



Evaluating Commonwealth Scholarships in the United Kingdom:

Assessing impact in the health sector



The **Commonwealth Scholarship Commission in the United Kingdom** (CSC) is responsible for managing Britain's contribution to the Commonwealth Scholarship and Fellowship Plan (CSFP), established in 1959. The five core principles stated at its foundation remain a feature of the CSFP today, and provide a valuable framework for the CSC's work. The Plan would, it was agreed:

- be distinct and additional to any other schemes
- be based on mutual cooperation and the sharing of educational experience among all Commonwealth countries
- be flexible, to take account of changing needs over time
- be Commonwealth-wide, and based on a series of bilateral arrangements between home and host countries
- recognise and promote the highest level of intellectual achievement

Since 1960, the Commonwealth Scholarship Commission in the United Kingdom has offered the following awards:

Commonwealth Scholarships: 'general' Scholarships available for postgraduate, and in some cases undergraduate, study at any UK university.

Commonwealth Academic Staff Scholarships: targeted at academic staff in specific developing country universities. These awards were merged with 'general' Scholarships in 2006.

Commonwealth Academic Fellowships: aimed at mid-career staff in specific developing country universities and providing for up to six months' work at a UK institution.

Commonwealth Split-site Scholarships: to support candidates undertaking doctoral study at a university in their home country to spend time in the UK as part of their academic work.

Commonwealth Professional Fellowships: offering mid-career professionals from developing Commonwealth countries an opportunity to spend a period with a UK host organisation, working in a relevant field.

Commonwealth Distance Learning Scholarships: allowing developing country students to secure Master's-level qualifications from UK institutions through distance learning study.

Commonwealth Medical Scholarships: from the same pool, and offered on the same terms, as 'general' Scholarships, to candidates with basic medical or dental qualifications, to enable them to pursue a higher professional qualification or advanced clinical training. These awards were merged with 'general' Scholarships in 1996.

Commonwealth Medical Fellowships: nominated through national agencies or medical schools, for up to twelve months' clinical and/or research experience at an advanced level in the candidate's field of specialisation. These awards were merged with Academic Fellowships in 1996.

Evaluating Commonwealth Scholarships in the United Kingdom:

Assessing impact in the health sector



The Commonwealth Scholarship Commission in the UK (CSC) and its secretariat would like to extend their gratitude to the many alumni who have taken the time to respond to the evaluation survey, and to all those who have supported and continue to support the work of the CSC.

This report was written by James Ransom, Julie Stackhouse and Dr Fiona Groenhout (of the CSC secretariat) and Dr Norman Geddes and Dr Monica Darnbrough (Commonwealth Scholarship Commissioners), and published in May 2010. The CSC would like to thank Professor Sharon Huttly, Professor and Dean of Studies at the London School of Hygiene and Tropical Medicine, and Dr Peter Bourdillon, the CSC's Medical Awards Administrator, for their advice and input in the preliminary stages of the report.

For further information regarding the CSC Evaluation and Monitoring Programme, please contact:

Commonwealth Scholarship Commission in the UK
c/o The Association of Commonwealth Universities
Woburn House
20-24 Tavistock Square
London WC1H 9HF
UK

www.cscuk.org.uk/cscevaluationandmonitoringprogramme.asp

Contents

List of figures	IV
List of tables	IV
Foreword	V
Executive summary	VI
Introduction	1
1. Health priorities and higher education	2
2. Commonwealth Scholarships and Fellowships in health	4
3. Case studies in health	10
4. Assessing impact in the health sector: survey responses	14
5. Assessing impact in the health sector: interviews with individuals	21
Conclusion	29
Bibliography	31
Appendix 1 Evaluating scholarships: the Commonwealth Scholarship Commission's approach	32
Appendix 2 Measuring impact: the methodology behind the study	34
Appendix 3 A history of Medical Scholarships and Fellowships in the UK	35
Appendix 4 Top 15 UK institutions with the most health alumni	36

List of figures

Figure 1	Gender distribution of health awards by decade	5
Figure 2	Health awards by region, to date	6
Figure 3	Health qualifications with 40 or more alumni	7
Figure 4	Health-related awards by discipline	7
Figure 5	Reported impact in health by discipline	14
Figure 6	Proportion of alumni reporting impact in health by discipline	15
Figure 7	Further impact areas of alumni who studied and reported impact in health	15
Figure 8	Reported impact in health by impact indicator	16
Figure 9	'I gained knowledge in my field of expertise'	17
Figure 10	'I accessed equipment and expertise not available in my home country'	17
Figure 11	'I use the specific skills gained on award in my work'	18
Figure 12	'I have been able to introduce new practices or innovations as a result of my award'	19

List of tables

Table 1	Health awards by decade	4
Table 2	Health awards by region and decade	6
Table 3	Health disciplines studied by decade	8
Table 4	Health disciplines studied by region	9

Foreword

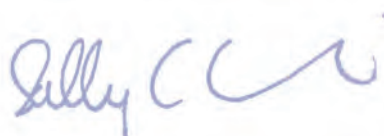
The UK government has increased its support for Commonwealth Scholarships in recent years. We see this as an investment – in the skills, human capacity and higher education systems that developing countries need to devise their own long-term solutions to key global health issues.

In assessing the impact of our investment, it is important to remember that, whilst all of the costs are confined in the period of the award, the benefits can accrue over a period of perhaps 40 or 50 years. Essential to this process is a firm understanding of what the award holders do throughout their careers, how this relates to their home region, and what contribution their award has made. That is why publications such as this are so important.

The results to date are impressive. Former Commonwealth Scholars in the health sector are active at all levels of society – including several at the highest level of government. There is a concentration on maternal and child health, HIV/AIDS and infectious diseases, and sanitation and access to clean water – areas of vital importance for improving global health.

From my meetings with the Commonwealth Scholarship Commission, I know that they will not be complacent about these findings. Scholarships need to change over time, in order to reflect new challenges and opportunities. The Commonwealth Scholarship Commission has been a dynamic leader in this process – embracing new methods such as distance learning, split-site awards and highly-focused short fellowships, alongside well-tried and tested routes such as Master's and doctoral awards based in the UK.

I look forward to working with the Commission as they develop their provision further. In the meantime, I congratulate both them and their alumni on their contribution to DFID's development priorities and the Millennium Development Goals. I hope that the evidence provided in this report will convince other Commonwealth countries to increase their support for Commonwealth Scholarships and for improved global health generally.



Professor Dame Sally C Davies
Director General for Research and Development
Department of Health, UK



Executive summary

Higher education is a vital contributor to socioeconomic development and growth, and international scholarships play an important role in this. The Commonwealth Scholarship Commission in the UK (CSC), a major international scholarship agency funded by the UK government and responsible for disbursing 16,700 scholarships to date, is currently engaged in wide-scale evaluation of the impact of its awards. Almost 3,800 of the 16,700 scholarships awarded have been granted to individuals for study in health-related fields, and the aim of this report is to assess the impact of these awards, particularly in the light of global health priorities.

This report provides an outline of key development priorities in health and the role of Commonwealth Scholarships in development. The main body of the report considers all of our health-related alumni and the wider impact of health-related awards, before narrowing the focus to a selection of case studies and a group of survey respondents, and then looking in particular at five alumni who were interviewed in depth on the impact of their awards.

Our overview of priority areas in the health sector highlights a need for skills and expertise in areas such as maternal and child health, HIV/AIDS, malaria, and other infectious diseases. Many of our alumni, who studied in a variety of different disciplines and towards different qualifications, have had an impact in areas that directly contribute towards the Millennium Development Goals, in particular Goals 4, 5 and 6: reducing child mortality, improving maternal health, and combatting HIV/AIDS, malaria and other major diseases.

Case studies show the long-term impact of Commonwealth Scholarships and Fellowships in more detail. 15 case studies are presented in the report, together with five in-depth interviews, which demonstrate both long-term and immediate impact of alumni who held awards across various decades. Examples of activity include influencing government to provide clean water to flood-affected communities, coordinating the construction of a maternity hospital, leading an HIV/AIDS peer education organisation, lobbying government on malaria prevention, developing a drug to combat AIDS, and launching a research laboratory. One alumnus has been Chief Medical Officer, another Permanent Secretary of a Ministry of Health, and several have used their knowledge and skills in work with national governments, the United Nations, the World Health Organization (WHO) and international NGOs.

The main findings of the report are that:

We are providing relevant skills and expertise in the health sector

- Of those who studied a health discipline, over 99% had gained knowledge and skills through their awards, and 92% had had access to equipment and expertise not available in their home countries. Furthermore, almost 97% reported that their award had increased their ability to have influence and make changes at work, a higher percentage than across all respondents as a whole.
- The absolute number of people taking up health awards has tended to rise decade on decade, and in total represents just over one-fifth of our awards.
- The gender gap has closed since the first Commonwealth Scholarships were awarded in the 1960s. There were slightly more health-related Scholarships and Fellowships awarded to females than males in the 2000s.
- Individuals from 55 Commonwealth countries and British Overseas Territories have received awards in health-related fields. India and Nigeria have received the most health awards, though recent years have seen a dramatic rise in the number of awards made to sub-Saharan Africa as a whole.
- Fellowships have accounted for the largest proportion of awards. Awards held in hospital-based clinical subjects have declined in number, whereas those relating to community-based clinical subjects have risen.
- Whilst 16% of respondents had studied a health-related field, 38% of respondents indicated that they have had an impact in health, suggesting that our scholarships have a wide, cross-disciplinary impact.
- The greatest health impact reported was in specific projects, with almost three-quarters of respondents in this area reporting impact. In addition, 31% of respondents reported having influence on government thinking or policy, and 35% having a socioeconomic impact.
- Over 89% of health-related respondents are working in their home country.

Our in-depth interviews with alumni further established six important findings

- Awards can act as a catalyst for development, and the benefits of a single scholarship can ultimately reach many people.
- Commonwealth Scholarships allow Scholars to challenge existing practices and knowledge, not just in their home countries, but also internationally.
- Awards can 'open doors', and Commonwealth Scholars and Fellows are highly sought after.
- Much of the research undertaken whilst on award is new and innovative, and the skills and knowledge alumni gain can often be put to use with immediate effect upon their return home.
- Study in the UK has several important advantages, from the easily demonstrable – access to equipment – to the more subtle – increasing a Scholar's confidence.
- Studies or research often cut across disciplinary boundaries; awards encourage the development of a wide set of transferable skills, and lead to the ability to contribute significantly beyond the immediate area of expertise.

The report concludes that the CSC's alumni in the health sector are having considerable impact both within the sector, and also towards wider development objectives. The CSC is enabling individuals to gain skills and expertise relevant to their countries' needs, and the survey respondents and interviewed alumni show how these skills are being used in tackling current global health challenges. These challenges include those identified by DFID, the WHO and, in particular, the health-related Millennium Development Goals.

Introduction

'Poor people's health is a top priority. Healthy people can look after their children, hold down jobs, and help their country to grow.'¹

Improved global health is a necessary foundation for successful development efforts, and higher education plays a vital role in building human capacity, advancing research, and formulating policy in the health sector. Three of the Millennium Development Goals (MDGs) explicitly relate to health, and this is reflected in the UK Department for International Development's (DFID) 2009 White Paper. Furthermore, international scholarships are increasingly viewed by funders and key stakeholders as an effective mechanism for delivering development objectives, and the Commonwealth Scholarship Commission in the UK (CSC) has a role at the interface between higher education and health priorities.

