was devised, managed and completed by a team led by Dr Anita Holdcroft (Imperial College London), and ably assisted by Tania Fisher (HPERU BMA) and Jaspal Sunita Kaur-Griffin (project manager, Imperial College London).

The Women in Academic Medicine team would especially like thank the following:

- Caroline Fox of the Athena Project for her outstanding contribution as a consultant to the Women in Academic Medicine team
- Professor Selena Gray, Director of Centre of Clinical and Health Services Research, University of the West of England, Bristol for chairing the Project Steering Group and her constant support during the development of the report.
- Professor Michael Arthur – Vice Chancellor of the University of Leeds and Professor Eric Thomas – Vice Chancellor of the University of Bristol for being our champions during the project

We also thank the staff of the HEFCE LGM team including Alison Johns and Philip Pramod for their help in setting up the project. Finally, we would like to thank all of the doctors who participated in the research.

List of abbreviations

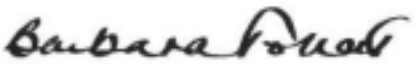
ASSET	Athena Survey of Science, Engineering and Technology
BMA	British Medical Association
CV	Curriculum vitae
DfES	Department for Education and Skills
EO	Equal opportunities
FT	Full time
GED	Gender Equality Duty
GP	General Practitioner
HE	Higher education
HEFCE	Higher Education Funding Council for England
HEI	Higher education institution
HR	Human Resources
LTFT	Less than full-time working
MRC	Medical Research Council
MWF	Medical Women's Federation
NHS	National Health Service
PA	Programmed activity
RAE	Research Assessment Exercise
SET	Science, Engineering and Technology
SPA	Supporting programmed activity
VC	Vice Chancellor
WAM	Women in Academic Medicine

Introduction to Women in Academic Medicine report

I am very pleased by the increase in the number of women choosing medicine as a career. It is not so very long ago that they were barred from the profession altogether and, until quite recently medical schools had to limit the number of women they admitted to 30% of their total intake.

Thankfully, those days are behind us and women now make up almost 60% of entrants to medical schools. But, they remain under-represented in some crucial areas like surgery; the university medical sector and at senior levels throughout the whole profession.

That is why this report by the British Medical Association is so welcome. It examines the barriers facing women in academic medicine and makes practical proposals for overcoming them. It also emphasises the BMA's commitment to equality of access and opportunity to all areas of the profession and will, I am sure, help to raise awareness of this continuing imbalance in British medicine.



Barbara Follett
Parliamentary Under-Secretary

Preface from the Chief Medical Officer

In my 2006 Annual Report of the Chief Medical Officer, in the chapter 'Women in Medicine: Opportunity Blocks', I drew attention to the hurdles that women doctors face.

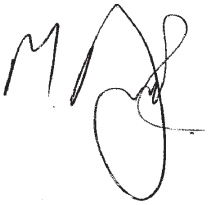
The situation is particularly bleak in academic medicine. This report provides a background overview, questionnaire results, focus group vignettes and recommendations for improving the opportunities for women in academic medicine. As the Chief Medical Officer for England I would urge the medical community and the wider higher educational institutions to read this report and to address the issues it raises across the devolved nations and at all levels, from individual doctors to government.

Much work has been done to identify the barriers facing women in their medical careers. But this is not enough. We must aim to reduce the disparities, to measure these effects over time and to work on identifying priorities so that women doctor's skills are used to the full and they can achieve what they deserve.

SIR LIAM DONALDSON
CHIEF MEDICAL OFFICER FOR ENGLAND

Foreword

As the champions of this project, that collected data for the first time across all sectors of the medical profession in order to identify strategic issues relating to gender inequalities in academic medicine, we would endorse the listed recommendations. They are based on quantitative and qualitative evidence collected by this study from hundreds of doctors from Higher Education institutes and medical specialties. The university sector would be well advised to further develop the strengths and economic advantages that medical women could contribute to accelerating progress in academic research, teaching and management. We therefore recommend this report to the University community, to professionals and to politicians for action.



Professor Michael Arthur
Vice Chancellor
University of Leeds

Professor Eric Thomas
Vice Chancellor
University of Bristol

Summary

Despite the increasing feminisation of the medical workforce, women doctors are still strikingly under-represented in the university sector compared to their male counterparts, particularly at more senior levels. This is despite women accounting for more than 40% of medical graduates in the past 20 years. One in 5 medical schools do not have a female professor, two out of the 33 heads of UK medical schools are women and at professorial level only 11% of clinical academics are women.

Academic medicine is currently failing to attract and retain women doctors. Given the demographic changes in medical schools and the availability of a major competitive employer such as the NHS, unless the reasons for this are addressed it is unlikely that this situation will be reversed.

The under-representation of women in senior academic positions has also been found in the field of Science, Engineering and Technology (SET). The Athena Project was set up to promote good practice in this field. It has raised the profile of SET through a variety of initiatives, but these have not to date had an impact in medicine.

The Athena Survey of Science Engineering and Technology (ASSET2006) on-line questionnaire collected responses from male and female medical doctors across the UK. The respondents were self-selected and came from most specialties, health care and higher education (HE) sectors. Of the 1,162 respondents, 38% were working in HE, 53% were in the NHS and the remaining (9%) were working in other sectors or on a career break. Three quarters (73%) of WAM respondents were female (HE 68%, NHS 77%). Men and women in both HE and the NHS identified barriers to career progression, but for women these were often of a greater magnitude and there were HE/NHS differences.

A literature review, focus groups and interviews with key stakeholders were also undertaken. This part of the project supplied examples of good practice that have been included in the recommendations. A Project Steering Group with key stakeholders including HE and NHS sectors provided broad expertise and input into the questionnaire, focus groups and recommendations.

Key findings

Findings from the survey results are structured under four headings:

Appointments and promotions processes
Structures, systems and activities in place regarding career progression
Organisational arrangements and culture
Flexibility in working life

The report includes further detailed survey results accompanied by ranked lists in the appendix, supported by qualitative results from the focus group and stakeholder interviews and examples of good practice. Under each heading, the research results are followed by recommendations for good practice (summarized in Appendix 1).

Below are some findings from each of the four areas identified by WAM as being key to women's career progression:

Appointments and promotions processes

- 37% of WAM respondents received encouragement from senior colleagues or professional contacts to apply for a job at the next level (NHS female 37%, male 33%, HE female 38%, male 43%).

- 68% of WAM respondents had at least some knowledge of the criteria and 66% of the processes for promotion.
  Criteria – NHS female 67%, male 73%, HE female 66%, male 79%
  Process – NHS female 65%, male 69%, HE female 61%, male 77%.

- Despite appraisal being a professional requirement for doctors, 12% of WAM respondents did not have regular appraisal (NHS female 9%, male 4%, HE female 16%, male 14%).

Structures, systems and activities in place regarding career progression

- 11% of respondents considered the lack of role models and 24% considered the availability of personal mentor were important factors to career progression.
  Lack of role models – NHS female 13%, male 3%, HE female 16%, male 4%
  Availability of mentoring – NHS female 26%, male 21%, HE female 29%, male 19%.

Organisational arrangements and cultures

- 34% of HE respondents were on editorial boards of journals compared with 12% of NHS respondents (NHS female 9%, male 20%, HE female 32%, male 42%).

- 23% of HE respondents were on grant giving panels compared with 9% of NHS respondents (NHS female 8%, male 16%, HE female 21%, male 38%).

- 9% of HE respondents achieved an editorship, compared with 3% of NHS respondents (NHS female 3%, male 6%, HE female 8%, male 20%).

Flexibility in working life

- 54% of female respondents (male 42%) saw working conditions as influential in their current choice of employment. Those who saw working conditions as influential were asked to select the most important from a range of eight factors. Flexible working was ranked top by men and women in both sectors (NHS female 26%, male 11%, HE female 32%, male 18%).

- 27% of WAM respondents did not know whether their contract allowed for flexible working (NHS female 18%, male 24%, HE female 37%, male 34%).

In conclusion, the same problems face both men and women but not equally. The results highlight important factors that are impeding recruitment and retention of women in academic medicine as well as solutions. Some solutions may be activated immediately through the recent legislation on the right to request flexible working and gender equality duty. Others warrant active measures from senior managers to clinical staff as identified in our recommendations. Our findings are thus timely and identify for the first time gender differences and their magnitude in career progression between the NHS and HE sectors.

There is an urgent need to implement the following recommendations if universities and other public bodies are to meet their statutory responsibilities as well as enabling the advantages that women bring such as diversity and skill mix. Our hope is that this will be to the benefit of patients, academic excellence and the UK economy.

Introduction

The Women in Academic Medicine Project was funded through the HEFCE Leadership, Governance and Management (LGM) Fund, the British Medical Association (BMA), the Medical Women's Federation (MWF) and Imperial College for one year and worked together with the Athena Project. Stakeholders in the study included all Universities that carry contracts (substantive or honorary) with clinical academics. The WAM study aimed to:–

- test personal and institutional assumptions on career progression
- identify barriers to women's careers
- provide a baseline database for future studies to evaluate improvements
- identify solutions (e.g. good practice, training)
- facilitate the sharing of good practice

There are currently concerns about the state of academic medicine in the UK, and the falling numbers of those in this important field. Data from the Medical Schools Council (formerly the Council of Heads of Medical Schools) has identified an under-representation of senior female clinical academics.

It is hoped that this report will assist in both raising awareness of the current gender disparities that exist in academic medicine and provide possible solutions that universities, medical schools and individuals working in academic medicine can use to address these issues.

This project is particularly timely given the new responsibilities of UK legislation-the Gender Equality Duty, which came into effect in April 2007 for England, Wales and Scotland (Equal Opportunities Commission, 2006a & b). This places a requirement upon public bodies to ensure that they have due regard to the need to eliminate unlawful discrimination and harassment against either women or men and also to ensure that their policies do not maintain or lead to gender inequality. The recommendations in this report should assist institutions in meeting these new requirements.

Background

Women in academic medicine (WAM)

There has been a substantial increase in medical student numbers in England with a rise from just over 3,700 to just under 6,500 in 2006 (Government Response to Health Select Committee on Workforce Planning, [Department of Health, 2007]) following recommendations from the UK Medical Workforce Standing Advisory Committee (1997). Both nationally and internationally, there has been a change in the demography of medical students, with an increasing number of women and graduate students entering medicine. Currently, over 60% of medical students in the UK are female, although this is even higher in some universities. There has also been a substantial increase in the number of doctors in training (an estimated extra 16,000 since 1997) and an overall increase of 35,000 doctors in the NHS.

In stark contrast, the numbers of doctors working in the university sector (clinical academics) has been declining for a number of years (Council of Heads of Medical Schools, 2005; Margerison & Morley, 2007) falling below 3,000 for the first time in 2006 in the UK. This is despite the rapid increase in the number of medical school places and the opening of new medical schools. A number of high level reports have examined these trends and made recommendations to halt this decline (Savill, 2000; Chief Medical Officer, 2006; Medical Schools Council, 2007). Integrated Academic Training Programmes for academic medicine were launched in 2005 to help revitalise academic medicine through the Academic Careers Sub-committee of Modernising Medical Careers (2005) and the UK Clinical Research Collaboration.

In this context, women doctors face barriers to academic career progression (Health Policy and Economic Research Unit 2004) and are under-represented compared to their male counterparts, at senior levels. For example, 1 in 5 medical schools do not have a female professor (Sandhu et al, 2007), two out of the 33 heads of UK medical schools are women and at professorial level only 11% of clinical academics are women (Medical Schools Council, 2007). If the excellence in national and international achievements that Universities aspire to is to be maintained, it is essential that the skills of women are valued for their economic strength and diversity.

What is Academic Medicine?

A definition of academic medicine is that used by the Academy of Medical Royal Colleges:

> *"Academic medicine is the work undertaken by clinicians with responsibilities to both their University and their NHS Hospital Trust. They usually combine service delivery with research, teaching and/or administration* (Royal College of Physicians of London, 2004)."

In practice, doctors undertaking this role are usually employed by medical schools within universities, although also, but less commonly, employed by universities with postgraduate medical centres or without medical schools. They usually have honorary contracts with local NHS organisations and undertake a limited number of fixed clinical sessions, whilst the main focus of their work is on teaching and research. These doctors are known as clinical academics, and will be on university grading and pay scales ranging from Clinical Lecturer (Specialist Registrar equivalent), Senior Clinical Lecturer (Consultant equivalent), to Reader and Professor at more senior levels.

However, individuals may also be primarily employed by the NHS, and have a part-time or honorary contract with a university, for whom they undertake agreed research or teaching roles. There is an increasing trend for medical schools to deliver core undergraduate teaching through NHS staff closely linked to the university.

Barriers facing women in academic medicine- a review of the literature

Academic Medicine in the UK

Evidence of lack of progress

Women doctors are still strikingly under-represented in the UK university sector compared to their male counterparts, particularly at more senior levels (Federation of Royal Colleges of Physicians, 2001, British Medical Association, 2004). After 2 years of gender data reporting from the Medical Schools Council, at professorial level only 11% of clinical academics are women, despite over 40% of medical graduates for over 20 years being women (Margerison & Morley, 2007).

Brown et al (2003) found that while a variety of factors may contribute to women's slower advancement in medicine; a 'pipeline problem' that is experienced in science (e.g. Athena Report 22, 2003) is not one of them. Instead, the very culture of academic medicine that tends to overvalue heroic individualism may be contributing to the problem. Hence individuals who are seen not to devote excessive time to their careers due to family or personal responsibilities may be penalized. Another factor is the lack of high-ranking female role models or mentors. For example, it has been reported that women with mentors report more publications, more time spent on research activity than those without mentors and higher overall career satisfaction (Levinson et al, 1991). Gender stereotyping was also found to lead to limited opportunities, differences in workplace expectations for men and women, social and professional isolation, family responsibilities that leave women disadvantaged and in women spending less time in research and more in teaching when teaching is less valued in the RAE than research (Colletti et al, 2000; Bellini et al, 2001; Benz, 1998). Women are also reported to publish fewer papers and obtain fewer grants (Jagsi et al, 2006; Candib et al, 2004; Valian, 1999) and to be financially disadvantaged having adjusted for variations in the distribution of work time and productivity (Ash et al, 2004; Wright et al, 2003). The WONCA (Candib et al, 2004) report and Buckley et al (2000) also emphasised that women in academic medicine tend to lack confidence and aggression when pushing for higher salaries and promotions and are criticised as being overly aggressive and having a 'one-track mind' when they do push for promotions. This situation needs correction because even small salary increases significantly boost morale in females (Beyond Parity: Workbook for Action, 2001). Furthermore, assumptions that women are more likely to be in a two-income family may lead to beliefs that salary increases are not as necessary for women as they are for men (Bickel & Kopriva, 1993; Schafer, 1997).

Medical women were also found to earn significantly lower salaries than men in unpublished results from ASSET2004 (Anderson & Connolly, 2006). A report by the Commission of the European Communities (2007) found that the gender pay gap is almost 25% in most countries and the *largest* gap is found in the United Kingdom (30%).

Reasons for lack of progress

Holdcroft (2004) reports that the reasons academic medicine is failing women are due to the lack of recruitment and retention of senior female academics and also because of the non-application of gender issues to medical research.

Evidence of prejudice against women by both men and women is not unique to medicine. A review considered that *"such prejudice appears to be deep seated, subtle and a reflection of socio-cultural attitudes of previous generations such as the "old boys club" mentality which has been accredited for the opposition and discrimination towards female academics"* (Candib et al, 2004).

Allen (2005) in a study using focus groups with women doctors identified that academic posts were seen as particularly challenging for those with family demands:

> *'One consultant had considered an academic career but had abandoned the idea. She had done a PhD at a prestigious teaching hospital and could have gone on to a senior lectureship, but had settled for a consultant post elsewhere: "I decided I would not be able to juggle everything—to be a good clinician, plus do the research, plus have a social life and a family life. I couldn't do a senior lecturer job part time. I'd get kicked out."'*

Higher Education in the UK

Evidence of lack of progress in science

A key report entitled the "Recruitment and Retention of Academic Staff in Higher Education" produced by the Department for Education and Skills (DfES) examined the representation of women in academia (Metcalf et al, 2003). The report identified there was relatively poor representation of women in senior posts but this finding only summarised the general trend for the entire HE sector and specifically excluded academic medicine.

Recognition of the high quality skills of female science students and their subsequent loss during early postgraduate years has led to a reappraisal of the culture of a male dominated hierarchy in universities (Goldberg, 1999). The same process however, has yet to be applied to medicine (Holdcroft, 2004).

Reasons for lack of progress

The DfES (Metcalf et al, 2003) study found that respondents considered that career breaks and part-time working may have a detrimental effect on women's careers in terms of research activity which is a key criteria for promotion. Apart from the issue of part-time working, the difficulties of balancing an academic job and busy home life were recognised to sometimes take their toll on female academics. Women with children were also found to participate less in international conferences than their male colleagues.

Mark et al (2001) reported that a major barrier to the advancement of women as well as men in academic medicine in the US is the lack of senior role models and mentors. Other work has reported that the culture in the older, more prestigious institutions is an enduring source of inequality (Hostler, 1993). This is reiterated in other studies: *'It is a bit male and clubby and it would be nice to be more diverse. In British universities there are comparatively few women in senior positions [compared to the US]' (Metcalf et al, 2003).*

Interventions

For HEIs in the UK, the Equality Challenge Unit has been publishing guidance on the various tools available to address gender inequality and equal opportunities (Equality Challenge Unit, 2004, 2005 & 2006). As a result most HEIs have developed policies that explicitly address equal opportunities and gender equity. HEFCE through their Equality Scheme (2007) has published reports that identify gender equality schemes and sets out an equality action plan to address these issues.

In recognition of the particular problems facing women in science, the Athena Project was established in 1999 with the aim of advancing women in Science, Engineering and Technology (SET) and increasing the number of women recruited to the top posts (e.g. Athena Report 22, 2003). Athena has since worked in partnership with UK universities, SET professionals and learned societies (www.athenaproject.org.uk). Athena's development programmes supported good practice illustrated by local academic women's networks, and guides on mentoring, networking, career development and the organisational culture, processes and practices of HE and SET that represent barriers to women's career progression (e.g. Athena Report 16, 2000).

International experience

Evidence of lack of progress

A similar pattern to the UK has been reported from the US; specifically, the number of women graduating from medical colleges has reached almost 50%, but this has not yet translated into similar increases in the proportion of female medical staff within senior university posts. For example, only 10% of full professors are currently women (Cohen, 2001; Bickel et al, 2002) and women are also found to be concentrated in the lower academic ranks (Brown et al, 2003, National Academy of Science, 2006).

Reasons for lack of progress

Interestingly, Ash (2004) in a study involving 1,814 full-time US medical school staff in 1996, found that reasons for the scarcity of female professors such as discrimination, lower motivation, lack of mentorship, greater family responsibilities and less institutional support, were actually not applicable. Instead, women were found to have similar mentoring and motivation to men, and issues such as gender bias or sexual harassment did not have a noticeable affect on academic productivity. However, family responsibilities did differentially affect females in relation to their academic productivity, and contributed to a greater time in attaining senior rank. In another questionnaire survey of 418 medical academics in the US, Wright and colleagues (2003) found that substantial gender differences in the rewards and opportunities of academic medicine remain that cannot be attributed to differences in productivity or commitment between men and women.
In order to understand the barriers confronting women and the potential remedies, Yedidia & Bickel (2001) conducted open-ended interviews in the US with senior academic staff. These staff universally acknowledged the existence of barriers to the advancement of women which they perceived to be due to the constraints of traditional gender roles, manifestations of sexism in the medical environment and lack of effective mentors.

Interventions

Data collection may not effect change without other positive actions. For example, the Association of American Medical Colleges has published an annual benchmarking report since 1983 (Magrane et al, 2005). Despite this, there are still fewer American women who achieve senior rank than would be expected on the basis of parity between men and women (Nonnemaker, 2000).

Other initiatives have been more successful. Fried and colleagues (1996) described a multi-faceted initiative in Johns Hopkins University including problem identification, leadership courses and education, mentoring, rewards and steps to reduce isolation and structural career impediments. It resulted in women being retained and promoted (a reversal of previous experience) and a five fold increase in women at the associate professorial rank over five years. Moreover, more than half the women reported improvements in timelines of promotions, manifestations of gender bias, access to the information needed for faculty development, isolation and salary equity. Importantly men also reported improvements in these areas.

Following this study, the US Office on Women's Health convened a National Task Force on Mentoring for Health Professionals (Mark et al, 2001). Institutional commitment and reward such as financial incentives, development of a criterion for promotion based on mentoring excellence and mentoring awards were key factors in success and this led to the creation of the National Centres of Leadership in Academic Medicine. The success of these initiatives is being evaluated but it is hoped they will prove a model for other institutions.

Methods

The methodology adopted by the WAM project was threefold:

Review of the literature and good practice

A literature review was undertaken with 'PubMed' using the keywords: "academic", "medicine", "women", "gender", "inequality" and "equity". Relevant papers were also provided by the Project Steering Group Members (Appendix 2) and sourced from a broader internet search.

National survey via ASSET2006

The Athena project ran national surveys in 2003 and 2004 on academic staff working in science, engineering and technology (SET). This data, which provides in depth information about career progression, employment and factors impeding or promoting career progression, has been used to identify gender differences within the sector, and to underpin the development of guidance on good practice in employment in SET academic and research institutions (Athena Report 16, 2000; Athena Report 22, 2003).

Collaborating with Athena, additional questions were incorporated into the Athena Survey of Science, Engineering and Technology (ASSET) 2006 nationwide survey to allow a more detailed analysis of clinical academic staff within the sample. This web-based self-completion survey ran in Autumn 2006 using the Bristol On Line Survey (BOS website). It was open to scientists, engineers, medical staff and technologists working in the UK or who were at the time on a career break or maternity leave.

Vice Chancellors, Heads of Medical Schools, and Medical and Human Resource Directors of NHS Trusts were contacted via the WAM project manager and asked to forward the questionnaire URL to male and female doctors. Reminder emails were also circulated through the two Vice-Chancellors in Leeds and Bristol who were championing the project, and via partner organisations including the BMA, MWF and Imperial College London.

Qualitative interviews and focus group

In order to further explore the issues raised in the survey results and the review of good practice, a focus group and series of interviews with key stakeholders from the Higher Education (HE) sector and National Health Service (NHS) were arranged. The key issues addressed in these discussions included assumptions (personal and institutional) on career progression, identified barriers to women's careers and identified good practice and training solutions.

The qualitative research allowed the exploration of perceptions and experiences of key stakeholders in some depth and provided complementary data to those generated by the survey. A total of 24 stakeholders engaged in a range of senior positions within both HE and the NHS participated in the research. A list of those contributing is provided in Appendix 3.

The Project Steering Group reviewed the literature review, survey results and qualitative data and discussed and prioritised recommendations for good practice.

Survey respondents

A total of 6,243 responses were received to the ASSET2006 survey overall. From this a WAM sub-sample was derived. The WAM sub-sample included respondents with a General Medical Council Registration, a medical degree (primary or higher degree) and/or respondents who were evidently in current clinical practice (based on type of contract and stated clinical grade). This broad definition therefore included individuals who were employed by the NHS and had honorary university academic contracts, as well as those employed by universities with honorary NHS contracts. In addition, individuals employed by research councils e.g. MRC but with honorary university contracts were included in the sample.

Responses were received from individuals from most (31 out of 33) UK medical schools and a further nine universities with postgraduate medical schools (see Appendix 4).