The CSC has traced 6,000 of its 16,700 alumni to date and, in June-July 2008, a detailed evaluation survey was sent to this group. Over 2,000 alumni responded (a response rate of nearly 40%), giving details of their careers and achievements since their award, as well as their views on their impact. This wide-scale survey has provided evidence of the effectiveness of the CSC's awards, with quantitative and qualitative results building an impressive picture of our alumni as actively engaged in their societies and able to use the skills learned during their awards to achieve considerable impact. The results were published in June 2009.²

The next phase of our evaluation programme is to drill down to look at what has been achieved in specific regions and employment sectors, examining existing data in more detail and adding to it to increase the validity of our findings. As part of this phase, we published our first regional report in November 2009, looking at the impact of alumni from the Caribbean.³ This, our first sector report, evaluates impact within the health sector.

Over 20% of our scholarships have been awarded in health-related areas, from innovative research into malaria to community nursing. This report begins by outlining key development priorities in health and the role of Commonwealth Scholarships in development. The main body of the report considers all of our health-related alumni and the wider impact of health-related awards, before narrowing the focus to a selection of case studies and a group of survey respondents, and then looking in particular at five alumni who were interviewed in depth about the impact of their awards. A key finding from this study is how the same themes and messages are reflected in both the larger analysis and the individual experiences; the report concludes by drawing this out in more detail and looking towards the future.

- 1 DFID website
<<http://www.dfid.gov.uk/Global-Issues/How-we-fight-Poverty/Health>>
- 2 Commonwealth Scholarship Commission in the United Kingdom, *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in key priority areas* (2009)
- 3 Commonwealth Scholarship Commission in the United Kingdom, *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in the Caribbean* (2009)

1. Health priorities and higher education

Health and development: priority areas

When the CSC selects DFID-funded candidates, particular emphasis is given to applicants' demonstration that their work will help achieve the development objectives of their home country. In particular, candidates are asked to relate their planned studies or research to any existing national or regional development plans, and to particular DFID programmes and priorities.

The health priorities identified in DFID's most recent White Paper on development are closely aligned with the three MDGs that relate explicitly to health.⁴ These include the reduction of child mortality by two-thirds between 1990 and 2015 (Goal 4), the reduction of maternal mortality by three-quarters between 1990 and 2015 (Goal 5), and halting and beginning to reverse the spread of HIV/AIDS and the incidence of malaria and other major diseases by 2015 (Goal 6). Furthermore, the provision of affordable essential drugs in developing countries is a target within Goal 8.⁵ The CSC has supported research, training and capacity building in all these areas.

Maternal and child health are inextricably linked. As a World Health Organization (WHO) report has emphasised, maternal, newborn and child health (MNCH) programmes can only be effective if there is a 'continuum of care' from pregnancy through to childbirth and childhood.⁶ A comprehensive continuum of care is also essential for countries to deal with communicable diseases (such as tuberculosis, malaria and HIV/AIDS), as well as injuries and non-communicable diseases (such as cancer, cardiovascular disease and diabetes), which are increasing in importance.⁷ The CSC has made many types of award in the field of maternal and child health – for example, Distance Learning Scholarships in nursing, Master's Scholarships in obstetrics and gynaecology, PhD Scholarships in reproductive immunology, and Fellowships in foetal medicine.

Halting the spread of HIV/AIDS and the incidence of malaria and other major diseases is one of the most important health priorities for developing countries, and is also one to which higher education is in a unique position to contribute. Half the world's population is at risk of malaria, with Africa having the largest number of people living in areas of high risk, followed by South East Asia; both regions are home to many Commonwealth countries.⁸ Such diseases have wide-ranging implications: AIDS has, in some countries, reversed decades of economic progress and advancements in health and education.⁹ The CSC has facilitated extensive research and knowledge transfer in this area, from the scientific – the pharmacology of antimalarial drugs – to the social – understanding the stigma of HIV in India. Specific impact in these areas is borne out in the case studies presented later in this report, but it is noteworthy that similar issues are relevant across different regions of the Commonwealth.

An essential foundation for achieving these goals is work to improve access to safe water supplies and sanitation. Our case study section illustrates this in more detail.

There are two further important considerations when looking at these health priority areas. The first is the uneven progress of the MDGs; specifically, there are tough challenges to overcome in African countries, and so progress towards the health-related goals has not been as high as in other regions.¹⁰ The CSC is investing heavily in Scholarships and Fellowships to this region; currently well over half of health-related awards are made to candidates from sub-Saharan Africa.

4 Department for International Development (DFID), *Eliminating world poverty: Building our common future*, White Paper (2009)

5 See <http://www.undp.org/mdg/basics.shtml>

6 World Health Organization, *The World Health Report 2005: Make every mother and child count* (2005). See also Department for International Development (DFID), *Child Mortality (Factsheet)* (2007)

7 World Health Organization, *The World Health Report 2008: Primary health care, now more than ever* (2008)

8 Department for International Development (DFID), *Malaria (Factsheet)* (2008)

9 Department for International Development (DFID), *HIV & AIDS (Factsheet)* (2009)

Second, a DFID Working Paper on health emphasises the importance of promoting multidisciplinary research to tackle the most pressing health issues, for example, the interrelation between health and education.¹¹ This complements a key finding from this study: that Scholars from many different disciplines have had an impact in health, and that impact is rarely confined to any one sector or development area. The Working Paper also recognises that other goals bear directly on improving health outcomes, for example, environmental sustainability (Goal 7). Climate change, in particular, will have (and indeed is already having) wide-ranging ramifications – to take but one example, the further spread of malaria as the average temperature rises. The WHO has recently prioritised the protection of health from the impact of climate change.¹² The CSC will acknowledge these new priorities with a future evaluation report examining our impact on environmental issues. Section four of this report, in particular, considers adjacent priority areas, highlighting cross-disciplinary linkages in health.

The role of international scholarships in development

Higher education fulfils a crucial development need for highly-trained professionals across many fields that are key to poverty elimination and socioeconomic development, including health, and across many regions with specific development needs.

Within higher education, international scholarships can play a specific role, supplementing and supporting the role of HE with additional unique features. As such, scholarships are increasingly viewed by funders and key stakeholders as an important mechanism in this process. The motivation for funding scholarships can be seen as three-fold:

1. To have a wider impact on communities and societies, not only through the institutional and individual benefits mentioned below, but also by funding research into specific subject areas that offer benefits to the health sector and to societies as a whole. Scholarships provide an environment for the exchange of ideas and practices, as well as the development of indigenous solutions, and encourage research and innovation essential for poverty elimination, growth and socioeconomic development.

2. To support talented and able individuals by providing opportunities that might not otherwise be available for study and research, enabling the acquisition of skills and expertise, and facilitating networking and collaboration, leading to enhanced employment prospects and professional development.

3. To assist institutional capacity building through providing training and research in key sectors, boosting the human capital and skills base of employing organisations (including higher education institutions) where acquired expertise may be utilised, and through the provision of opportunities for international research collaboration, adding to potential for growth and innovation in the health sector.

The objectives of the CSC can be seen as broadly fitting into these three categories, while keeping pace with changing global development priorities and the strategies and policies of its funding bodies.

10 DFID White Paper

11 Department for International Development (DFID), *Working Paper Series: Better Health* (2008)

12 World Health Organization, *Protecting health from climate change: global research priorities* (2009)



Sabelo Dlamini,

Commonwealth Scholar from Swaziland, completed his Doctor of Public Health (DrPH) degree at the London School of Hygiene and Tropical Medicine in 2009. One of the requirements of the DrPH is that candidates undertake a professional attachment, which offers an opportunity to analyse the operation of a public health organisation. For his attachment, Sabelo worked with the All-Party Parliamentary Malaria Group (APPMG), a forum for UK parliamentarians, interested organisations (members of scientific, academic, media, charitable and support communities) and representatives of the public and private sector to promote a united voice to help fight malaria.

'Malaria kills more than one million people every year, 90% of whom live in sub-Saharan Africa. The greatest death toll occurs in children under five. Despite the availability of preventive and treatment methods, the burden of malaria remains high. One objective of my professional attachment was to determine the adaptability of the APPMG model to least developed countries (LDCs). The Abuja Declaration resulted in African governments resolving to allocate 15% of their national budgets to health. To this day, only a few countries have achieved this undertaking. There is a need to quicken the establishment of new forms of governance globally to ensure freedom and participation of all in government agenda-setting.'

2. Commonwealth Scholarships and Fellowships in health

Commonwealth Distance Learning Scholar **Dr B Barathi** started her MSc in Palliative Medicine at Cardiff University in 2006.

'I work in palliative care in a tertiary care hospital in southern India. The knowledge that I've gained through this course is enormous. The notion of support groups is not yet a developed concept in India, and very few exist. This course has helped me to start a support group for palliative care patients and their family members here. I've also recently started conducting a training programme for volunteers in palliative care, who facilitate patient care along with the palliative care team.'

'I've been selected as a member of the tumour board that has been newly formed in my institution. This has helped me to look at complex cases and to provide palliative care to many patients, especially those for whom curative treatment has been deferred because of their poor socioeconomic status.'

'I am one of the few doctors in India who has chosen palliative care as their career; this course has helped to place me on a certificate programme conducted by the Indian Association of Palliative Care. This gives me the opportunity to train doctors and nurses, as a step forward to improve awareness. My future plan is to build on what I have learnt on this course, and start conducting research in palliative care.'

This section assesses the number and nature of all Commonwealth Scholarships and Fellowships awarded in the health sector since 1960, looking at the allocation of awards across the decades by gender, nationality, and discipline and level of award. We consider responses to our evaluation survey specifically in section four.

The absolute number of Scholars and Fellows taking up health awards has tended to rise decade on decade (with the exception of the 1990s), and has hovered just above one-fifth of the total number of awards. Overall, there have been 3,737 health-related Scholarships and Fellowships hosted by the UK – 22% of all our awards. There have, however, been marked changes in award holders over the decades, in particular a dramatic narrowing of the gender gap.

Table 1: Health awards by decade

Decade	No. of health awards	Total no. of awards	%
1960s	539	2388	22.6%
1970s	853	3253	26.2%
1980s	881	3705	23.8%
1990s	676	3552	19.0%
2000s	788	3839	20.5%
Total	3737	16737	22.3%



Dr B Barathi (left) training healthcare professionals in palliative care in India

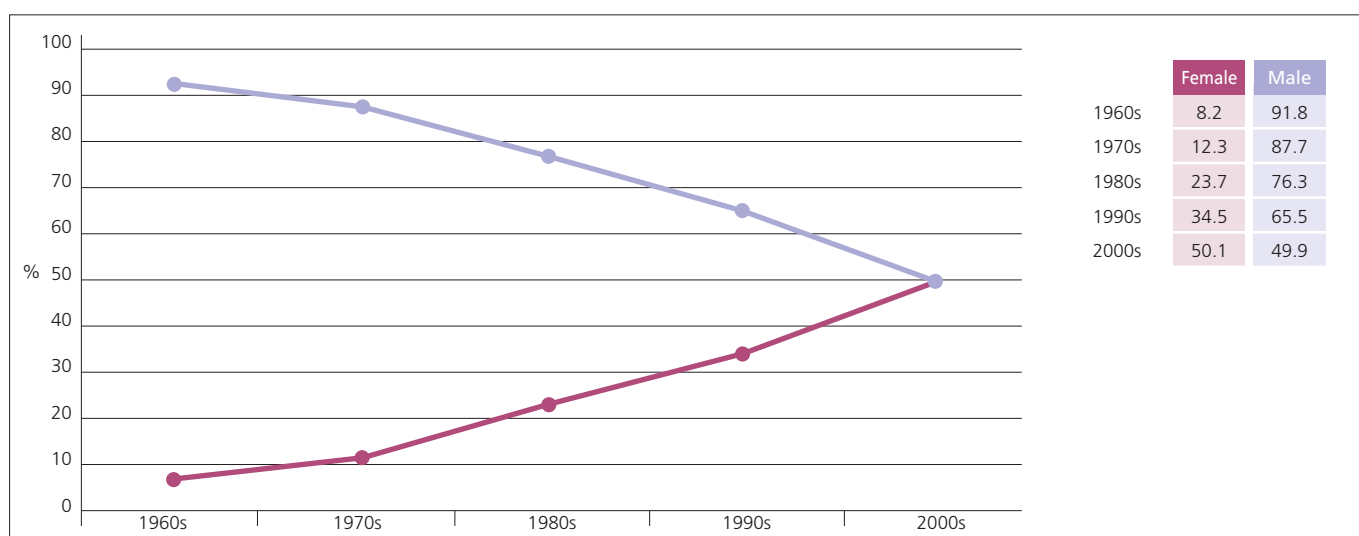
Gender balance

The gender gap has closed since the first decade of Commonwealth Scholarships in the 1960s. Indeed, there were slightly more health-related Scholarships and Fellowships awarded to females than males in the 2000s.