To address the aims of this research, comparison of respondents according to sector was a core objective. Whilst the respondents to ASSET2006 included professionals working in SET and 'medics', for the purposes of the WAM analysis, a new grouping was created to reflect the key sectors of HE and the NHS. Most WAM respondents could be classified as working primarily in the HE sector (38%) or NHS (53%). The remaining respondents were working in other institutions including research councils (7%) or on a career break (2%). Respondents were representative of all medical specialties and grades (Appendix 5).

The demographic profile of the respondents was as follows:-

- A total of 1,162 respondents fulfilled the criteria for inclusion in the WAM sub-sample. Of these, 73% (851) were female and 27% (311) were male (NHS female 77%, male 23%, HE female 68%, male 32%).

- 85% of 1,125 WAM respondents classified themselves as white ethnic origin, 8% as Asian or Asian British, and the remaining 7% from a range of other ethnic groups.

- The average age of WAM respondents was 43 years and ranged from 24-70 years. The average age for females was 42 years (range 24-67 years) and for males was 46 years (range 26-70 years) (NHS female 42yrs, male 46yrs, HE female 43yrs, male 47yrs).

- 16% of respondents were at the senior clinical academic grade of reader or professor (NHS female 11%, male 22%, HE female 28%, male 44%).

- 8% of WAM respondents reported some form of disability (NHS female 6%, male 9%, HE female 8%, male 9%). These included unseen disabilities, such as diabetes or epilepsy, mental health difficulties, use of wheel chair or mobility difficulties, deafness or hardness of hearing or specific learning difficulties, eg. dyslexia.

- 65% of WAM respondents were parents (NHS female 60%, male 82%, HE female 61%, male 77%). Of these, 78% reported having joint caring responsibilities for their children (NHS female 79%, male 64%, HE female 78%, male 65%).

- 13% of WAM respondents reported providing care for a partner or parent(s). 78% of these respondents were female (NHS female 16%, male 14%, HE female 12%, male 7%).

The ASSET2006 survey was in a web-based self completion format, and women were over-represented in the response. The Medical Schools Council (2007) report identified just under 3,000 clinical academics (739 of whom were women but few at senior level) working in UK medical schools. The WAM results from the ASSET2006 survey reflect the largest data collection from this group to date and also include honorary academic contract holders. The considerable concordance between the findings from the literature review, the ASSET survey, the focus groups and the interviews with key stakeholders adds validity to the findings.

.

Findings

The following section outlines the key findings from both the quantitative survey and the qualitative stakeholder interviews and focus group. Results have been integrated and structured under key headings. Under each heading, the research results are followed by recommendations for good practice. Case studies of current good practice are also included where available. Selected tables that include ranked data of key factors are summarised in Appendix 5.

A summary of the recommendations is in Appendix 1.

Key issues

1. Appointment and promotion processes

ASSET2006 survey results

- 69% of WAM respondents reported that they had been invited or encouraged to apply for their 'current' level of job by senior colleagues or professional contacts (NHS female 64%, male 71%, HE female 71%, male 81%).

- 37% of WAM respondents received encouragement from senior colleagues or professional contacts to apply for a job at the next level (NHS female 37%, male 33%, HE female 38%, male 43%).

- 28% of WAM respondents reported that they have been promoted by their current employer (NHS female 23%, male 24%, HE female 32%, male 38%).

- 19% of WAM respondents who had been promoted reported that this was based on the recommendation of their line manager (NHS female 13%, male 22%, HE female 12%, male 29%).

- 68% of WAM respondents had at least some knowledge of the criteria and 66% of the processes for promotion.
  - Criteria – NHS female 67%, male 73%, HE female 66%, male 79%.
  - Process – NHS female 65%, male 69%, HE female 61%, male 77%.

- Despite appraisal being a professional requirement for doctors, 12% of WAM respondents did not have regular appraisal (NHS female 9%, male 4%, HE female 16%, male 14%).

Focus Group themes

- There is a noticeable lack of female applicants to professorial and other senior levels, and pro-active steps need to be taken to encourage a wide diversity of applicants.
- Promotion committees need to take into account the impact of career breaks on an individual's CV, for example, there will be different timelines to expected goals.
- Visibility of women on appointments panels and other committees is an important indirect signal within institutions.
- Although information on promotion criteria is generally in the public domain, individuals do not always seek it out.
- Women approach appointments and promotions with a tick box mentality and may need encouragement to be more risk taking and to think positively about themselves and their careers.

Recommendations

Recommendation		Who takes action
1.1	**Both the promotions criteria and process need to be made explicit and transparent to staff**	Government, Institution
1.1.1	Build regular positive feedback into appraisal and promotion processes	Institution
1.1.2	Promotion criteria and process should be regularly reviewed in open discussion	Staff
1.1.3	Prior to each promotion	
	1.1.3.1 Undertake positive review of staff	Institution, Department
	1.1.3.2 Organise an open meeting to promote awareness	Institution, Department, Staff
1.1.4	Encourage awareness by making training in GED obligatory	Head of department, Staff
1.2	**Appraisal should be an annual process and timed to fit in with the promotion cycle**	Government, Institution
1.2.1	Senior staff appraisal should include how well they have discharged their key responsibility for the career development of their staff	Institution, Staff
1.2.2	Ensure promotion opportunities recognise a range of activities	Institution
1.2.3	Encourage confidence to apply for senior posts	Institution, Staff, Head of department
1.3	**Appointments committees should reflect the diversity of staff required (e.g. women, ethnic groups)**	Government
1.3.1	Composition of appointments committees should be monitored	Institution
1.3.2	Ensure that advertisement of senior posts includes LTFT option (to widen the pool of applicants)	Institution
1.3.3	Promotions committees should view career breaks positively and recognise their impact on career development	Institution
1.4	**Gender monitoring of appointments and promotions should be in place**	Government, Institution
1.4.1	Regular monitoring of salaries, start-up packages and promotions to identify disparities and assess progress	Institution

Case studies of good practice

1.1 An awareness of the male bias in surgery resulted in a concerted effort to include women in the selection process – this resulted in more women in the specialty and more women in senior positions. The knock on effect was to encourage more women to progress through the ranks and aspire to senior roles.

1.2 University A is currently recruiting medical academics to a new medical school. They are conscious of the problem of a lack of women in academic medicine and are trying to instil best practice with regard to recruitment. They are trying to overcome a dearth of women applicants. A more balanced gender response to recruitment was expected. They would encourage women to apply.

2. Structures, systems and activities in place regarding career progression

2.1 Career choice, progression and development

ASSET2006 results

Career choice

- 64% of WAM respondents saw career progression factors as influential in their current choice of employment across both HE and NHS sectors (NHS female 59%, male 54%, HE female 69%, male 67%). The top three factors (Appendix 5) were:
  - Area of interest (NHS female 40%, male 35%, HE female 59%, male 58%)
  - Intellectual challenge (NHS female 32%, male 30%, HE female 53%, male 43%)
  - Autonomy and self direction (NHS female 20%, male 19%, HE female 34%, male 38%)

- 46% of WAM respondents chose their employment because of the absence or availability of particular roles or responsibilities (NHS female 47%, male 44%, HE female 49%, male 39%).

Career progression and development

- Respondents were asked to identify the 'most important' factor in contributing to successful career progression (Appendix 5). The most important factors identified by WAM respondents included:
  - Research publications (48%) – NHS female 32%, male 26%, HE female 72%, male 71%.
  - Working on high profile/successful/projects/programmes/research (33%) – NHS female 27%, male 32%, HE female 41%, male 39%.
  - Obtaining external research funding (32%) – NHS female 17%, male 14%, HE female 54%, male 56%.
  - Collaborative working across/within own organisation (29%) – NHS female 29%, male 33%, HE female 30%, male 30%.
  - Collaborative working externally (23%) – NHS female 20%, male 18%, HE female 30%, male 27%.
  - Networking within the organisation (22%) – NHS female 24%, male 31%, HE female 17%, male 17%.
  - Meeting targets/delivering on time (21%) – NHS female 27%, male 32%, HE female 11%, male 18%.

- 95% of WAM respondents wanted some form of career development/ advice from a professional society. The main forms of career development/ advice included:
  - Continuing professional development (66%) – NHS female 72%, male 63%, HE female 63%, male 59%.
  - Professional support and advice (53%) – NHS female 57%, male 51%, HE female 56%, male 42%.
  - Networking opportunities (49%) – NHS female 49%, male 44%, HE female 54%, male 48%.

- 11% WAM respondents reported that there was no professional development training/Continuous Professional Development (CPD) made available to them by their current employer (NHS female 10%, male 9%, HE female 11%, male 13%). 16% of WAM respondents reported that there was no management or supervisory skills training made available to them by their current employer (NHS female 20%, male 16%, HE female 12%, male 14%).

- 43% of WAM respondents thought that being a member of any particular committee had been beneficial for their career. Key committees included:
  - Specialist organisation wide committee (11%) – NHS female 11%, male 18%, HE female 10%, male 13%.
  - Appointments/selection committee (11%) – NHS female 11%, male 18%, HE female 9%, male 12%.
  - Research committee (8%) – NHS female 5%, male 7%, HE female 11%, male 13%.

- Respondents were asked to identify the significant factors that have 'most helped' their career (Appendix 5). The most important factors identified by WAM respondents included:
  - Hard work (84%) – NHS female 88%, male 82%, HE female 87%, male 81%.
  - Support and encouragement from partner/family (47%) – NHS female 50%, male 40%, HE female 51%, male 36%.
  - Active promotion/support by senior colleague/manager (45%) – NHS female 43%, male 44%, HE female 50%, male 43%.
  - Support and encouragement from colleagues (37%) – NHS female 38%, male 37%, HE female 37%, male 38%.
  - Publications (40%) – NHS female 29%, male 38%, HE female 48%, male 60%
  - Luck (36%) – NHS female 33%, male 44%, HE female 37%, male 43%.

Focus group themes

Career choice

- The lack of stability in academic medicine may deter young doctors and particularly women, entering such a career. Undertaking research can sometimes be seen in a negative light in service settings, particularly general practice.
- The inherent tension of "walking a tightrope between clinical and academic careers, with potential to overcompensate in both roles" and the challenges in protecting time for research work and not allowing clinical work to encroach on it, were highlighted as deterrents to clinical academic careers, particularly if combined with family responsibilities.
- There is a lack of understanding about clinical academia – particularly where a university does not have a medical school.
- Individuals feel devalued because HE colleagues in the sciences think that they are not real academics because of time spent in clinical NHS service.

Career progression and development

- Leadership development and opportunities for career development are important for all staff, both men and women – more should be done to develop leadership skills.
- All staff in senior positions need to undertake equal opportunities training.
- Formal appraisal processes are not always as helpful as informal mentoring.
- Special measures are needed for women's career development.
- Leadership skills must be taught. Women are less likely to be represented on committees or groups because they are less likely to put themselves forward.
- Managerial medicine – females are in senior positions but need to be supported by the organisation and the Chief Executive Officer. Women often need positive encouragement to apply for senior jobs.
- Women and men work differently and this will impact on career progression if not acknowledged.

Recommendations

Recommendation		Who takes action
2.1	**Equal Opportunity and diversity training should be provided**	Institution, Staff
2.1.1	Institutions should have evidence of a fair, broad and thorough search before approving appointments	Institution

Case studies of good practice

2.1.1 All staff at University B who are involved in interviewing staff, are required to undertake equality training and the majority of staff have done this.

2.1.2 At University C, all senior academics, including Heads of Departments and Deans are required to undertake Equal Opportunities training.

2.2 Role models, mentoring and networking

ASSET2006 results

- 11% of WAM respondents considered the lack of role models and 24% considered the availability of personal mentor were important factors to career progression.
  - Lack of role models – NHS female 13%, male 3%, HE female 16%, male 4%.
  - Availability of mentoring – NHS female 26%, male 21%, HE female 29%, male 19%.

- 34% of WAM respondents were aware of a formal mentoring scheme provided by their employer – the remainder either didn't think it was available or didn't know (NHS female 35%, male 34%, HE female 31%, male 39%).

- 25% of WAM respondents considered the availability of a personal mentor would help progress their career (NHS female 26%, male 21%, HE female 29%, male 19%).

- 20% of WAM respondents considered that opportunities through networking to be a significant factor that had 'most helped' their careers (NHS female 22%, male 20%, HE female 19%, male 18%).

- Networking both within the organisation (22%) and outside the organisation (15%) were seen as important factors contributing to successful career progression by WAM respondents.
  - Networking within the organisation – NHS female 24%, male 31%, HE female 17%, male 17%.
  - Networking outside the organisation – NHS female 15%, male 18%, HE female 15%, male 12%.

Focus group themes

- Role models are vital; seeing women in senior roles encourages others to aspire to these roles; however it must be acknowledged that role models are not just gender specific.
- Role models can lead by example, particularly in terms of work culture and work life balance.
- Mentoring is important, for both men and women and should encourage strategic career planning; it can be gender specific but does not need to be.
- Networking may be a solution to finding out information.

Recommendations

Recommendation		Who takes action
2.2	**Mentoring for women staff should be mainstreamed and monitored**	Institution, Department, Profession/professional societies, Staff
2.2.1	Establish mentoring schemes as an essential and valuable activity	Institution
2.2.2	Time for mentoring should be recognised in job plans	Institution, Department, Staff
2.2.3	Establish and constantly update a database of mentors	Institution, Profession, Staff
2.3	**Role models and networking should be recognised and encouraged**	Institution, Department, Head of department, Staff
2.3.1	Actively promote flexibility in career routes and highlight those who are successful despite "unconventional" career paths	Institution,Profession/ professional societies, Department, Staff
2.3.2	Increase the presence of female role models	Institution, Department, Staff
2.3.3	Improve visibility of female clinical academics	Institution, Journals, Department, Staff
2.3.4	Prioritize schemes that promote networking	Institution, Department, Staff
	2.3.4.1 Active encouragement for women to attend conferences/national meetings	
	2.3.4.2 Encourage informal networks	

Case studies of good practice

2.2.1 At the time of its conception, University D had an informal link with an Australian University. Professional networks resulted in an invitation from University D to a female Professor Y. Her contribution to staff development was instrumental in creating the appropriate learning environment which allowed a relatively inexperienced group of fledgling academics to have confidence in their ability to deliver.

2.2.2 Visiting female professorships should be actively supported and encouraged as they bring multiple benefits e.g. Erasmus programme.

3. Organisational arrangements and cultures

3.1 Workplace and personal factors

ASSET2006 results

- 51% of WAM respondents saw working conditions as influential in their current choice of employment (NHS female 55%, male 46%, HE female 49%, male 37%). The most important factors identified by WAM respondents included: (Appendix 5):
  - Flexibility of working hours (25%) – NHS female 26%, male 11%, HE female 32%, male 18%.
  - Security of employment (15%) – NHS female 18%, male 22%, HE female 11%, male 8%.
  - Less travel (10%) – NHS female 15%, male 8%, HE female 6%, male 2%.

- 57% WAM respondents saw personal/quality of life issues as influential in their current choice of employment (NHS female 66%, male 52%, HE female 53%, male 43%). The most important factors identified by WAM respondents included (Appendix 5):
  - Geographical location (32%) – NHS female 39%, male 35%, HE female 26%, male 26%.
  - Better work-life balance (26%) – NHS female 29%, male 24%, HE female 22%, male 22%.
  - Family reasons (16%) – NHS female 19%, male 13%, HE female 15%, male 12%.

- 52% of WAM respondents reported workplace factors or personal circumstances as having an especially detrimental effect on their career (NHS female 50%, male 39%, HE female 53%, male 42%). Key workplace factors included (Appendix 5):
  - Lack of support/encouragement (41%) – NHS female 19%, male 13%, HE female 26%, male 16%.
  - Culture of long working hours (38%) NHS female 20%, male 18%, HE female 19%, male 12%.
  - Attitude of colleagues (30%) NHS female 16%, male 8%, HE female 19%, male 9%.
  - Attitude of senior management (34%) – NHS female 14%, male 15%, HE female 20%, male 18%.

Focus group themes

- There is a folklore that if you are a woman you won't get ahead in academic medicine. There is an inherent cultural issue that needs to be addressed within academia – one of macho, aggressive, cut throat attitude. Until recently this attitude persisted across the board, but seems to now be changing.
- According to a University Senior Women's Group, some men still see women as inferior. They also recognise a 'club culture', meetings out-of hours and gendered attitudes, but don't want to challenge the 'male structures'.
- A fundamental issue is the long working hours. Success in academia is currently measured in terms of the amount of grants you get and the number of publications you have – a competition element. The whole system is set up to reward those that work harder and often longer. This is a significant problem if you have other responsibilities such as family.
- Need to raise awareness of the detrimental way that academia is measured and the emphasis on competition. Maybe need to broaden the definition of success, which is not only reliant on the Research Assessment Exercise (RAE). People do other things, often bring different perspectives which are valuable, but how do we devise a system that recognises this?
- Women often lean towards teaching rather than research. Fine whilst the Teaching Quality Assessment is in progress, but when the focus switches to the RAE, women often feel marginalised because they have been involved in teaching rather than research. There needs to be some form of reward system in place for teaching.
- There is a need to move away from the idea that you must always be seeing patients to be a legitimate doctor.
- Higher education is still perceived as being restrictive and old fashioned from the outside, i.e. by the NHS.
- A 'jobs for the boys' culture- perception persists – i.e. that career progression is decided at the pub. Not seen as delivering fair or even access to promotions and women feel inhibited. Most men are shocked to hear this perception, but there maybe an element of truth. How do we manage this culture?

Recommendations

Recommendation		Who takes action
3.1.1	Ensure open, transparent and fair allocation of teaching and administrative loads	Institution, Head of department
3.1.2	Ensure administrative and committee responsibilities have fixed terms of office and are rotated so as to ensure opportunities to all staff and to avoid individuals taking on a disproportionate workload	Institution, Head of department, Staff
3.1.3	Greater recognition needs to be given to the teaching role in undergraduate and postgraduate education	Institution
3.1.4	Monitor hours of work and actively discourage long hours culture	Institution, Head of department, Staff

Case study of good practice

3.1 'Long hours culture' is being challenged.

The evidence exists that you don't have to work incredibly long hours in order to succeed – there needs to be a culture that dictates this in order to diminish the pressures placed on academics to work all hours of the day. For example, University E in the past had a clear culture of long working hours, but this is now not enforced in the medical school – the Dean does not work long hours and does not expect his/her staff to do so either.

3.2 Gender equality

ASSET2006 results

- 71% and 74% of WAM respondents agreed that senior colleagues and their line managers respectively were supportive.
  - Senior colleagues were supportive – NHS female 71%, male 76%, HE female 66%, male 79%.
  - Line manager was supportive – NHS female 74%, male 75%, HE female 72%, male 79%.

- 73% of WAM respondents agreed that their contribution to the department was valued (NHS female 72%, male 78%, HE female 69%, male 79%).

- 71% of WAM respondents agreed that they felt socially integrated within their department (NHS female 73%, male 74%, HE female 68%, male 72%).

- 70% of WAM respondents agreed that they have the opportunity to participate in important committees, meeting or projects (NHS female 70%, male 79%, HE female 65%, male 79%).

- 62% of WAM respondents agreed that they were encouraged to undertake activities which will contribute to their career development (NHS female 61%, male 64%, HE female 61%, male 66%).

- 41% of WAM respondents perceived women as disadvantaged in terms of career progression (NHS female 44%, male 19%, HE female 57%, male 26%).

- 21% of WAM respondents perceived women as disadvantaged in terms of salary (NHS female 24%, male 5%, HE female 29%, male 14%).

- 18% of WAM respondents perceived women as disadvantaged in terms of access to career development/training opportunities (NHS female 23%, male 6%, HE female 21%, male 9%).

- 35% of WAM of respondents perceived women as disadvantaged in terms of visibility to senior management (NHS female 40%, male 12%, HE female 49%, male 17%).

- Agreement for celebration of success in their working life by their department was expressed by 46% of WAM respondents (NHS female 18%, male 47%, HE female 49%, male 58%).

Focus group themes

- Women are not applying for senior posts often because of a lack of confidence- they 'won't apply unless they are guaranteed the job'. Women often interpret not getting the job as a gender issue.
- Women often perceive that they can't do the job and need more encouragement to apply for senior posts than men. Men will put themselves forward even if they are not suitable.
- Confidence is also an issue – examples of senior women who don't have the confidence to ask for a meeting to be rescheduled or to say that they can't attend because of childcare issues are perceived as showing weakness and not being able to manage their lives. Need to improve perception of colleagues and be aware of issues.
- Women are less sure about selling themselves than men – perhaps not conducive to the competitive environment of academic medicine. Women and men have different styles of working, but the outcomes are often equal. Often women focus on the 'style' and don't see the outcomes.
- There is no obvious gender discrimination, either in the NHS or HE, but sub-textual obstacles exist- male culture (not deliberate), meetings after 5pm/breakfast/during caring times.
- Attitudes perpetuate perceptions of equality. If you don't already have children, then it is assumed that you will have them at some point. If you do have children it is assumed that you are not as committed to your career- 'professional women don't have children'.
- Negative perceptions need to be pointed out to people in leadership positions, i.e. VCs and acted upon in order to lead by example.

Recommendations

Recommendation		Who takes action
3.2	**Measures of gender equality should be benchmarked against European targets and exemplars**	Government, Institution, Profession/professional societies
3.2.1	Gender equality must be systematically integrated into all policies and programmes of organisations and their cultures (gender mainstreaming)	Government, Institution, Profession/professional societies Head of department, Department, Staff
3.2.2	Senior leaders should take a clear lead and steer on challenging policies, practices and 'sub-texts'	Institution, Head of department
3.2.3	Ensure important departmental business is not conducted in settings or at times in which women are generally not present	Institution, Head of department, Department, Staff
3.2.4	Promote positive action by the development and use of tools	Institution, Head of department, Department, Staff
3.2.5	Develop a culture in which individuals are supported when confronted with unacceptable behaviour	Institution, Head of department, Staff, Profession/professional societies

Case studies of good practice

3.2.1 An NHS Mental Health Trust has just published a gender equality plan. It was assumed that there was not a problem with gender equality and career progression. However, women were not getting senior positions. The Trust has learned to monitor and act on its findings.

3.2.2 University F was aware of gender discrepancy in pay and as a result is undertaking an equal pay audit. Women's salaries were lower than males and an inequality was found that needs to be corrected.

3.2.3 University G is very aware of gender issues, has applied good practice in Equal Opportunities and they consider that they have more senior female academic staff as a result.

3.3 Measures of esteem

ASSET2006 results

- 56% of WAM respondents had been 'invited' to contribute to a national or international conference in the last three years as a keynote-plenary speaker, specialist/breakout session speaker or a sessional chair.
    - Keynote-plenary speaker (29%) – NHS female 18%, male 25%, HE female 41%, male 50%.
    - Specialist/break out session speaker (37%) – NHS female 28%, male 36%, HE female 45%, male 50%.
    - Sessional chair (31%) – NHS female 20%, male 25%, HE female 42%, male 54%.

- 34% of HE respondents were on editorial boards of journals compared with 12% of NHS respondents (NHS female 9%, male 20%, HE female 32%, male 42%).

- 23% of HE respondents were on grant giving panels compared with 9% of NHS respondents (NHS female 8%, male 16%, HE female 21%, male 38%).

- 9% of HE respondents achieved an editorship, compared with 3% of NHS respondents (NHS female 3%, male 6%, HE female 8%, male 20%).