In the 2000s, 50% of Scholars and Fellows given health-related awards were female, as opposed to 42% across all fields, whereas in the 1960s, 8% of Scholars and Fellows in health were female, compared to 9% overall. The percentage of female Scholars and Fellows has increased considerably decade by decade, and is proportionally greater for health than for the scheme as a whole.

This can be partly explained by a greater recognition of the important role played by women in development generally, and in health specifically, and therefore a corresponding rise in female nominations for health-related awards by home country nominating agencies. Another reason is the advent of new schemes, such as Distance Learning Scholarships.

Figure 1: Gender distribution of health awards by decade¹³



Regional allocation

Over the past 50 years, the majority of health-related awards have been made to Asia and sub-Saharan Africa. Over one-quarter of awards have been granted to India (the most populous Commonwealth country), with the second highest number of awards (10%) being made to Nigeria, the most populous country in sub-Saharan Africa. Kenya has been the third highest recipient, with 5% of health-related awards.

It is interesting to note how the distribution of health awards by region has changed over time. For example, in the 1960s, sub-Saharan Africa received 25% of health awards (24% of all awards). By the 2000s, this had risen to 64% (50% of all awards).

The CSC has always allocated awards based on academic criteria but, in recent years, it has also taken into account DFID's development priorities and award holders' potential to positively impact upon the development of their country of origin. The increased proportion of Scholarships and Fellowships awarded to citizens of sub-Saharan African countries reflects the prominence of the region on the UK development agenda. In total, 55 Commonwealth countries and British Overseas Territories have received awards in health-related fields.

¹³ Please note that data for 2005 onwards is incomplete, as many of those on three-year awards have not yet completed their studies, and are therefore not yet registered as alumni.

Figure 2: Health awards by region, to date¹⁴

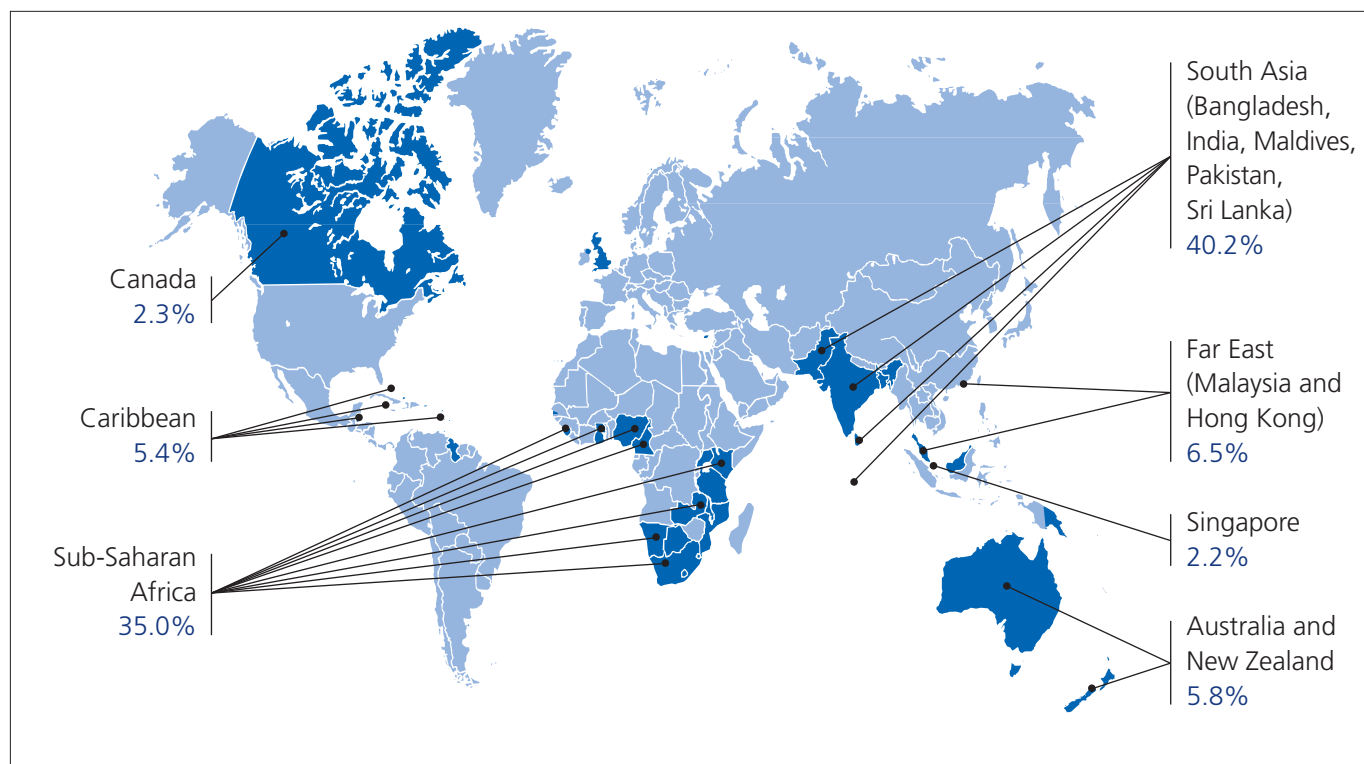


Table 2: Health awards by region and decade¹⁵

Decade	Developed Commonwealth	Sub-Saharan Africa	Caribbean	Far East	South Asia	Pacific
1960s	14.5%	24.9%	7.2%	6.7%	46.2%	0.6%
1970s	17.4%	18.3%	4.7%	6.2%	52.6%	0.8%
1980s	13.2%	32.2%	5.6%	10.3%	37.8%	0.9%
1990s	10.7%	33.7%	6.2%	8.0%	39.9%	1.5%
2000s	4.6%	64.2%	3.8%	1.3%	25.7%	0.5%
Total	12.1%	35.0%	5.4%	6.5%	40.2%	0.9%

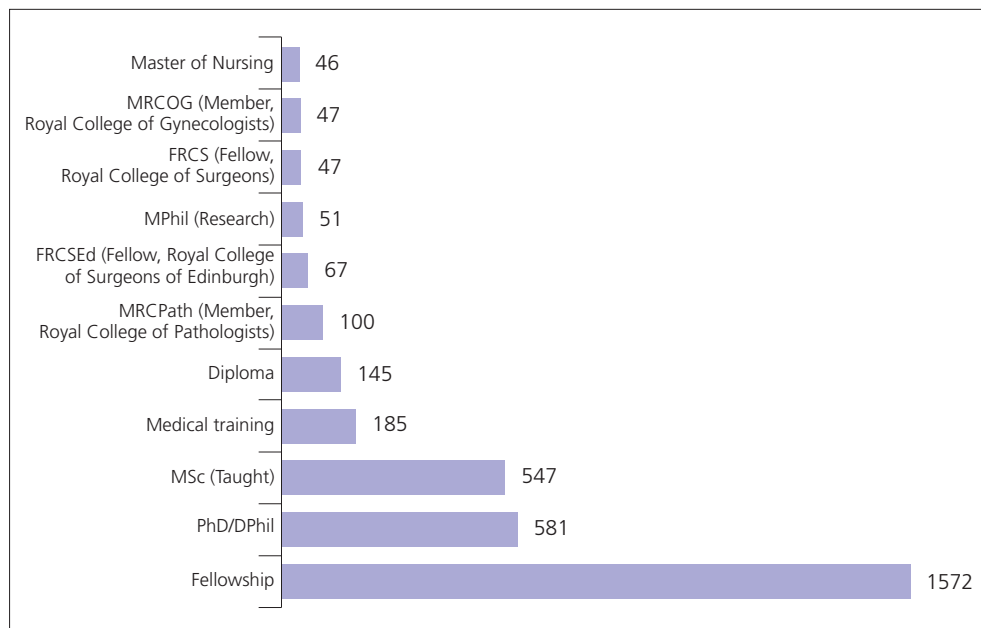
¹⁴ Features regions with more than 2% of all health awards

¹⁵ Awards for candidates from developing Commonwealth countries are funded by DFID, which was established in 1997; prior to this, awards to these countries were largely funded by the Overseas Development Administration wing of the FCO. Awards for candidates from developed Commonwealth countries – Australia, Canada, New Zealand and, from 2003, the Bahamas, Brunei Darussalam, Cyprus, Malta and Singapore – were funded by the FCO until 2009; they are now funded by the Department for Business, Innovation and Skills and the Scottish Government.

What did they study?

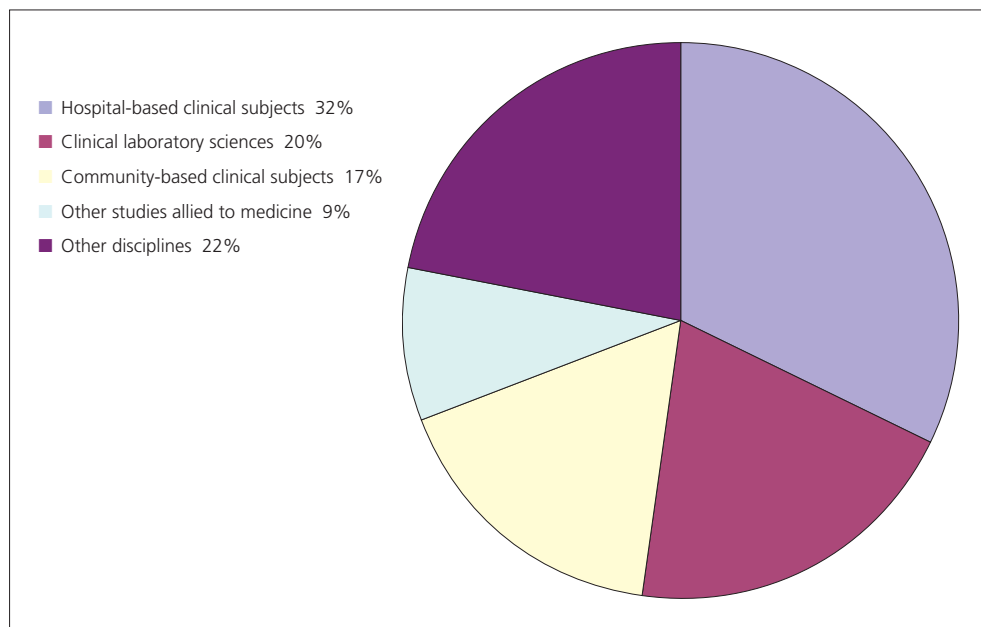
Awards in health have been held at over 240 institutions throughout the UK. Appendix 4 lists the 15 institutions with the most alumni who studied health. Fellowships have accounted for the largest number of awards, as can be seen from Figure 3, indicating the importance placed on acquiring highly-specialist knowledge. Until the 1990s, the CSC offered specific Medical Scholarships and Fellowships – these account for around half of health-related alumni. These awards have since been integrated into the general Scholarship and Fellowship schemes. Appendix 3 covers this history in detail.

Figure 3: Health qualifications with 40 or more alumni



The distribution of disciplines tells us about the changing priorities of international development and health, of our awards, and of award holders' home countries. Hospital-based clinical subjects and clinical laboratory sciences have dominated selections but, if current trends continue, this will not always be the case.