Focus group themes

- Measures of esteem – you have to produce what is required to produce levels of esteem – should be based on the effort it takes to produce something.
- Some women are not encouraged to progress higher and are told that they can't have both a family and a career. Women are not expected to do as well as men if they have a family to look after.
- Women often have the ability but not the confidence – men go ahead regardless of skill. Men are more likely to 'push themselves forward to the front of the meeting and make their point' – women need to do this more. How do we address this? Needs to be addressed early on in the medical career, i.e. at medical school.
- A lot of meetings are held outside working hours (*NB on which measures of esteem may be built)* – the working day is getting longer and if you have childcare responsibilities it is impossible to attend these meetings. This is a practical issue that needs to be addressed. Can be done, with the right leadership but need to work hard together to achieve this.
- Women and men have different perceived measures of esteem – e.g. value of number of publications. Taking a career break results in a gap in publications on a CV. There is a need to look at quality not quantity.
- Men and women are very different – men are often better at strategic positioning.
- Men and women have different priorities. For example, women are less likely to see the point of 'self serving' meetings and committees.
- Women will only do jobs that they know they can do well – more conscientious than men. Men will 'give it a go' which is important in a research environment. Women are not so good at this.
- There is a need to raise awareness about what senior posts actually involve.

Recommendations

Recommendation		Who takes action
3.3.1	Journals and bodies awarding grants should take steps to minimize gender bias	Government, Institution, Staff, Journal
3.3.2	Encourage leadership programmes that develop and maintain skills	Government, Institution, Profession/professional societies, Head of department, Staff
3.3.3	Recognise the value of different approaches to delivering key goals	Institution, Staff

Case study of good practice

3.3.1 Leadership development is vital to all junior staff, both male and female. University K has a University wide leadership development programme.

4. Flexibility in working life

4.1 Work-life balance

ASSET2006 results

- Respondents were asked to identify the 'most important' contributors to a good work life balance (Appendix 5). The most important factors identified by WAM respondents included:
  - Flexibility in hours/days worked/work pattern (69%) – NHS female 68%, male 61%, HE female 74%, male 67%.
  - Home/remote working (48%) – NHS female 39%, male 37%, HE female 60%, male 58%.
  - Being able to ask for time off at short notice within leave allocation, without need to give reasons (40%) – NHS female 38%, male 40%, HE female 43%, male 39%.
  - Meetings finishing on time, especially those at the end of the day (38%) – NHS female 42%, male 45%, HE female 35%, male 29%.
  - Important meetings/activities on a regular pattern or scheduled within core hours (36%) – NHS female 42%, male 35%, HE female 33%, male 25%.
  - Senior management show awareness of issue (33%) – NHS female 33%, male 43%, HE female 30%, male 30%.

Focus group themes

- The impact of family responsibilities on research time can be considerable as research time is the most flexible and often gets squeezed.
- Domestic factors impact significantly on the career progression of women. A supportive partner is important and there are choices that need to be made.
- Focusing on raising your national profile is manageable with family responsibilities, but as you get to a certain level of your career different factors start to impinge, i.e. international travel.
- Comments are made at senior level about 'women who have childcare issues' – inherent discrimination. In contrast, men with domestic responsibilities hide this.
- It is important to lead by example – one VC has a policy of not sending emails out to staff after 7.30pm at night, so that it doesn't look like the 'boss' is working late. Sending emails at 2am intimidates some staff (both men and women) as they feel they are expected to emulate this behaviour.

Recommendations

Recommendation		Who takes action
4.1.1	Leaders of the profession and universities should visibly and vigorously support programmes that encourage career progression.	Institution, Profession/professional societies
4.1.2	Promote a positive attitude to those working reduced hours.	Institution, Head of department, Staff
4.1.3	Recognise and use the inherent advantages of informal flexible working in academia.	Institution, Staff
4.1.4	Forms of academic assessment and accountability should take into account LTFT working, career breaks and measure output against similar post holders.	Institution

Case studies of good practice

4.1.1 At University L, it has been found that 50% of meetings are scheduled during the working day (9-5pm), but the remainder are scheduled outside these hours. It is difficult to schedule meetings around the diaries of clinicians – this ultimately disadvantages people with children. The University now has some data on which to start changing this culture.

4.1.2 Women often see themselves as the main parent and this often makes travel and international conference attendance difficult. A possible solution is to take the family along to the conference. For example, often North American conferences are in resort/holiday family friendly places and academics are encouraged to take their families. Although UK conferences are usually held at Universities in city centres (not family friendly), they often provide crèche facilities.

4.1.3 In some cases, senior academics try and consolidate all of their meetings in a 2 day period and then have the rest of the week without meetings. Part time home working can then be achieved.

4.2 Arrangements for flexible working

ASSET2006 results

- Since the first appointment in medicine, 38% of female WAM respondents but few male respondents (6%) had periods of working less than full time (NHS female 40%, male 7%, HE female 37%, male 7%).
- 25% of female WAM respondents reported working less than 40hours/week compared with 9% of male respondents (NHS female 24%, male 5%, HE female 27%, male 14%).
- 27% of WAM respondents did not know whether their contract allowed for flexible working (NHS female 18%, male 24%, HE female 37%, male 34%).
- The availability of flexible working when required was seen as a significant factor that had 'most helped' 18% of WAM respondents in their careers (NHS female 25%, male 2%, HE female 22%, male 8%).
- 42% of WAM respondents reported that they 'regularly' work from home (NHS female 33%, male 34%, HE female 54%, male 53%).
- 54% of female WAM respondents (male 42%) saw working conditions as influential in their current choice of employment. Those who saw working conditions as influential were asked to select the most important from a range of eight factors. Flexible working was ranked top by men and women in both sectors (NHS female 26%, male 11%, HE female 32%, male 18%).

Focus group themes

- If people are to be encouraged into academic medical careers, there needs to be better infrastructure in place to truly support flexible training for women.
- Job-sharing is often viewed with suspicion by colleagues – it is often not clear who is in charge. Need to lead by example. The VC needs to be in support of this for it to work.
- The key is to learn to multi-task, delegate and prioritise – not become stressed, but this only comes through experience – how do you handle several agendas at the same time? Secretarial and infrastructure support is important. Generic setups can be drawn on to make life easier. These set-ups need to be in place in order to work effectively in academic medicine.
- Academic work is by nature flexible.
- Flexible working up to consultant level is seen as fine, but the next stage impacts upon women's career progression – how do you gain credibility/status and also take time out or a career break? Working LTFT means that it takes a lot longer to obtain 'power' and credibility.
- Need more portfolio careers.
- More opportunities for job sharing or LTFT working need to exist within an academic research environment e.g. flexible training posts in academic medicine are needed.
- Flexible working strategies adopted by women in the NHS are not easily translated to academic medicine.
- You need to be able to feel OK about being off work with sick kids – there is a risk that this will be frowned upon in an academic context and you will feel guilty.
- Time off and flexible working arrangements shouldn't only be a female responsibility - partners should share the responsibility. By saying that the system needs to adapt to women's childcare responsibilities undermines women - there is a need to focus on both partners taking responsibility.

Recommendations

Recommendation		Who takes action
4.2 1	Visible support and take up by Vice Chancellors and Deans	Institution
4.2.2	Enable a flexible career structure	Institution
4.2.3	Create opportunities for job-share in research and senior positions	Institution

Case studies of good practice

4.2.1 At University M career breaks are encouraged as important components in a female's academic career. Staff are able to work part time if required.

4.2.2 Flexible working arrangements are in place for all staff including consultants (NHS Trust B). The perception is that part-timers tend to work harder and longer and job sharers are great, because you get two brains for the price of one. Annualised hours are also available. The medical director is keen to look at new and innovative ways of working.

4.2.3 Flexible working arrangements are in place (University Hospital C) whereby several female consultants are working 8-9 PAs. SPAs are often undertaken at home. The new NHS consultant contract lends itself well to increased flexibility.

4.3 Importance of lifestyle and personal factors

ASSET2006 results

- Respondents were asked to identify any 'personal circumstances' that had an especially detrimental effect on their career (Appendix 5). In order of magnitude the most common problems were:
  - Inability to easily move location (28%) – NHS female 15%, male 11%, HE female 17%, male 6%.
  - Unconventional career path (28%) – NHS female 11%, male 7%, HE female 20%, male 12%.
  - Partner's career (22%) – NHS female 12%, male 7%, HE female 14%, male 4%.
  - Periods of less than full time working (14%) – NHS female 10%, male 0%, HE female 9%, male 1%.
  - Taking a career break (10%) – NHS female 7%, male 1%, HE female 8%, male 0%.
  - Unavailability of flexible working when required (9%)– NHS female 7%, male 2%, HE female 4%, male 0%.
  - Absence of higher degree (9%) – NHS female 5%, male 3%, HE female 6%, male 2%.
  - Lack of quality affordable childcare (5%) – NHS female 4%, male 1%, HE female 3%, male 1%.

Focus groups themes

- Lifestyle pressures are important considerations in pursuing a medical academic career – contrary to popular belief, it is not impossible!
- Work life balance – domestic responsibilities mean that women can't progress as competitively as men.
- Personal circumstances are a vital element to career development.
- Women often don't enjoy the 'clubability' that comes with activities often inherent in senior posts. They make decisions and choices about their priorities. For example, those with children will have to decide which of three areas will have to be reduced in order to accommodate children: research, service or management. Often research is the area that is easiest to postpone.
- A formal career path is now much clearer in academic medicine – the Walport Integrated Academic Training initiative will hopefully benefit trainees wanting to pursue an academic career.
- Flexibility is key, so that one can enter an academic medical career at any point. Not just enter – but 'dip in and dip out' - must be a two way movement.
- Women will often return to a clinical career, but not a research career after a career break.
- Geographical immobility – it is more difficult to move a partner and women are usually responsible for moving the entire family.
- Insecure nature of academic medicine compared with security of the NHS. Women with family commitments want more security and a long term career path.
- Women often take career breaks at a critical time in their academic career.

Recommendations

Recommendation	Who takes action
4.3.1 Encourage women to recognise the need to invest in quality child care to support their career	Staff
4.3.2 Seek innovative solutions to suit personal and family circumstances	Institution, Department, Staff

Case study of good practice

4.3 Chadburn part-time lectureship posts (Kroll 2005) are London based for individuals who are:

- Clinically qualified
- Interested in or already involved in research
- Currently in training or intending to start a training programme on appointment – whether specialist training, vocational training for general practice, or higher professional training
- Unable or unwilling to work full time at present
- Ideally, have a postgraduate clinical diploma/qualification

4.4 Career Breaks

ASSET2006 results

- 58% of female WAM respondents had taken a career break compared with 10% of males. Females who had taken a career break were more likely to be working in the NHS than HE sector (NHS female 61%, male 9%, HE female 53%, male 11%).

- Of those WAM respondents who had taken a career break, 72% regarded the availability of good childcare as the 'most' important factor in helping the transition back to work (NHS female 76%, male 8%, HE female 79%, male 7%). Other important factors included:
  - Flexible working (54%) – NHS female 52%, male 25%, HE female 64%, male 13%.
  - Contact / keeping in touch with department while away (32%) – NHS female 29%, male 33%, HE female 35%, male 47%.
  - LTFT working, building up to FT (29%) – NHS female 30%, male 25%, HE female 30%, male 0%.

Focus group results

- Maternity breaks change the trajectory of career development. Delaying childbearing only increases the impact of taking time off from an academic career. Interview panels don't take enough notice of the impact of maternity leave.
- Time taken out of medicine is counterproductive compared with other academic careers, because of the rapid nature of change in clinical medicine.
- Career breaks should be seen positively as it shows that women are able to re-enter the workforce and bring themselves up to speed.
- Promotions committees should take gaps in CVs/publications due to career breaks into account and be viewed positively.
- Career breaks are accepted but expensive. Re-entry to the workplace is negotiated on an individual basis.
- Flexible working after career breaks is important – need time to re-orientate-'rather like starting up again'.
- The academic environment is difficult to re-enter after a long career break.
- Taking time out of an academic career is reflected in the CV – must look for quality as opposed to quantity – but difficult to account for loss of impetus.
- More medical graduates now are mature and already have a family. It is even more difficult for them to comprehend getting through the whole medical degree, possibly intercalating, junior training and then possible academic jobs – such a long path!
- Difficult to keep up to date whilst on a career break.
- The impact of a career break is critical in a clinical context – flexibility on return is crucial. Physical and mental aspects are all difficult to come to grips with.
- Awareness of issues facing returners from a career break is vital. Confidence is an issue for women coming back from maternity leave or ill health.
- Academics live hand to mouth and are largely reliant on bring in grant income. Stepping off the treadmill will be detrimental to your career. Can easily drop a session in the NHS, but not so easy in academia.