Figure 4: Health-related awards by discipline¹⁶



¹⁶ Hospital-based clinical subjects: includes oncology, cardiology, neurology, and foetal medicine, for example.
 Clinical laboratory sciences: includes clinical microbiology, virology, pathology, immunology, and haematology, for example.
 Community-based clinical subjects: includes public health, epidemiology, and health promotion, for example.
 Other studies allied to medicine: includes biomedical sciences, speech therapy, and nutrition, for example.
 Other disciplines: includes (in order of size) dental sciences, pharmacy, pharmacology, psychology (social), physiology, nursing, psychology (biological), anatomy, physical education, other medicine.

In the early 1990s, **Dr Satnarine Maharaj** was awarded a Commonwealth Academic Staff Scholarship to study MA Health Management, Planning and Policy at the University of Leeds. Currently a lecturer in community health at the University of the West Indies at Mona, Jamaica, he also spent a number of years as Chief Medical Officer for the Turks and Caicos Islands and Grenada.

'In the late 80s and early 90s, health sector reform was in full swing globally. Those of us in developing countries involved in any aspect of healthcare – teaching, research or service – recognised the need for further training to facilitate evidence-based interventions to improve efficiency, effectiveness and equity in the planning and delivery of healthcare services.'

'I was able to bring current thinking on the subject of health sector reform to the classroom and, when the opportunity arose to assume the responsibilities of Chief Medical Officer for the Turks and Caicos Islands, it allowed me to bring to bear all aspects of my knowledge gained as a result of my Commonwealth Scholarship.'

'The process of health sector reform in both islands, while not yet complete, has progressed significantly. I'd like to think that I've made some contribution in improving healthcare delivery for the people of these two islands.'

Table 3: Health disciplines studied by decade¹⁷

Discipline	1960s	1970s	1980s	1990s	2000s	Total
Clinical laboratory sciences	10.9%	24.0%	25.9%	31.2%	4.9%	19.9%
Community-based clinical subjects	13.2%	4.8%	11.9%	10.7%	45.2%	17.3%
Hospital-based clinical subjects	54.5%	39.2%	31.6%	26.0%	12.8%	31.7%
Other studies allied to medicine	4.1%	13.7%	5.1%	10.5%	10.2%	9.0%
Other disciplines:	17.3%	18.3%	25.5%	21.6%	26.9%	22.3%
Anatomy	1.7%	0.6%	1.2%	1.0%	0.1%	0.9%
Dental sciences	5.2%	5.2%	4.7%	4.3%	2.9%	4.4%
Nursing	0.2%	0.0%	0.2%	1.3%	8.4%	2.1%
Pharmacology	2.8%	3.5%	4.5%	2.2%	3.2%	3.3%
Pharmacy	1.5%	3.3%	5.7%	5.2%	5.5%	4.4%
Physical education	0.0%	0.2%	0.5%	0.6%	0.0%	0.3%
Physiology	2.6%	2.3%	2.8%	2.4%	0.5%	2.1%
Psychology (biological)	0.4%	0.9%	1.4%	1.9%	1.8%	1.3%
Psychology (social)	2.8%	2.0%	4.0%	2.7%	4.6%	3.2%
Other medicine	0.2%	0.2%	0.6%	0.0%	0.0%	0.2%
Total	100%	100%	100%	100%	100%	100%

A comparison across the decades shows that awards in hospital-based clinical subjects have declined in number, whereas those in community-based clinical subjects have risen. This can be explained by tightened General Medical Council legislation for practising medical staff, changes in the type of awards offered, and perhaps also a 'decentralisation' of healthcare in a development context, from hospitals to community practices, and the recent high-level emphasis placed upon primary health care and the community focus this entails.¹⁸ Additionally, in reference to our earlier point on gender, community-based clinical sciences often have a female bias, together with nursing and both biological and social psychology.

There are distinct trends in disciplines across regions. Over half of all Scholarships and Fellowships in clinical laboratory studies were awarded to candidates from South Asia, as were almost half of hospital-based clinical subject awards. However, just under half of all community-based clinical subject awards were made to candidates from sub-Saharan Africa.

Many of our alumni, studying within different disciplines and towards different qualifications, have had an impact in areas that directly contribute towards the MDGs. These include awards in tropical child health and paediatric cardiology, to take but two examples of work towards the goal of reducing child mortality; feto-maternal medicine and advanced midwifery practice towards the improvement of maternal health; and epidemiology of HIV and malaria immunology towards tackling diseases.

¹⁷ Disciplines are flexible to allow categorisation of all awards.

¹⁸ World Health Organization, *The World Health Report 2008*

Table 4: Health disciplines studied by region

Discipline	Developed Commonwealth	Sub-Saharan Africa	Caribbean	Far East	South Asia	Pacific	Total
Clinical laboratory sciences	100	172	36	54	377	3	742
Community-based clinical subjects	67	370	31	28	140	9	645
Hospital-based clinical subjects	124	282	90	99	579	9	1183
Other studies allied to medicine	43	123	9	14	143	3	335
Other disciplines:	123	358	34	48	261	8	832
Anatomy	3	11	0	0	19	0	33
Dental sciences	28	47	5	27	56	2	165
Nursing	2	75	1	0	0	0	78
Pharmacology	7	59	0	7	50	2	125
Pharmacy	10	86	7	4	57	0	164
Physical education	1	6	2	1	0	0	10
Physiology	19	22	4	2	30	2	79
Psychology (biological)	17	13	3	0	16	0	49
Psychology (social)	36	35	11	7	30	2	121
Other medicine	0	4	1	0	3	0	8
Total	457	1305	200	243	1500	32	3737

Summary

From the analysis of data relating to all awards in health, we found that:

- the absolute number of people taking up health awards has tended to rise decade on decade, and in total represents just over one-fifth of our awards
- the gender gap has closed since the first decade of Commonwealth Scholarships in the 1960s. There were slightly more health-related Scholarships and Fellowships awarded to females than males in the 2000s
- 55 Commonwealth countries and British Overseas Territories have received awards in health-related fields. India and Nigeria have received the most health awards, though recent years have seen a dramatic rise in the number of awards made to sub-Saharan African countries
- Fellowships have accounted for the largest proportion of awards. Awards in hospital-based clinical subjects have declined in number, whereas those relating to community-based clinical subjects have risen
- a large number of our awards have either directly or indirectly contributed to the health-related MDGs

3. Case studies in health

Section four of this report will consider the impact that respondents to the alumni survey say they have had in the health sector, and section five will concentrate on the findings from detailed telephone interviews with five alumni. Before then, we present a selection of alumni case studies. These demonstrate both the geographic reach of our awards and the balance between 'traditional' health fields and less obvious, but nonetheless vitally important, areas that indirectly contribute to improved global health.

Access to **safe water and sanitation** is one such area that plays a critical role in underpinning health and development (Millennium Development Goal 7). Water, hygiene and sanitation form the foundations of basic health, essential for overcoming poverty and increasing education, and provide a stepping stone for improving health in the other areas covered by the MDGs.

Edward Bwengye-Kahororo completed an MSc in Water and Environmental Management at Loughborough University in 2007, on a Commonwealth Distance Learning Scholarship. He works for UNICEF Uganda as a water and environmental sanitation specialist.

'I have successfully influenced the government of Uganda and other partners to provide water supplies to internally displaced persons' camps using motorised systems instead of hand pumps – these are cost effective and minimise the chances of contamination. In July 2007, north-eastern Uganda was affected by severe flash floods, and I was assigned to lead the water, sanitation and hygiene (WASH) cluster in identifying latrine technology for institutions and households affected by the floods and subsequent water logging. The cluster also evolved criteria that were followed by partners engaged in household water treatment using chlorine-based water purification products.'

'In my day-to-day work with local authorities, I work to influence district local government to prioritise UNICEF-Government of Uganda country programme interventions in their planning processes. I have also supported the Ugandan Ministry of Education to enable approximately 1,000 children, living in flood-affected communities in 12 districts in north-eastern Uganda (and including those who had returned to school as a result of the Girls' Education Movement), to continue learning and to efficiently and effectively sit for their primary leaving examinations. This was achieved through advocacy for resource mobilisation, the establishment of temporary learning centres, provision of teaching materials, non-food items and WASH facilities, and the movement of teachers and pupils.'



Edward Bwengye-Kahororo (right) with a district water officer constructing a temporary latrine for flood-affected primary school pupils

A recurring theme is the immediate effect that clean water and sanitation can have in other priority areas, such as education.

Ansumana Swarray, from Sierra Leone, completed his MSc in Water and Environmental Management in 2006, on a Commonwealth Scholarship at Loughborough University.

'As a water supply supervisor at the Ministry of Energy and Power, I was responsible for the provision of safe and affordable drinking water to peri-urban communities, and I helped to reduce water-related health problems. This also helped reduce poverty, as children have the chance to go to school early instead of queuing for several hours to obtain water. I now lecture at Njala University, training students in various aspects of water and environmental management. This type of course has not been taught at the university before, and I learnt the teaching and assessment methods I use during my time in the UK.'

Millennium Development Goals 4 and 5 relate to **child mortality** and **maternal health**. Both are areas in which the CSC has supported a substantial number of awards.

Professor Wah Yun Low completed a PhD in Psychology at the University of Surrey in 1993 as a Commonwealth Academic Staff Scholar. Now a professor and psychologist in the Faculty of Medicine at the University of Malaya, she is involved in teaching, research and consultancy work, particularly in the areas of sexual and reproductive health, HIV/AIDS, men's health, and behavioural medicine.

'My work with the urban poor has generated programmes to improve their lives in terms of health services, childcare and income-generating activities for women and children in poverty-stricken areas of cities. Due to its success, the programme was incorporated into the Malaysian national population plan to uplift the lives of the urban poor in other states in the country.'



Md Sohel Shamsuzzaman was awarded a Commonwealth Scholarship to study MSc Immunology at the London School of Hygiene and Tropical Medicine in 2005. An assistant professor at the University of Dhaka now, he has also been involved in a collaborative research project at the International Centre for Diarrhoeal Disease Research, Bangladesh.

'Very recently, we completed a study at the centre on the effect of zinc on the immunological responses of Bangladeshi children. A randomised double-blind placebo-controlled trial was carried out to observe the effect of zinc treatment compared to zinc treatment plus supplementation in children of 6-24 months of age with acute diarrhoea. The objective of the study was to determine if additional supplementation with zinc has any beneficial effect on the immunological outcomes, and so if it will be important in tackling diarrhoea – a major cause of infant mortality.'



Professor Malik Goonewardene received both a Commonwealth Medical Scholarship and, a decade later, a Commonwealth Medical Fellowship in Obstetrics and Gynaecology. He is now Senior Professor and Head of the Obstetrics and Gynaecology Department at the University of Ruhuna, Sri Lanka. In 2009, he was President of the Sri Lanka College of Obstetricians and Gynaecologists. His expertise placed him in an ideal position to respond to the 2004 tsunami.

'The Teaching Hospital Mahamodara Galle (THMG), the only tertiary care gynaecological and maternity hospital and referral centre for the Southern Province of Sri Lanka (serving a population of about 2.5 million people), was badly damaged by the tsunami of December 2004 and was evacuated and abandoned. Medical undergraduates and postgraduates, nurses and midwives are trained at THMG. From mid-February 2005, services recommenced with difficulty in a couple of repaired wards. I formed the charity Galle Mother Care Foundation, which obtained donations to help re-establish a reasonably satisfactory gynaecological and maternity tertiary care service in Galle by mid-2005. I submitted several proposals appealing for assistance to many national and international, individual and corporate donors and obtained numerous donations, including two fully-equipped mobile field hospitals, a temporary ward, medical equipment, consumables, and training models for undergraduates and postgraduates. I also initiated and coordinated discussions with two international organisations who have agreed to construct and equip a new 600-bed maternity hospital, which is expected to be functional by 2012.'



Commonwealth Scholars and Fellows have also been involved in the fight against **HIV/AIDS and other infectious diseases** (Millennium Development Goal 6). The CSC has sought to increase its impact in this and other areas by diversifying the range of awards it offers. For example, the Commonwealth Professional Fellowships scheme, launched in 2002, is designed for mid-career professionals from developing Commonwealth countries to spend periods (typically three months) with a relevant UK host organisation in their field.



Philip Waweru Mbugua held a Commonwealth Professional Fellowship at Community Service Volunteers in 2005.

'The Commonwealth Professional Fellowship enriched my experience and helped to make me a better leader at the head of a young and dynamic organisation – NOPE (National Organisation of Peer Educators). Peer education involves the use of volunteers, and keeping them motivated is one of the key challenges. This was one of the main areas that I sought to address after my Fellowship in the UK.'

'NOPE works with different organisations to address HIV/AIDS awareness and other emerging challenges. NOPE has facilitated sensitisation meetings for over 1,000 managers to win their support for peer education programmes. Many of the organisations have put in place motivation mechanisms for peer educators, such as provision of t-shirts, training, and recognition through award schemes.'

'The HIV prevalence in Kenya when NOPE started in 2000 was over 14% – this now stands at 7.4%. I therefore feel that NOPE, under my leadership, is making a significant contribution to Kenya's fight against HIV/AIDS. The uniqueness of our programmes and facilitation techniques has created demand for NOPE services beyond Kenya, and we have conducted consultancy services in southern Sudan, Uganda, Tanzania, Somalia, Liberia and Sierra Leone.'

The CSC has supported Commonwealth Scholarships in health for both developed and developing countries. In an increasingly interconnected world, the benefits of a scholarship extend beyond national borders and regional communities.



Dr Richard Henchman is a Commonwealth Scholar from Australia, who started his PhD in Theoretical Chemistry at the University of Southampton in 1996.

'I contributed to the development of the first AIDS drug that targets the enzyme HIV integrase. This drug is called Isentress and was developed by Merck and approved by the FDA in September 2007. We discovered a new region of the enzyme into which the drug could then be designed to fit.'

Emma Richardson, a 2002 Commonwealth Scholar from Canada, graduated from her MSc Development Studies course at the London School of Economics and Political Science in 2003.

'My work for the United Nations in Honduras and Guatemala is multi-faceted, and the understanding of development issues I gained from my MSc in London has helped me considerably to contribute better on a day-to-day basis. In Honduras, for the United Nations Population Fund, I worked on the prevention of HIV/AIDS and of violence in adolescents and youth.'

Many alumni have been involved with setting up laboratories or medical companies; job creation is often a corollary of new health initiatives and advances.

Professor Anuja Padmanatha Premawardhena was awarded a Commonwealth Academic Staff Scholarship in 1998, and studied for a DPhil in Clinical Medicine (Haematology) at the University of Oxford.

'I had the opportunity of working in the Weatherall Institute of Molecular Medicine in Oxford and training in molecular diagnosis of thalassaemia. I have set up two laboratories in Sri Lanka, one of which is now the national reference centre for thalassaemia diagnosis in the country. We have also set up a genetic laboratory, which has been very successful.'

'The research work on thalassaemia in Sri Lanka has been groundbreaking. We have raised the profile of a disease of which there was little awareness in the health sector, including doctors and administrators. Our work here is undoubtedly what led the way to the development of a national thalassaemia prevention programme.'

'Had it not been for my Commonwealth Scholarship, I would have not been able to do my DPhil in Oxford. I would still have got a job and worked in health, but that would have shifted my focus from research to a career as a clinician.'

'I sincerely believe the award helped me open doors that I would have otherwise not have been able to venture into. At present, I am the only person in Sri Lanka who has done specialised work in thalassaemia.'

As with the CSC's Distance Learning Scholarships, which have supported studies in nursing and primary health care, public health has been a focus of the Professional Fellowships scheme too. Since 2002, 33% of Professional Fellowships awarded have been in public health.

The **St Lucia Diabetes Project** has hosted 11 Commonwealth Professional Fellows, who have held placements in the field of diabetes care at several London teaching hospitals. In 2008, a doctor and two nurses from St Lucia were placed at the Diabetes Centre at King's College Hospital. They were treated as part of the team and allowed to attend staff and clinical meetings, and they also had the opportunity to attend in-house training sessions. In addition, time was also spent at a GP surgery, where they were able to observe a diabetes clinic outside the hospital environment. The St Lucia Diabetes Project considers Commonwealth Professional Fellowships to be a wonderful opportunity for the enhancement of diabetes care in St Lucia.



Harriette Smith, 2006 Commonwealth Professional Fellow at the St Lucia Diabetes Project, attending to a patient

The **Association of Guyanese Nurses and Allied Professionals in the UK (AGNAP)** has hosted six Commonwealth Professional Fellows – five nurses and one doctor – all working in the field of the care and management of sickle cell disease and thalassaemia. The Fellowships had particular focus on the area of pain control and the physical and emotional aspects of care, as well as greater insight into prevention through screening and developmental techniques. The knowledge and skills gained have been of great value to the Fellows and also their employers in Guyana, with one hospital commenting that it is 'extremely grateful for the exposure the Fellows have had whilst in the UK and is benefiting from special clinics that the Fellows are now able to offer and proud of the improved delivery service now being given to patients'. AGNAP, a group set up by Guyanese diaspora in 1988, has also benefited, as the Professional Fellowship scheme has helped to raise its profile with the government of Guyana and other contacts, as well as increasing its portfolio of activities in the UK.

4. Assessing impact in the health sector: survey responses

This section provides statistics based on responses to the 2008 alumni evaluation survey. We will assess the impact that awards have had upon individuals, in terms of knowledge and skills gained, and how this has translated into practical application in the workplace, as well as the impact of our alumni on wider society. As these are responses to a survey, alumni were themselves making a judgement about what impact they have had and in what areas. The responses do not, therefore, represent an independent assessment, but they nevertheless provide an extremely valuable insight into the work and impact of our respondents.

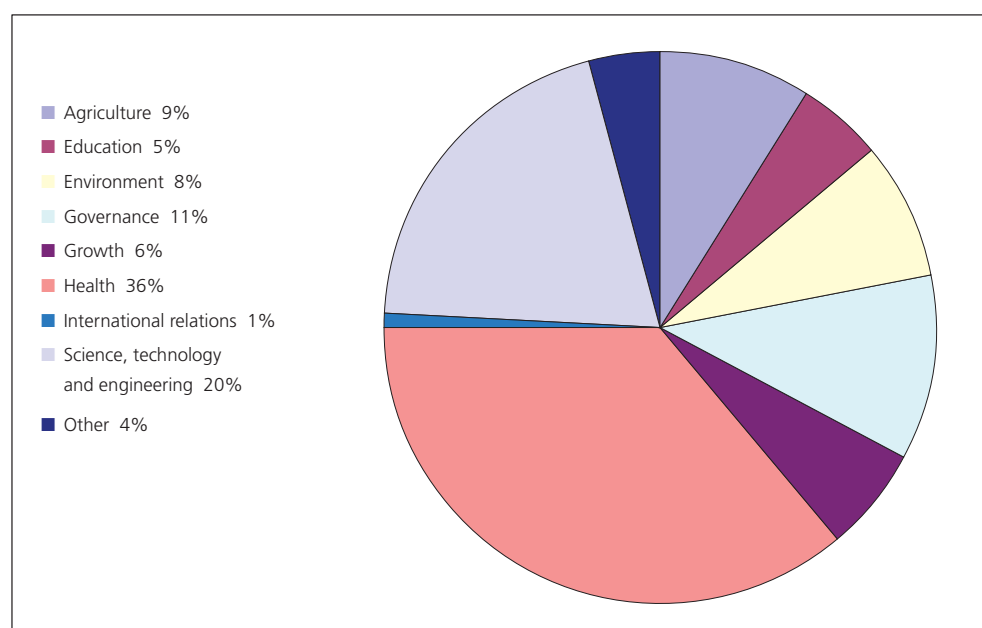
Who has had an impact in health?

Of the 2,226 responses to the evaluation survey, 359 (16%) have held awards classified by us as directly health-related. This is slightly less than representative of the 22% of all our alumni who have held health-related awards, and, whilst the respondents accurately reflect the regional spread of the alumni group as a whole, those who studied community-based clinical subjects, such as epidemiology and public health, were the most represented amongst our respondents. Over 89% of the 359 are now working in their home country.

Alumni in non-health disciplines report an impact in health

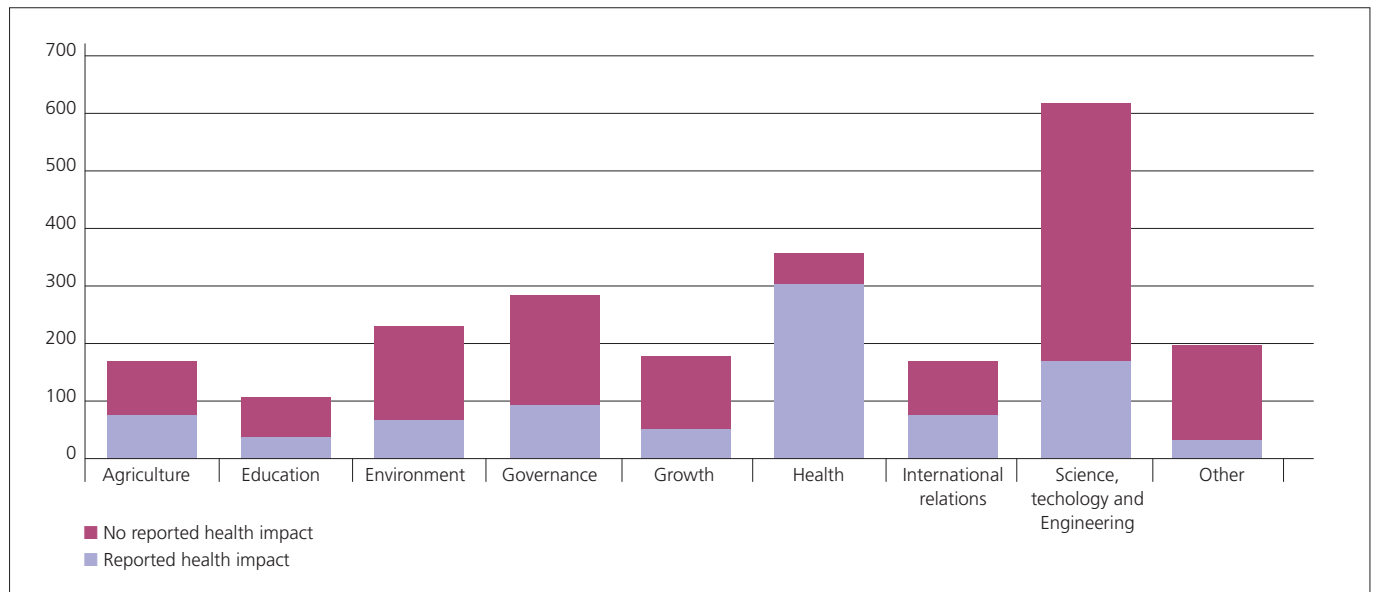
38% of respondents (851 individuals) said that they have had an impact in health. Furthermore, of the 1,867 respondents who did not study in a health-related field, 541 (29%) said that they had an impact in health. 51 of these people report having an impact in all three impact indicators: project involvement, government influence and socio-economic impact.

Figure 5: Reported impact in health by discipline



When considering all alumni by discipline, the actual *proportion* of those who had an impact in the health sector varies, as we can see from Figure 6. Agriculture (42%), education (39%), and governance (33%) score particularly highly. To take agriculture as an example, a number of respondents mentioned activity and research focusing on areas such as nutrition and food technology.