Recommendations

Recommendation		Who takes action
4.4.1	Ensure provision of contact between staff and departments for staff taking a career break	Department, Staff
4.4.2	Establish infrastructure for career breaks	Institution, Department

Case studies of good practice

4.4.1 The Daphne Jackson Trust (www.DaphneJackson.org)

The Daphne Jackson Trust arranges Fellowships throughout the UK, in university and industrial laboratories, for qualified medical and other scientists returning to work after a career break. The Trust enables returners to retrain and gain the latest knowledge and most up to date skills, mentoring them throughout their Fellowship, providing all the support, encouragement and help they require enabling them to re-establish their professional confidence and credibility thus enabling them to compete for employment on a level playing field with their peers. Fellowships are flexible, paid, and are usually part-time for two years. Fellows undertake a research project and retraining programme. Applications are welcomed throughout the year and each Fellowship is unique. Although the Daphne Jackson Trust does not help non-academic doctors, it is able to consider supporting doctors who are undertaking research in medical fields, or whose research has applications in medicine and the NHS.

4.4.2 University N has a 'Women Returnees' Programme'

The aims of this programme are:

- To relieve returning women academics from teaching or administrative duties, as appropriate, or to provide research support, either during their absence or upon their return to work. It is intended that this support will allow the participants to have a clearly defined opportunity to concentrate on their research activities, thus minimising the impact their absence may have on their long term career development/progression.
- To offer departments the practical resource support needed to allow them to accommodate this reallocation of responsibilities.
- To create a working environment that encourages women academics/researchers to flourish professionally, this benefiting the performance of both the department and University.
- To continue to develop forward thinking, innovative staff practices, which will ensure the future successes of both the individual and the organisation.
- To contribute to existing University targets around improving the representation of women in academic medicine.

Appendix 1

Recommendations

(The key to the abbreviations is at the end)

Appointment and promotion processes

Recommendation		Who takes action	Examples of good practice
1.1	**Both the promotions criteria and process need to be made explicit and transparent to staff**	G, I	
1.1.1	Build regular positive feedback into appraisal and promotion processes	I	Short term mentoring
1.1.2	Promotion criteria and process should be regularly reviewed in open discussion	S	Avoid practice of parading CV before department. It is intimidating Prevent procedures being enshrined in male culture
1.1.3	Prior to each promotion	I, D	Test CVs against objective measures
	1.1.3.1 Undertake positive review of staff	I, D, S	
	1.1.3.2 Organise an open meeting to promote awareness	I, D, S	
1.1.4	Encourage awareness by making training in GED obligatory	HoD, S	
1.2	**Appraisal should be an annual process and timed to fit in with the promotion cycle**	G, I	
1.2.1	Senior staff appraisal should include how well they have discharged their key responsibility for the career development of their staff	I, S	
1.2.2	Ensure promotion opportunities recognise a range of activities	I	Including teaching and clinical workload
1.2.3	Encourage confidence to apply for senior posts	I, S HoD	Actively identify posts for women
1.3	**Appointments committees should reflect the diversity of staff required (e.g. women, ethnic groups)**	G	
1.3.1	Composition of appointments committees should be monitored	I	Focus for impact assessment of human resources policy Use co-option if lack of female staff
1.3.2	Ensure that advertisement of senior posts includes LTFT option (to widen the pool of applicants)	I	

Recommendation		Who takes action	Examples of good practice
1.3.3	Promotions committees should view career breaks positively and recognise their impact on career development	I	
1.4	**Gender monitoring of appointments and promotions should be in place**	G, I	
1.4.1	Regular monitoring of salaries, start-up packages and promotions to identify disparities and assess progress	I	Dissemination of results to staff

Structures, systems and activities in place regarding career progression

Recommendation		Who takes action	Examples of good practice
2.1	**Career choice, progression and development**		
2.1	**Equal Opportunity and diversity training should be provided**	I, S	
2.1.1	Institutions should have evidence of a fair, broad and thorough search before approving appointments	I	Evidence provided in open forum Inclusion of women in developing job description, in search team and among candidates
2.2	**Role models, mentoring and networking**		
2.2	**Mentoring for women staff should be mainstreamed and monitored**	I, D, P, S	
2.2.1	Establish mentoring schemes as an essential and valuable activity	I	
2.2.2	Time for mentoring should be recognised in job plans	I, D, S	Applies to mentors and mentees
2.2.3	Establish and constantly update a database of mentors	I, P, S	Medical academics can choose or be allocated a suitable mentor
2.3	**Role models and networking should be recognised and encouraged**	I, D, HoD, S	
2.3.1	Actively promote flexibility in career routes and highlight those who are successful despite "unconventional" career paths	I, P, D, S	
2.3.2	Increase the presence of female role models	I, D, S	Use visiting female professorships

Recommendation		Who takes action	Examples of good practice
2.3.3	Improve visibility of female clinical academics	I, J, D, S	Use of female first names
2.3.4	Prioritize schemes that promote networking	I, D, S	
	2.3.4.1 Active encouragement for women to attend conferences/national meetings		Facilitating taking families will contribute to more productive networking
	2.3.4.2 Encourage informal networks		Single sex networks

Organisational arrangements and cultures

Organisational arrangements and cultures should encompass and ensure the following:

Recommendation		Who takes action	Examples of good practice
3.1	**Workplace and personal factors**		
3.1.1	Ensure open, transparent and fair allocation of teaching and administrative loads	I, HoD	Ensure that individuals do not take on an inequitable share of tasks that are not recognised in the promotional process
3.1.2	Ensure administrative and committee responsibilities have fixed terms of office and are rotated so as to ensure opportunities to all staff and to avoid individuals taking on a disproportionate workload	I, HoD, S	Maximum term of office is clear Open, regular access to these 'measures of esteem' is available for women Monitoring and reporting of terms of office and selection process
3.1.3	Greater recognition needs to be given to the teaching role in undergraduate and postgraduate education	I	
3.1.4	Monitor hours of work and actively discourage long hours culture	I, HoD, S	Develop appropriate outcome measures e.g. job diaries Recognise clinical commitment in job planning

Recommendation		Who takes action	Examples of good practice
3.2	**Gender equality**		
3.2	**Measures of gender equality should be benchmarked against European targets and exemplars**	G, I, P	
3.2.1	Gender equality must be systematically integrated into all policies and programmes of organisations and their cultures (gender mainstreaming)	G, I, P, HoD, D, S	Compare with European policy, other HEIs, NHS and other public bodies e.g. benchmark data against national medical data from ASSET Gender equality schemes should include an action plan based on the evidence of data collected. The scheme will be assessed on the outcomes of the action plan
3.2.2	Senior leaders should take a clear lead and steer on challenging policies, practices and 'sub-texts'	I, HoD	Target men and encourage training in responsible management
3.2.3	Ensure important departmental business is not conducted in settings or at times in which women are generally not present	I, HoD, D, S	
3.2.4	Promote positive action by the development and use of tools	I, S, HoD, D	Use GED tools to monitor and evaluate changes
3.2.5	Develop a culture in which individuals are supported when confronted with unacceptable behaviour	I, HoD, S, P	The values and ethos of the department does not tolerate unacceptable behaviour
3.3	**Measures of esteem**		
3.3.1	Journals and bodies awarding grants should take steps to minimize gender bias	G, I, J, S	Examine entire review and decision making processes Include women in Editorial Boards and conference programme boards to reflect GED Institute blinded peer reviews
3.3.2	Encourage leadership programmes that develop and maintain skills	G, I, P, HoD, S	See Leadership Foundation Senior Clinical Academic programme: http://www.lfhe.ac.uk/support/clinical/scalbroc.pdf
3.3.3	Recognise the value of different approaches to delivering key goals	I, S	Women may be generally less aggressive or competitive than men but may have a more softer and more people oriented approach that is equally effective

Flexibility in working life

Arrangements to improve working life should include the following:

Recommendation		Who takes action	Examples of good practice
4.1	**Work-life balance**		
4.1.1	Leaders of the profession and universities should visibly and vigorously support programmes that encourage career progression	I, P	Ensure the availability of quality, locally-delivered caring facilities (i.e. child and adult care)
4.1.2	Promote a positive attitude to those working reduced hours	I, HoD, S	
4.1.3	Recognise and use the inherent advantages of informal flexible working in academia	I, S	Allow staff flexibility to organize academic work to fit their domestic commitments
4.1.4	Forms of academic assessment and accountability should take into account LTFT working, career breaks and measure output against similar post holders	I	
4.2	**Arrangements for flexible (LTFT) working**		
4.2 1	Visible support and take up by Vice Chancellors and Deans	I	Increase in flexible working
4.2.2	Enable a flexible career structure	I	Increase retention of female doctors
4.2.3	Create opportunities for job-share in research and senior positions	I	Guidance and training for line managers Creation of opportunities at senior level
4.3	**Importance of lifestyle and personal factors**		
4.3.1	Encourage women to recognise the need to invest in quality child care to support their career	S	
4.3.2	Seek innovative solutions to suit personal and family circumstances	I, S, D	Recognise geographical immobility is an issue
4.4	**Career breaks**		
4.4.1	Ensure provision of contact between staff and departments for staff taking a career break	D, S	
4.4.2	Establish infrastructure for career breaks	I, D	Institute 'keep in touch' days Provide phased returns following a career break

Abbreviations: GED = Gender Equality Duty; Staff (S) = all medical doctors; flexible = less than full time (LTFT); I = institution (HEI = Higher Education Institution); D = department; P = profession/professional societies; HoD = head of department; G = government (e.g. professional governance, clinical excellence award administration); J = journals.

Appendix 2

Members of the Project Steering Group

Professor Selena Gray (Chair)	Director of Centre of Clinical and Health Services Research, University of the West of England, Bristol.
Professor Emeritus Isobel Allen	Policy Studies Institute.
Professor Michael Arthur	Vice Chancellor of the University of Leeds and Champion of the Project.
Professor Yvonne Carter	Dean, Warwick Medical School.
Nicola Dandridge	Head, Equality Challenge Unit.
Dr. Melanie Davies	Past President, Medical Women's Federation.
Tania Fisher	Research Analyst, British Medical Association.
Caroline Fox	Programme Manager, Athena Project.
Dr. Anita Holdcroft	Reader in Anaesthesia and Honorary Consultant Anaesthetist, Imperial College London.
Sunita Kaur-Griffin	Women in Academic Medicine Project Manager, Imperial College London.
Professor Irene Leigh	Head of College, University of Dundee.
Dr. Jane Roberts	Clinical Senior Lecturer in General Practice, University of Sunderland.
Maya Sherwin	Policy Officer, Equality Challenge Unit.
Professor Eric Thomas	Vice Chancellor of the University of Bristol and Champion of the Project.