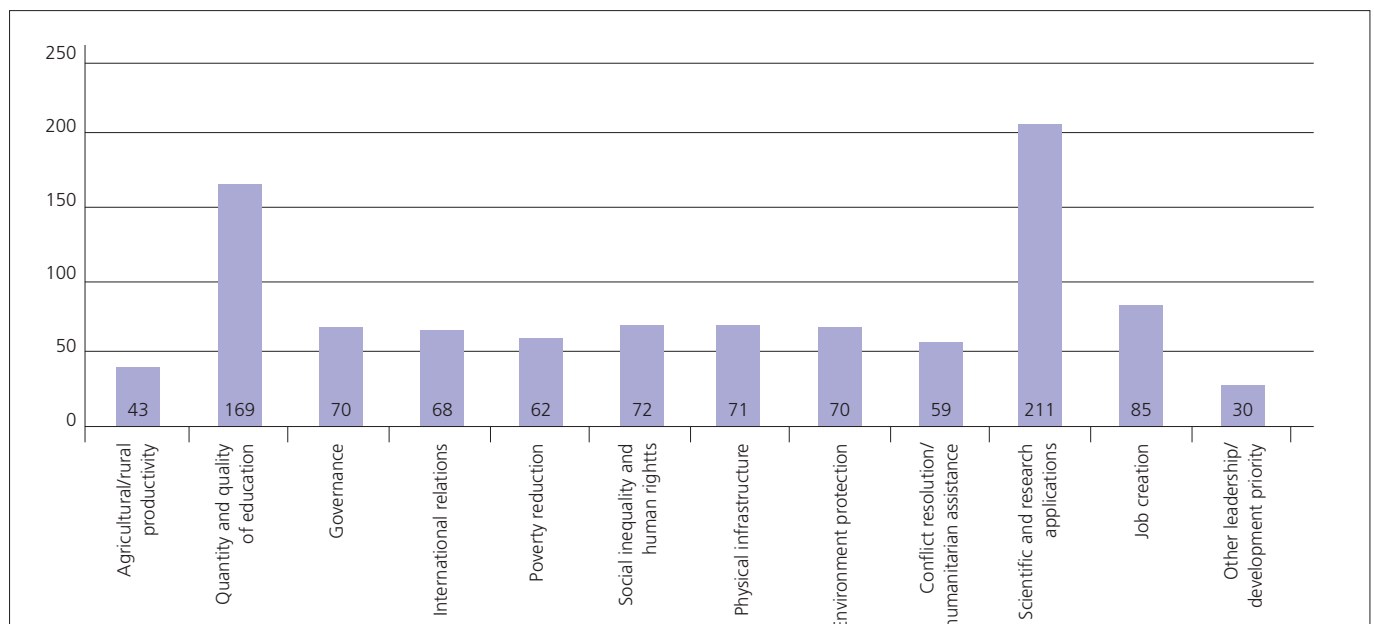
Figure 6: Proportion of alumni reporting impact in health by discipline



Alumni of scholarships in health disciplines report impact in wider areas

Figure 7 shows the other areas in which our health alumni have had an impact. Particularly noteworthy is the prominence of education and science, and that those who report impact in health also report a relatively high impact in job creation. Our Scholarships and Fellowships, therefore, have had a two-way, cross-disciplinary impact. This underlines the fact that ‘development’ as a field is composed of interrelated and interdependent fields, which should not be seen as isolated disciplines.

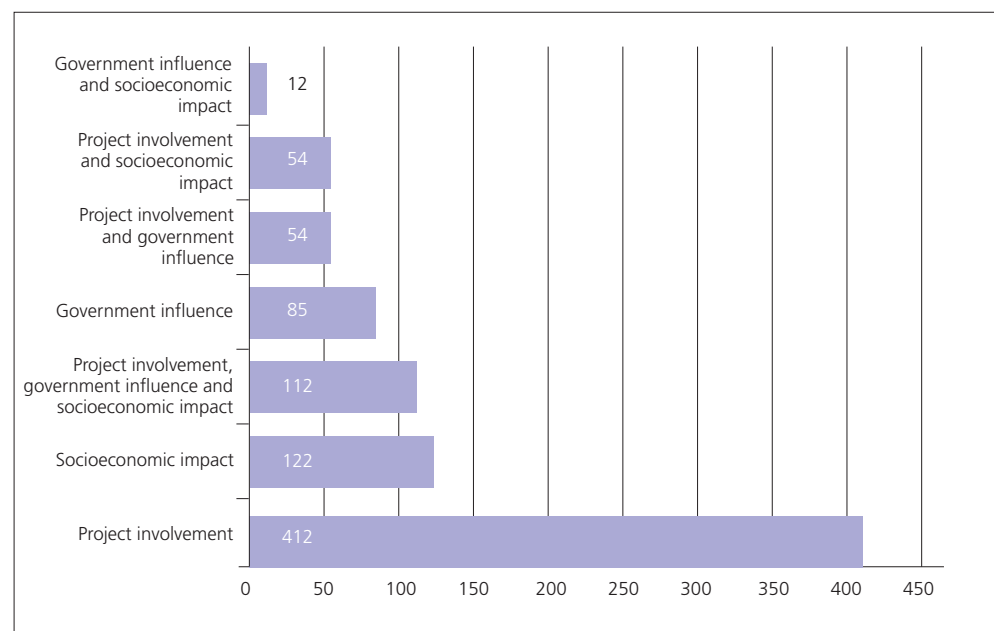
Figure 7: Further impact areas of alumni who studied and reported an impact in health



When considering impact in terms of year of award and region, we found that 33-41% of those beginning their awards in each decade reported impact in health in one or other capacity. Looking at region, we found that over 40% of respondents from South Asia, sub-Saharan Africa and the Far East reported activity here, as did 35% of those from the Caribbean. Looking at impact in terms of scheme, it was unsurprising that high proportions of those who held Medical Scholarships and Fellowships reported impact (over 88% for both schemes), although the low numbers of respondents from these schemes overall should be noted. Over 57% of Professional Fellows responding to the survey also reported impact – a positive finding, as public health is one of the focus areas of the scheme.

We can break down further the form this impact took. In the final section of the alumni survey, we requested information regarding wider impact, asking respondents to identify whether they had been able to make changes in their workplaces, as well as whether they had been involved in a specific project, helped government thinking and policy, and/or contributed to wider socioeconomic impact in one or more of twelve key areas relevant to the development and leadership priorities of our funding bodies, including health. We used these three impact indicators – project involvement, government influence and socioeconomic impact – to measure the impact of alumni in health. As we might expect, and as Figure 8 confirms, the greatest impact reported was in specific projects, with almost three-quarters of responses in this area reporting impact. In addition, 31% of respondents reported having influence on government thinking or policy, and 35% having a socioeconomic impact. 629 of the 851 individuals gave specific examples of the impact they have had, albeit in any of the priority areas.

Figure 8: Reported impact in health by impact indicator



Of the 359 respondents who were classed as studying a health-related discipline, over four-fifths (86%) reported some form of impact in health. 71% of the 359 respondents reported project involvement, and just over 31% reported government influence in relation to health; the same percentage have had a socioeconomic impact here. 17% reported an impact in all three areas.

Impact on individuals and institutions

Knowledge gained

Former award holders were asked to assess the extent of knowledge and skills gained during their studies. 99% of respondents who had studied in health disciplines said that they had gained some knowledge in their field of expertise as a result of their studies, with 92% reporting that they had done so significantly. 92% of respondents also reported having had access during their award in the UK to equipment and expertise not available in their own country. Similarly, there was a positive response regarding the acquisition of skills, with 99% answering that they had increased their analytical and technical skills (79% significantly, 20% to some extent), and 87% that they had acquired techniques for managing and organising people and projects (50% significantly, 37% to some extent).

Figure 9: 'I gained knowledge in my field of expertise'

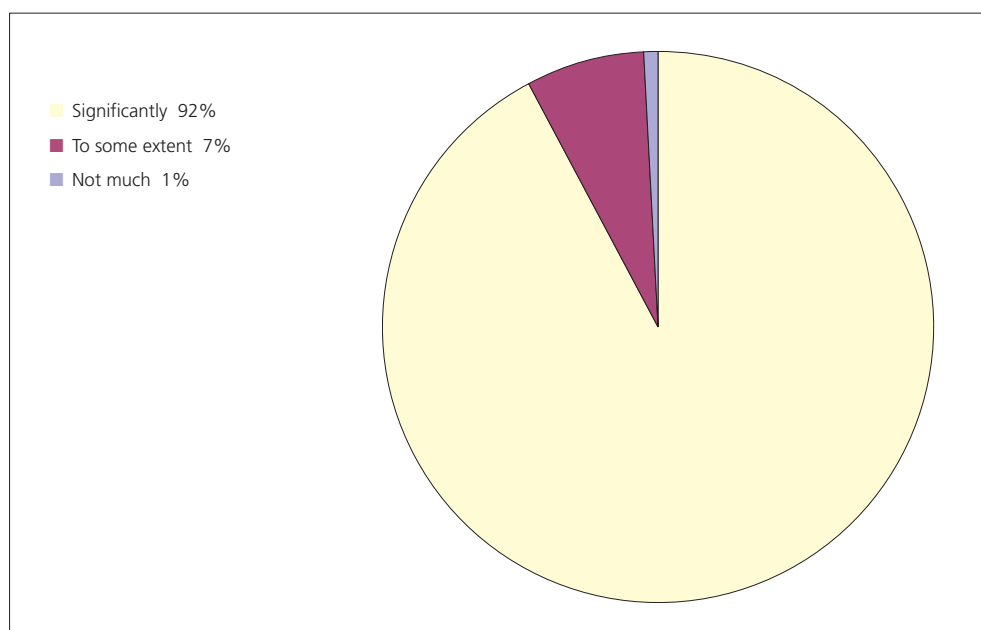
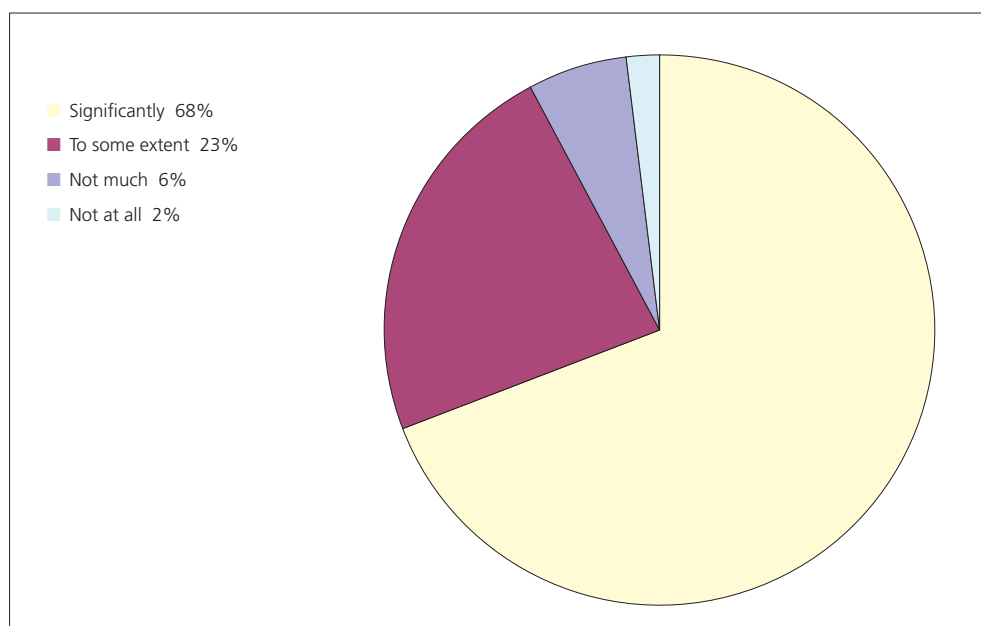


Figure 10: 'I accessed equipment and expertise not available in my home country'



After a Commonwealth Medical Fellowship at Middlesex Hospital, London, in the mid-1980s, **Dr Clarence Charles** returned to Guyana as the country's first gastroenterologist. He established an endoscopy unit at the West Demerara Regional Hospital, and later worked at Georgetown Hospital. He was also Medical Director of the School of Medicine at the University of Guyana, where he developed the Gastroenterology, Hepatology and Nutrition Unit. Clarence practised in Guyana for 11 years before taking up his current position as Medical Director of Rapha Medical Centre, in the Cayman Islands. Before leaving Guyana, he invited one of his graduate students to understudy and train with him and, in 2000, handed over his practice, thus ensuring that Guyana continued to benefit from having a practising gastroenterologist.

'My Commonwealth Scholarship allowed me to work at one of the leading centres in gastroenterology in the UK, under the supervision of eminent gastroenterologists. I participated fully in all the activities of this very active, ethnically diverse and highly-qualified clinical research-oriented unit. My experience in the UK was invaluable to my practice in the Caribbean.'

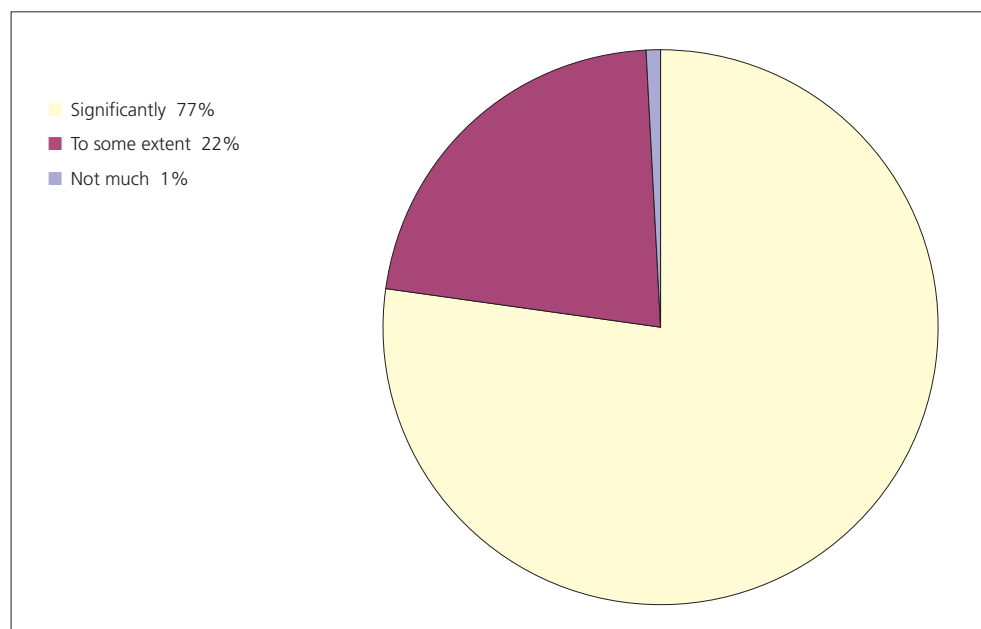
Knowledge utilised

Most of the survey respondents took up their awards following a period of employment, rather than continuing direct from education. Of those who were students before their Commonwealth Scholarship or Fellowship, 79% obtained employment within 12 months of finishing their award. 56% of those previously in employment obtained a more senior post within 12 months of finishing their award.

Moreover, 92% said that they thought that their award helped them obtain advancement *after* this 12-month period. This suggests that awards in the health sector have a strong long-term impact.

Figure 11 shows that the overwhelming majority of award holders use the skills and knowledge gained from their award in their work. Furthermore, almost 97% found that their award increases their ability to have influence and make changes in their workplace – a larger proportion than across all awards.

Figure 11: 'I use the specific skills and knowledge gained on award in my work'



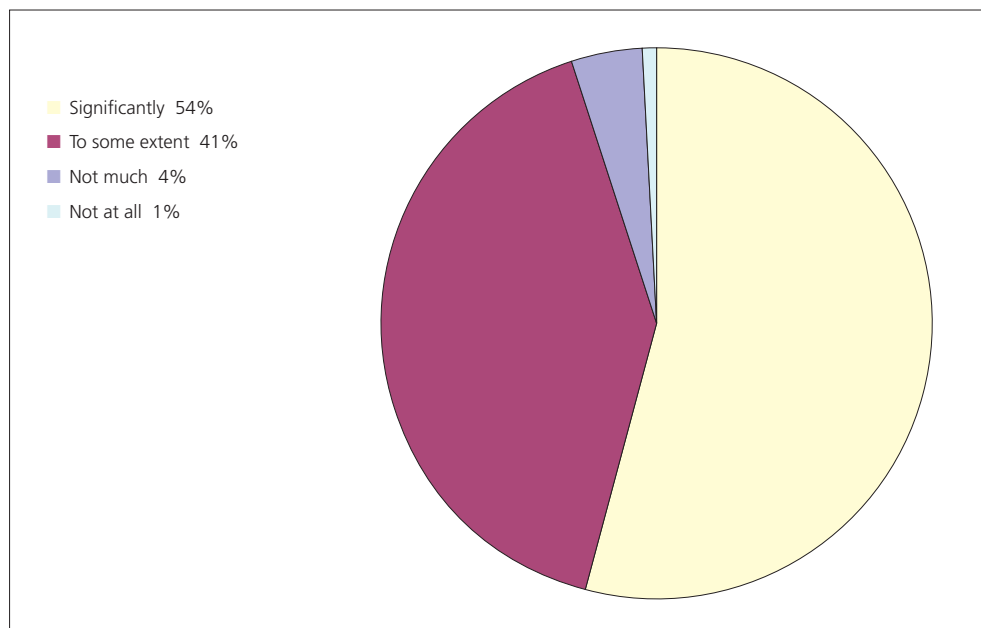
International links and collaboration

In addition to accessing otherwise unavailable expertise and equipment, another benefit arising from the international nature of Commonwealth Scholarships and Fellowships is the encouragement of international links, collaboration and partnerships. Over half of the survey respondents classed as studying in health-related fields said that they had maintained links with UK universities significantly or to some extent (63%). 58% said the same of work contacts in the UK, while 60% maintained contact with professional associations and 75% with social contacts.

Wider impact on society

In order to gauge contribution to wider society, we asked respondents whether they have been able to introduce new practices or innovations in any positions they have held since their award, whether voluntary or professional. 95% have done so significantly or to some extent.

Figure 12: 'I have been able to introduce new practices or innovations as a result of my award'



The CSC's role in international scholarships

As has been seen, alumni who studied a health discipline have said that they had a high level of impact following their award. We can, furthermore, try to measure the opportunity rendered – did the CSC provide a unique opportunity to acquire these skills and expertise through a scholarship, or would the individual have found other means to acquire their qualifications?

The survey asked alumni to say what they thought might have happened if they had not received their Commonwealth Scholarship or Fellowship. Looking at the survey as a whole, most respondents said that, if they had not been awarded a Commonwealth Scholarship or Fellowship, they would not have been able to study the same UK programme. Only 14% thought that they were 'very likely' to have found alternate means to do so.

It is important to note, when considering international scholarships, that if one person accepts a scholarship, this does not mean someone else necessarily loses out. If a candidate had been able to secure funding from elsewhere to study in the UK, but still chose to take up a Commonwealth Scholarship or Fellowship, this may indicate that the CSC is supporting the strongest candidates. In turn, alternate funding elsewhere can then support a further deserving individual.

The questions asked in the alumni survey are useful for measuring the long-term impact of an award; however, intended outcomes – particularly those that are not easily measurable, such as socioeconomic impact – are unlikely to be immediately apparent. In order to explore ways in which Commonwealth Scholarships and Fellowships have affected the lives of alumni and have had a beneficial impact on the wider society of their home countries, we conducted five detailed interviews, which we examine in the next section.

Summary

From analysing the survey data of those alumni who had studied in health and/or had an impact in health after their award, we found that:

- whilst 16% of respondents had studied a health-related subject, 38% of respondents indicated that they have had an impact in health. Our awards have a wide, cross-disciplinary impact
- over 89% of health-related respondents are working in their home country
- the greatest health impact reported was in specific projects, with almost three-quarters of responses in this area reporting impact. In addition, 31% of responses reported having influence on government thinking or policy, and 35% having a socioeconomic impact
- of those who had studied a health discipline, over 99% had gained knowledge and skills through their awards, and 92% had had access to equipment and expertise not available in their home countries. Furthermore, almost 97% found that their award had increased their ability to have influence and make changes in their work, a higher percentage than across all awards in total
- 92% found that their award helped them obtain career advancement within 12 months of finishing their award

5. Assessing impact in the health sector: interviews with individuals

Phase Three of our evaluation programme seeks to understand better what changes in individual award holders' careers and professional lives, as well as to wider society, can be attributed to their Scholarship or Fellowship, and to move beyond the survey data. To do so, we interviewed by telephone five alumni who had reported having an involvement in health, and who had said that they would have been unlikely to undertake a similar programme in their home country. The interviews highlight the wide range of roles in the health sector in which our alumni are involved, and a number of recurring themes concerning the impact of their awards. This section begins by profiling the alumni who were interviewed, and then explores these themes in more depth.

Who did we interview?

Clementine Mashwama – Swaziland

Commonwealth Scholar Clementine graduated with an MSc in Community Paediatrics from the University of Nottingham in 2001. She is a senior lecturer and coordinator at the Nazarene College of Nursing in Swaziland, responsible for teaching paediatrics as well as examining, developing and implementing the curriculum, and evaluating the college's strategic plan and policies. She is also Project Director of the Swaziland Mothers' Union Orphan and Vulnerable Children's Project, and chairs her church fundraising committee.



Dr Bhaskara Rao Malla – India

Bhaskara is a consultant neurosurgeon, and co-founded the first and most active epilepsy surgery programme in India at the Sree Chitra Tirunal Institute for Medical Sciences and Technology. He was awarded a Commonwealth Fellowship in Functional Neurosurgery at King's College Hospital in 2000. Following his award, Bhaskara expanded and improved the programme in India, and also initiated epilepsy surgery programmes in Sri Lanka and the Middle East. He is currently establishing a programme at the Kokilaben Dhirubhai Ambani Hospital and Medical Research Institute in Mumbai, India.



Samson Mulyanga – Kenya

Samson held a Commonwealth Distance Learning Scholarship to study MSc Computer-based Information Systems at the University of Sunderland. He graduated in 2007, and his award helped him to secure his current job as a programme officer at Family Care International, Kenya, improving health systems to manage maternal health care. Working closely with the Ministry of Health, Samson's role includes responsibility for the Safe Motherhood and HIV/AIDS projects, and he has trained health workers in Kenya and Tanzania in COPE, a quality maternal care tool.





Dr Patricia Vella Bonanno – Malta

Shortly after graduating from her PhD in Medicines and Formulary Management from Robert Gordon University in 2003, Commonwealth Scholar Patricia was appointed Chief Executive Officer of the Medicines Authority in Malta. This was a new post arising out of Malta's accession into the EU, the implications of which she had studied in her PhD. Patricia is involved at a regulatory and policy level both nationally and at EU level, and she has been particularly effective in ensuring that the needs of small states are considered in EU legislation on medicines.



Lamin Samateh – The Gambia

Lamin works in the World Health Organization's Regional Office for Africa, and was formerly Permanent Secretary of the Ministry of Health in the Gambia, following his Commonwealth Scholarship studying MSc Demography at the London School of Economics and Political Science in 1980-1981. He led a reform of the health sector in the Gambia, extending and improving health infrastructure throughout the country, and has previously been involved in developing adult literacy programmes for women in rural areas. He now works on the provision of medical supplies, equipment and services to 46 African countries.

What did we find?