Appendix 3

Participants in the qualitative research

Institution	*Post*
Royal Liverpool University Hospital	Medical director
Newham Primary Care Trust	Medical director
Centre for Reproductive Biology, University of Edinburgh	Professor of Reproductive Medicine
North Cumbria Acute Hospitals NHS Trust	Medical director
Tower Hamlets, London	Salaried GP
Daphne Jackson Trust, University of Surrey	Trust Director
Queens Hospital, Essex	Consultant clinical oncologist
University of Southampton	Head of Medical School
University of Reading	Professor of Elderly Care
University of Cambridge	Women in Science, Engineering & Technology Initiative (WiSETI) Project officer
Peninsula College of Medicine & Dentistry	Clinical Senior Lecturer/Consultant in Diabetes & Endocrinology
University College London	Executive Dean of Medicine
University of Leeds	Vice Chancellor
University of Bristol	Vice Chancellor
School of Medicine, Health Policy & Practice, University of East Anglia	Dean
Pennine Care NHS Trust	Medical director
University of Leicester	Vice Chancellor
University of Brighton	Vice Chancellor
Harplands Hospital	Academic director
University of Dundee	Vice Principal & Head of College
University Hospital of North Staffordshire	Medical director
Milton Keynes Primary Care Trust	Medical director
University of Warwick	Deputy Dean
University of Glasgow	Head of Medical School

Appendix 4

Participant UK medical schools and universities

Responses to the survey from individuals from most (31 out of 33) UK medical schools were received. These medical schools are:

- Aberdeen
- Barts and the London, Queen Mary University London
- Birmingham
- Brighton
- Bristol
- Cambridge
- Cardiff
- Dundee
- Durham
- Edinburgh
- Glasgow
- Hull York
- Imperial College London
- Keele
- King's College
- Leeds
- Leicester
- Liverpool
- Manchester
- Newcastle
- Nottingham
- Oxford
- Peninsula
- Queen's University Belfast
- St. George's
- Sheffield
- Southampton
- St. Andrews
- University College London
- University of East Anglia
- Warwick

Responses were also received from individuals working from the following Universities (individuals who may also be part of the NHS):

- Bath
- Central Lancashire
- Cranfield/Hertfordshire
- Lancaster
- Napier
- Oxford Brookes
- Portsmouth
- Strathclyde
- Surrey

Appendix 5

Tables based on ASSET2006 data

*Please note: In all tables percentages have been rounded up to the nearest whole number.

Table 5.1 Medical specialty of WAM respondents according to sector and gender (%)

Specialty	Higher education		NHS		Other*		Total		Total respondents (N)
	M	F	M	F	M	F	M	F	
General medicine	17	24	20	19	23	30	19	21	205
Geriatrics	4	1	2	2	0	3	3	2	22
A&E	0	1	4	2	8	0	2	2	18
Ophthalmology	1	1	6	5	0	0	3	3	34
Surgery	8	2	12	7	15	0	10	5	64
Obstetrics & Gynaecology	9	6	4	7	8	6	6	7	65
Paediatrics	8	7	9	7	0	15	8	8	77
Clinical oncology, nuclear medicine & radiology	13	5	6	5	23	9	10	5	65
Pathology	13	12	7	16	0	21	9	15	133
Anaesthetics	4	2	17	8	0	0	11	5	67
Psychiatry	6	7	6	8	0	0	6	7	69
General practice	7	13	2	11	8	6	5	11	95
Public health	4	13	2	3	8	6	3	6	54
Medical education	3	2	0	0	0	0	1	1	8
Other	4	3	4	2	8	3	4	2	27
Total (%)	100	100	100	100	100	100	100	100	
Total (n)	117	250	135	455	13	33	265	738	1003
No reply	25	48	7	21	12	25	44	113	159

M=males; F=females

* Other includes research institutes and other public sector

Table 5.2 Current clinical academic grade of WAM respondents in higher education according to gender (%)

Academic grade	HE		NHS		Total (incl. other)	
	M	F	M	F	M	F
Professor	36	21	13	7	30	15
Reader	8	7	9	4	8	5
Senior lecturer	21	27	52	36	28	30
Lecturer	13	14	9	13	11	13
Other	22	32	17	40	23	37
Total (%)	100	100	100	100	100	100
Total (n)	139	281	54	166	204	482
No reply	3	17	88	310	105	350

Table 5.3 Current clinical grade of WAM respondents according to sector and gender (%)

Current clinical grade	Higher education		NHS		Other*		Total		Total respondents (N)
	M	F	M	F	M	F	M	F	
Consultant	66	56	79	58	45	31	72	56	517
Staff grade / Associate Specialist	1	2	1	4	0	0	1	3	21
Specialist Registrar / Training Post	23	27	9	18	36	46	17	22	178
Senior House Officer	0	2	5	8	0	8	3	5	40
Non training post	3	0	2	1	18	4	3	1	12
GP Principal	3	4	2	4	0	0	2	4	31
GP Salaried	5	8	0	4	0	12	2	6	41
GP trainee	0	1	2	3	0	0	1	2	15
Total (%)	100	100	100	100	100	100	100	100	
Total (n)	108	226	117	367	11	26	236	619	855
No reply	34	72	25	109	14	32	75	232	307

Tables 5.4 Ranked responses to selected questions as referenced in the text

Note: Responses are calculated as N = number (%); % within WAM gender group for employer (totals for denominator as HE 298F, 142M; NHS 476F, 142M).

Choice of employment

Were career progression factors influential in your current choice of employment? (The response rate was 98%).

	Total		Higher education		NHS	
	F	M	F	M	F	M
Yes	540 (65%)	193 (63%)	69%	67%	59%	54%
No	287 (35%)	113 (37%)	30%	28%	40%	44%
Total (n)	827	306				

If yes, any factors in particular? (more than one answer may have been given) (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Area worked / interest	76	76	59	58	40	35
Intellectual challenge	64	60	53	43	32	30
Autonomy / self direction	40	47	34	38	20	19
Better career prospects	35	44	20	20	23	32
Academic freedom	28	41	33	39	8	11
Widen experience	28	24	22	18	13	9
Less meetings / administration	7	9	6	6	4	4
More meetings / administration	3	5	2	1	3	5

Were working conditions influential in your current choice of employment? (The response rate was 96%).

	Total		Higher education		NHS	
	F	M	F	M	F	M
Yes	437 (54%)	128 (42%)	49%	37%	55%	46%
No	376 (46%)	176 (58%)	49%	63%	42%	51%
Total (n)	813	304				

If yes, any working conditions in particular? (more than one answer may have been given) (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Flexible working hours	56	36	32	18	26	11
Security of employment	28	38	11	8	18	22
Less travel	22	13	6	2	15	8
Shorter working hours	17	8	4	1	11	5
Equality of opportunity	16	7	6	3	10	3
Lower workload, less pressure	16	10	4	3	11	6
Better pay	14	16	5	4	8	8
No on call	5	3	2	1	3	1
Better childcare	3	3	1	1	2	1
More travel	3	6	4	4	0	2

Were personal/quality of life issues influential in your current choice of employment?
(The response rate was 97%).

	Total		Higher education		NHS	
	F	M	F	M	F	M
Yes	506 (62%)	147 (48%)	53%	43%	66%	52%
No	314 (38%)	158 (52%)	45%	56%	32%	46%
Total (n)	820	305				

If yes, any issues in particular? (more than one answer may have been given) (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Geographical location	55	62	26	26	39	35
Better work/life balance	45	49	22	22	29	24
Family reasons	29	25	15	12	19	13
Shorter journey to work	20	19	9	6	14	13
Relocate with partner	11	5	7	4	7	2
Restricted / only choice	9	5	6	2	6	2

Professional activities and measures of esteem

In the last 3 years how many peer reviewed research publications have you had? (%)

As joint author (response rate = 75%)

Number of publications	Total		Higher education		NHS	
	F	M	F	M	F	M
0	33	22	10	6	36	33
1	13	11	7	9	12	11
2	13	13	10	11	10	12
3	11	8	12	7	7	8
4	6	4	5	6	4	3
5	4	7	4	8	3	5
More than 5	21	34	29	45	9	14

As lead author (response rate = 69%)

Number of publications	Total		Higher education		NHS	
	F	M	F	M	F	M
0	39	33	13	11	39	42
1	14	13	9	12	11	8
2	14	13	13	14	8	6
3	8	6	8	7	4	3
4	5	5	6	6	2	3
5	6	4	7	7	2	0
More than 5	15	25	21	31	5	10

Are you or have you been... (one or more of the following, now or in the past) (%)

(%Response rate for Q)	Total		Higher education		NHS	
	F	M	F	M	F	M
Member of a national advisory/ policy committee (86%)	26	37	30	38	20	30
Editorial Board Member of an academic/ professional/learned journal (85%)	20	35	32	42	9	20
Assessor for a research council (85%)	16	31	24	46	7	11
Member of grant giving panel (85%)	15	30	21	38	8	16
Member of an international advisory/ policy committee (83%)	11	21	17	24	4	11
Company supported at professional meetings (83%)	7	14	8	13	5	13
Board member of PLC company or equivalent (83%)	6	8	6	8	5	5
Editor of an academic/professional/ learned journal (83%)	5	15	8	20	3	6
Member of the European Commission Expert Groups (82%)	4	7	6	9	2	1

What participation have you had in any of the societies/organisations of which you are a member? (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Attend meetings	516 (62%)	199 (64%)	66	63	61	67
Present papers	214 (26%)	100 (32%)	35	38	21	28
Member of special interest group	179 (22%)	76 (25%)	24	28	21	23
Member of Council (professional)	105 (13%)	43 (14%)	15	17	12	11
Member of Conference programme committee	105 (13%)	41 (13%)	17	19	11	8
College examiner	81 (10%)	54 (17%)	13	18	9	19
College tutor	60 (7%)	38 (12%)	5	8	9	18
Run local / regional group	53 (6%)	34 (11%)	5	8	8	14
President / Chair / Senior officer	47 (6%)	26 (8%)	7	10	5	6
Member of awards panel	36 (4%)	25 (8%)	6	11	3	4
Member of editorial board	33 (4%)	33 (11%)	7	13	2	7
Regional advisor	31 (4%)	21 (7%)	5	6	3	9

Career progression

What will help you progress in your career?

	Total (n)	Total		Higher education		NHS	
		F	M	F	M	F	M
Research performance	567	50	48	68	62	38	32
Personal/professional development	530	46	47	39	42	51	52
Management/ supervisory skills	442	39	38	37	35	41	43
Specialist skills	416	38	32	32	27	42	38
Appraisal/staff review	422	36	39	30	36	42	42
Personal mentor	283	27	20	29	19	26	21
Communication skills	299	26	27	22	23	29	30
Financial management expertise	190	16	19	12	18	18	22

Have any workplace factors or personal circumstances had an especially detrimental effect on your career progression? (The response rate was 92%).

	Total		Higher education		NHS	
	F (%)	M (%)	F	M	F	M
Yes	424 (54%)	127 (45%)	53%	42%	50%	39%
No	359 (46%)	158 (55%)	41%	51%	44%	16%
Total (n)	783	285				

Workplace factors (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Lack of support/encouragement	42	38	26	16	19	13
Culture of having long working hours	39	37	19	12	20	18
Attitude of colleagues	33	20	19	9	16	8
Attitude of senior management	32	44	20	18	14	15
Lack of role models	27	9	16	4	13	3
Professional isolation	26	32	15	12	12	13
Limited job opportunities	24	24	15	12	12	13
Bullying/harassment	21	15	11	4	11	7
Lack of professional development	12	14	8	5	4	6

Personal factors (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Unable to move location easily	31	20	17	6	15	11
Unconventional career path	28	26	20	12	11	7
Partner's career	24	14	14	4	12	7
Periods of less than full time working	18	1	9	1	10	0
Taking a career break	13	1	8	0	7	1
Unavailability of flexible working when needed	12	2	4	0	7	2
Absence of higher degree	9	7	6	2	5	3
Lack of quality / affordable childcare	7	2	3	1	4	1
Too specialist	6	6	3	2	3	2
Too generalist	5	6	5	3	1	2

Which of the following are the 'most important' in contributing to successful career progression within your current employment? (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Research publications	47	48	72	71	32	26
Work on high profile/successful projects	32	35	41	39	27	32
Obtaining external funding	31	34	54	56	17	14
Collaborative working across/ in own organisation	28	30	30	30	29	33
Collaborative working external	23	22	30	27	20	18
Networking within organisation	21	23	17	17	24	31
Meeting targets/delivering on time	20	24	11	18	27	32
Networking outside organisation	16	14	15	12	15	18
Attracting PhD students	14	21	28	35	6	9
Working long hours	13	11	10	9	16	14
International experience	13	16	19	20	9	14
Innovative teaching	11	16	14	20	10	14
Conference/meetings/keynote speaker	11	12	20	18	6	5
Experience in operational areas	11	14	5	7	16	21
Membership of national committee	10	13	10	13	10	14
Member of editorial board of an academic journal	7	11	11	13	5	9
Editorships	6	7	10	8	4	5
Project management experience	6	7	6	7	7	7
Wide experience of business	6	7	1	2	9	12
Conference/Industry meetings attendance	5	4	4	4	5	3
Presentations to senior management	4	6	3	3	5	10
Winning business contracts	3	6	4	7	2	4
Patenting	2	6	4	7	1	4

What have been the significant factors that have 'most helped' your career? (%)

	Total		Higher education		NHS	
	F	M	F	M	F	M
Hard work	88	81	87	81	88	82
Support/encouragement of family/partner	50	40	51	36	50	40
Active promotion/support by senior colleague/manager	45	44	50	43	43	44
Support/encouragement of colleagues	38	36	37	38	38	37
Publications	36	50	48	60	29	38
Luck	34	42	37	43	33	44
Good references from supervisor	29	23	31	22	42	25
Willingness to travel	23	21	25	20	22	20
Availability of flexible hours when needed	23	5	22	8	25	2
Research fellowships	22	22	33	44	14	14
Opportunities through networking	20	21	19	18	22	20
Working on high profile projects	16	23	23	22	12	20
Member of prestigious team early in career	15	17	20	18	12	15
Visibility	14	20	18	20	21	20
Size of grant income	14	22	28	32	5	11
Membership of professional society	12	12	9	7	14	16
Attitude of manager	10	10	10	8	10	11
Winning a prize/medal	8	8	10	10	8	8
Employer's success	6	4	11	6	4	2

Flexibility in working life

Which of the following are the most important contributors to a good work/life balance? (%)

	Total (n)	Total		Higher education		NHS	
		F	M	F	M	F	M
Flexible working hours/patterns	786	69	63	74	67	68	61
Home remote working	543	46	48	60	58	39	37
Ability to ask for time-off with short notice and with no reason	460	39	41	43	39	38	40
Having meetings finish on time especially at the end of the day	436	38	35	35	29	42	45
Having important meetings in core hours	413	38	28	33	25	42	35
Senior management showing awareness of issues	379	31	36	30	30	33	43
More support from colleagues	281	26	19	24	17	28	22
More notice of important meetings	298	26	25	21	19	30	33
Compressed hours	223	21	15	19	11	22	19
Enhanced maternity/paternity/ parental leave	169	16	11	15	8	17	13
Take up of work life provision by senior managers	115	10	11	9	10	9	13
Term time working	93	9	4	9	4	9	7

References

Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration (2005) *Medically-and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future*. UK Clinical Research Collaboration, London. http://www.nccrcd.nhs.uk/intetacatrain/Medically_and_Dentally-qualified_Academic_Staff_Report.pdf [accessed 23/07/06].

Allen I (2005) Women doctors and their careers what now? *British Medical Journal* **331**:569-72.

Anderson J & Connolly S (2006) *Equal Measures: Investigating University Science Pay and Opportunities for Success.* Research Briefing. UK Resource Centre for Women in Science, Engineering and Technology. (www.setwomenresource.org.uk).

Ash A, Carr P, Goldstein R & Friedman R (2004) Compensation and advancement of women in academic medicine: is there equity? *Annals of Internal Medicine* **141**:205-12.

Athena Report 16 (2000) *The Athena Good Practice Guide* www.athenaproject.org.uk/reports [accessed 22/7/06].

Athena Report 22 (2003) *The Athena Guide to Good Practice 1999 to 2002* www.athenaproject.org.uk/reports [accessed 22/7/06].

Bellini L, Abbuhl S, Grisso J, Lavizzo-Mourey R & Shea J (2001) Stresses and workplace resources for academic junior faculty: track and gender comparisons. *Academic Medicine* **76**:62-4.

Benz E (1998) Increasing academic internal medicine's investment in female faculty. *American Journal of Medical Sciences* **105**:459-63.

Beyond Parity: Workbook for Action. Transforming academic medicine through women's leadership (2001). The University of Illinois at Chicago, U.S. Department of Health and Human Services and the Office on Women's Health, Region V. http:www.uic.edu/orgs/womenshealth/page1.htm [accessed 21/01/07].

Bickel J, Wara D, Atkinson F et al (2002) Increasing women's leadership in academic medicine: report of the AAMC project implementation committee. *Academic Medicine* **77**:1043-61.

Bickel J & Kopriva P (1993) A statistical perspective on gender in medicine. *Journal of the American Medical Women's Association*. **48**:141-4.

British Medical Association, Equal Opportunities Committee (2004) *Career barriers in medicine: doctors experiences*. British Medical Association, London.

Brown A, Swinyard W & Ogle J (2003) Women in Academic Medicine: A Report of Focus Groups and Questionnaires, with Conjoint Analysis. *Journal of Women's Health* **12**: 999-1008.

Buckley L, Sanders K, Shih M, Kallar S & Hampton C (2000) Obstacles to promotion? Values of women faculty about career success and recognition. *Academic Medicine* **75**:653-60.

Candib L, Lent B & Levitt C (2004) WONCA Working Party on Women and Family Medicine http://www.womenandfamilymedicine.com/root/index.asp [accessed 14/08/06].

Chief Medical Officer's Report (2006) http://www.unum.co.uk/Home/AccessiblePDF/CMOreport2006.htm [accessed 20/05/07]

Cohen J J (2001) *Women in medicine, much progress, much work to do*. Association of American Medical Colleges www.aamc.org/newsroom/reporter/dec01/word.htm [accessed 27/11/07].

Colletti L, Mulholland M & Sonnad S (2000) Perceived obstacles to career success for women in academic surgery. *Archives of Surgery* **135**:972-7.

Commission of the European Communities (2007) *Tackling the pay gap between women and men*. CEC: Brussels.

Council of Heads of Medical Schools (2005). *Annual Report 2004 – 2005*. CHMS: London.

Department of Health (2007) *The Government Response to the Health Select Committee Report on Workforce Planning*. The Stationery Office: London.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_074842 [accessed 01/06/06].

Equality Challenge Unit (2004) *Employing people in Higher Education: Sexual Orientation*.
http://www.ecu.ac.uk/publications/guidancepublications/200412-EmployingPeopleinHESexualOrientation.pdf [accessed 02/07/07].

Equality Challenge Unit (2005) *A to Z of Equality and Diversity*.
http://www.ecu.ac.uk/publications/guidancepublications/200503-AtoZEqualityDiversity.pdf [accessed 02/07/07].

Equality Challenge Unit (2006) *The gender pay gap: origins and policy responses - a comparative review of 30 European countries*. http://bookshop.europa.eu/eubookshop/FileCache/PUBPDF/KE7606200ENC/KE7606200ENC_002.pdf [accessed 23/02/07].

Equal Opportunities Commission (2006a) *Gender Equality Duty Code of Practice England and Wales*.
http://www.eoc.org.uk/PDF/GED_CoP_Draft.pdf [accessed 24/06/07].

Equal Opportunities Commission (2006b) *Gender Equality Duty Code of Practice Scotland*.
http://www.eoc.org.uk/PDF/Scottish_GED_Code_of_Practice.pdf [accessed 03/07/07].

Federation of Royal Colleges of Physicians of the United Kingdom (2001) *Women in hospital medicine. Career choices and opportunities*. Lavenham Press Ltd, Suffolk. http://www.rcplondon.ac.uk/pubs/contents/323349ed-a949-40bb-b79a-b6a6df6fe3af.pdf [accessed 20/06/07].

Fried LP, Francomano CA, MacDonald SM et al (1996) Career development for women in academic medicine: multiple interventions in a department of medicine. *Journal of the American Medical Association* **276**:898-905.

Goldberg C (1999) MIT admits discrimination against female professors. *New York Times* March 23.

Health Policy and Economic Research Unit (2004) *Women in Academic Medicine: Challenges and Issues*. British Medical Association: London.

Higher Education Funding Council for England (HEFCE) (2007). *The HEFCE Equality Scheme.* The Higher Education Funding Council for England, Bristol. http://195.194.167.100/pubs/hefce/2007/07_01/07_01.pdf [accessed 23/02/07].

Holdcroft A (2004) Academic medicine is failing women. *British Medical Journal* **328**:46.

Hostler S & Gressard R (1993) Perceptions of the gender fairness of the medical education environment. *Journal of the American Medical Women's Association* **48**:51-4.

Jagsi R, Guancial E, Worobey C, Henault L, Chang Y, Starr R, Tarbell N & Hylek E (2006) The "gender gap" in authorship of academic medical literature –a 35 year perspective. *New England Journal of Medicine* **355**:281-7.

Kroll L (2005) A flexible job in academic medicine: the Chadburn lectureship. *BMJ Career Focus* **331**:28-29.

Levinson W, Kaufman K, Clark B & Tolle S (1991) Mentors and role models for women in academic medicine. *Western Journal of Medicine* **154**:423-6.

Magrane D, Lang J & Alexander H (2005) *Women in U.S. academic medicine: statistics and medical school benchmarking.* Association of American Medical Colleges. http://www.aamc.org/data/aib/aibissues/aibvol6_no7.pdf [accessed 15/08/06].

Margerison C & Morley H (2007) *Clinical Academic Staffing levels in UK Medical and Dental Schools*. A report by the Medical Schools Council and the Council of Heads and Deans of Dental Schools, May 2007. London.

Mark S, Heather L, Monahan P, Polloi L, Reznik V & Tropez-Sims S (2001). Innovative mentoring programs to promote gender equity in academic medicine. *Academic Medicine* **76**:39-42.

Medical Schools Council. (2007) *Women in Clinical Academia. Attracting and developing the Medical and Dental Workforce of the Future.* A report by the Medical Schools Council. June 2007, London.

Medical Workforce Standing Advisory Committee (1997) *Planning the medical workforce: third report.* http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4006180 [accessed 23/09/06].

Metcalf H, Rolfe H, Stevens P and Weale M (2003) *Recruitment and Retention of Academic Staff in Higher Education*. National Institute of Economic and Social Research, Department for Education and Skills, London.

National Academy of Science, National Academy of Engineering and Institute of Medicine (2006). *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, National Academies Press. http://books.nap.edu/openbook.php?record_id=11741&page=R1 [accessed 01/03/07].

Nonnemaker L (2000) Women physicians in academic medicine: new insights from cohort studies. *New England Journal of Medicine* **342**:399-405.

Royal College of Physicians of London (2004) *Clinical academic medicine: the way forward*. A report of the forum on academic medicine, November 2004. Salisbury, Wiltshire: Sarum ColourView Group.

Sandhu B, Margerison C & Holdcroft A (2007) Women in the UK Medical Academic Workforce. *Medical Education* **41**: 909-14.

Savill J (2000) *The tenure-track clinical scientist: a new career pathway to promote recruitment into clinical academic medicine*. The Academy of Medical Sciences, London.

Schafer J (1997). Despite progress women in academic medicine find glass ceiling still in place. *Journal of Investigative Medicine* **45**:211-20.

Valian V (1999) *Why so slow: The advancement of women*. Cambridge MA: MIT Press.

Wright A, Schwindt L, Bassford T, Reyna, V, Shisslak C, Germain P & Reed K (2003) Gender differences in Academic Advancement: Patterns, Causes and Potential Solutions in One U.S. College of Medicine. *Academic Medicine* **78**; 500-08.

Yedidia M & Bickel J (2001) Why Aren't There More Women Leaders in Academic Medicine? The Views of Clinical Department Chairs. *Academic Medicine* **76**:453-65.