We found that awards can act as a catalyst for development

The benefits of a single scholarship can ultimately reach many people. One theme that emerged from the interviews was the 'multiplier effects' of an award, which further confirms the strong long-term impact and value for money investment that scholarships represent for international development efforts. The catalytic effects of awards in the health field are further reflected by the relatively high number of survey respondents who recorded a high impact in the area of job creation (see Figure 7).

Following the conclusions of her Master's dissertation, a report written by Clementine and several others explaining that children were ignored and marginalised led to the Swaziland government and UNICEF establishing a Child Unit.

Clementine Mashwama initiated the Orphan and Vulnerable Children's Project as a result of a recommendation in her Master's dissertation. 'I piloted the project in Manzini, central Swaziland, and it has since grown to three other territories. The orphan project was a breakthrough, and helped people realise that this was a serious problem.' As the project grew, so did government awareness: 'Some of our church members work in the government, so they would go back and report on what we were doing. The government then established neighbourhood care points, and so in every area you will now find a neighbourhood care point where children will go to be fed and taught how to read and write. They have also established an office in the Ministry of Health to manage the neighbourhood care points'. Likewise, Clementine's work at the Nazarene College of Nursing has led to wide-ranging reforms. Following the conclusions of her Master's dissertation, a report written by Clementine and several others explaining that children were ignored and marginalised led to the Swaziland government and UNICEF establishing a Child Unit. 'This represented quite a shift, and they were now subsidising the school fees for orphaned children for four years. From 2010 they aim to provide completely free education.' She is currently working on a comprehensive policy that will be submitted to the government to provide guidelines for the care of children. 'There needs to be a stronger focus on children', she explains. 'Also, when it comes to disability, this issue is even greater.'

Part of Samson Mulyanga's role, working within an EU-funded Safe Motherhood programme at Family Care International, Kenya, has been to train health workers in quality maternal health care using a tool called COPE (Client Orientated, Provider Efficient). Here, the skills he learnt during his Master's degree provided the necessary base for implementing the tool. 'The analytical skills inherent as part of the course in systems analysis were pivotal in helping me identify gaps in the delivery of maternal health care. The management skills enhanced capacity, mainly in product design, implementation strategy, monitoring and evaluation.' Samson provided an example of how COPE led to an increase in the number of people seeking care: in Muumandu Health Centre, numbers increased from 829 to 1,449 in the month following the introduction of COPE. 'My task was to roll that out, improve it, and then train the health workers. Our management in New York heard that we had done so well in Kenya – I trained 512 health workers – that they wanted us to train other staff in Tanzania. I trained doctors and nurses, plus the training teams. Now they are at a stage where they can proceed further training by themselves. Looking back, I couldn't have done that actively without the kind of training I got thanks to this course.' In addition, Samson has maintained contact with 17 Kenyan Commonwealth Distance Learning Scholars, in order to share information and interact about matters of shared concern.

Now they are at a stage where they can proceed further training by themselves. Looking back, I couldn't have done that actively without the kind of training I got thanks to this course.

Dr Bhaskara Rao Malla's Commonwealth Fellowship focused on functional neurosurgery for people with medically-intractable epilepsy. In addition to increasing his skills in neurosurgery, he was able to implement a new organisational approach upon his return to India. 'In India, as well as many developing countries, medicine is largely practiced on an individual basis, whereas in established centres in the UK, such as King's, we found that a team approach is better for tackling difficult health-related issues. The first thing we did was to assemble a team of people who are qualified and trained in this area, and initiated this programme in my current hospital. I also learnt about the research and training methodology which subsequently helped me to train our postgraduates and junior colleagues.' This team-based approach, including the facility to 'pull' resources from different areas of expertise to solve problems, has been implemented in many medical institutions in India. As with Samson, the benefits of Bhaskara's award have reached beyond the borders of his home country. 'As soon as I returned from the Fellowship, I had the opportunity to start an epilepsy surgery programme in Sri Lanka. Since then, over 100 people have undergone epilepsy surgery procedures successfully at the National Hospital, Colombo.'

I also learnt about the research and training methodology which subsequently helped me to train our postgraduates and junior colleagues.

Lamin Samateh's MSc focused on mortality and fertility rates, and this formed the basis of policy decisions in his role as Permanent Secretary of the Ministry of Health, Social Welfare and Women's Affairs in the Gambia. He also led, together with a team of health experts, a reform of the health sector. 'The hospitals were rehabilitated and refurbished. We carried out a lot of decentralisation of the functions of the ministry; the hospitals became semi-autonomous, and this provided an incentive for the doctors to stay and not leave for the private sector. We also carried out a huge training programme for nurses who were deployed at the district health centres, and we sent health workers abroad [for training] in certain disciplines. We then provided these district health centres with drugs and equipment.' Crucially, these reforms have continued since Lamin moved to the World Health Organization after six years at the ministry. 'A lot of things that we did formed the basis of the health development that is taking place in the country today.'

A lot of things that we did formed the basis of the health development that is taking place in the country today.

We found that our awards help Scholars and Fellows challenge existing practices and knowledge

The interviews brought to light the important role of key outcomes and recommendations that emerge from research carried out while on award, whether in the UK or by distance. Awards have allowed Scholars and Fellows to solve problems, anticipate issues, and formulate recommendations that, in many instances, enable them to become pioneers of new strategies and policies and respected leaders in their fields.

I want to establish this programme not only in India, but also other countries with limited resources.

Bhaskara had already established a basic epilepsy surgery programme in India by the time he started his Commonwealth Fellowship. However, with five million people with epilepsy and 300,000 potential surgical candidates in India alone, it has been calculated that, at current rates, it will take 200 years to clear the backlog of operations. 'Through the Fellowship, I learned how to manage difficult cases from a clinical point of view. In many areas, there will be residual problems. People need prolonged rehabilitation; some may need long-term hospital management. I found that with epilepsy, for a child who cannot go to school, a man or woman who cannot get a job, once treated and managed epilepsy is no longer any form of "burden" on society and they can become a productive member of society.' Bhaskara has also been involved with developments in India that deliver surgical treatments at a greatly reduced cost. 'Until recently, this sort of work has been confined largely to industrialised countries because it needs a lot of investment, infrastructure and funding. In India, we were able to deliver the service at a fractional cost, whilst achieving the same results. I want to establish this programme not only in India, but also other countries with limited resources.'

Public knowledge has changed a lot; now, people know that children grieve, like any other adult. They know that they have to listen to a bereaved child, and children need to be protected and need to play, in order to grow.

Clementine's Master's dissertation focused on the attitudes of caregivers to child bereavement. She explains that, prior to the study, 'the knowledge of caregivers about bereaved children was minimal – people didn't realise that a child needs to grieve. One consequence of having one of the highest HIV rates in the world is the large numbers of orphans, so there was a need for the government to help extended families with the extra care they need to provide for orphans, and educating people on how to help grieving children'. There were several recommendations that emerged from Clementine's study, including setting up an Orphan and Vulnerable Children's Project as part of the Swaziland Mothers' Union. 'One study recommendation was a focus group for orphans, so they could learn from one another, and how they cope. It is a place where orphans can play, and be with people who care for them and love them.' Such work has helped to challenge the notion that children do not undergo the same grieving process as adults. 'Public knowledge has changed a lot; now, people know that children grieve, like any other adult. They know that they have to listen to a bereaved child, and children need to be protected and need to play, in order to grow.'

I had studied the pros and cons and the pitfalls, and what would be the problems. Some of it materialised, so I could prevent it.

Dr Patricia Vella Bonanno's PhD thesis, entitled 'Introducing New Drugs: A Case Study for Malta', allowed her to anticipate the consequences of EU accession for Malta. 'A major objective of my PhD was to study accession, and so I knew when I returned home, just as Malta joined the EU, what the impact would be. I had studied the pros and cons and the pitfalls, and what would be the problems. Some of it materialised, so I could prevent it.' One example is the availability of medicines following EU legislation that tightened quality controls. 'From the public health point of view, in terms of quality, this was a big plus. But it did mean a lack of availability of certain products, something I had pre-empted from the beginning. I was involved at quite a high EU level to bring up this problem and, together with five other small EU states, formed the Task Force on the Availability of Human Medicinal Products, which successfully pushed through legislation to address this gap in availability.'

Samson chose to specialise in electronic medical record systems for his MSc research project. 'One thing that really surprised me in my research was the lack of sensitisation about ethics with medical records. You may find, for example, that a system administrator has more privileges to patient information than even the MD. If systems are not managed properly, they impact on the quality of care; they infringe on local patient rights. Also, facilities with good systems are more efficient and faster, so there is less wastage, patient information is retrieved faster, and patient satisfaction is higher.' Working for Family Care International, in conjunction with the Kenyan Ministry of Health, Samson is involved in training administrators on data and record management issues, and how these impact on the provision of health care, in particular maternal health care.

Lamin held his scholarship in 1981, and so is the earliest award holder to be interviewed. His studies in the UK focused on demographic analysis, with particular reference to fertility and mortality trends. Not only did other Gambians who later studied at the London School of Hygiene and Tropical Medicine (LSHTM) reference Lamin's work, but the demographic data also formed the basis of recommendations once he became Permanent Secretary of the Ministry of Health in the Gambia. 'In the policies we formulated, there were a lot of inputs that would have not been possible if I had not had this experience at LSHTM. I was able, together with colleagues, to push the health sector reform with confidence as we were armed with demographic data on mortality and fertility and health statistics.'

We found that Commonwealth Scholarships 'open doors', and that Commonwealth Scholars and Fellows are highly sought after

Much of the research undertaken whilst on award is pioneering and cutting-edge, and the skills and knowledge gained by alumni can often be put to use with immediate effect upon their return home. With Patricia's thesis anticipating the consequences of EU accession, the government employed her soon after her return to Malta as Chief Executive Officer of the Medicines Authority. 'The government considered me to be an asset, so I got quite a lot of support for what I was implementing. It helped quite a lot that I had the PhD and knew about the area; the area was new to most people.'

For others, such as Bhaskara, the award led to a promotion. 'Once I returned to India, I got a promotion in my academic position, and got an opportunity to expand and improve the epilepsy surgery programme. The Fellowship also helped me get the opportunity to work for a while in the Middle East as a consultant.'

Lamin worked at several ministries after returning to the Gambia, including the Ministry of Tourism and Information, the Ministry for Local Government, and the Personnel Management Office, where he carried out civil service reform. This last job, together with the knowledge he had gained whilst on award in the UK, led to his role as Permanent Secretary of the Ministry of Health. 'They wanted to reform the health service, so I was moved there. I had worked with the head of the civil service before and he remembered that, since I had studied demography, I would be suited to the role.'

Often, the qualification alone can increase the influence and reach of alumni. 'My influence has changed with health department officials, because people tend to listen when you have a Master's degree; people have a different picture', said Clementine. Samson agreed: 'Having the qualification gives you eligibility to do other things. Opportunities open up when you have that sort of experience. The privilege alone of having a scholarship says something about you; it shows that you passed through a system of assessment.'

If systems are not managed properly, they impact on the quality of care; they infringe on local patient rights.

Not only did other Gambians who later studied at the London School of Hygiene and Tropical Medicine reference Lamin's work, but the demographic data also formed the basis of recommendations once he became Permanent Secretary of the Ministry of Health in the Gambia.

The government considered me to be an asset, so I got quite a lot of support for what I was implementing.

Once I returned to India, I got a promotion in my academic position, and got an opportunity to expand and improve the epilepsy surgery programme.

Opportunities open up when you have that sort of experience.

We found that study in the UK has several important advantages

Study in the UK allows many Commonwealth Scholars and Fellows access to equipment and expertise that may not be readily available in their home country. The benefits can also be more subtle; studying outside one's home country can offer a fresh perspective and, in some cases, can provide space to be both constructive and critical.

I had all the books and reference works that weren't available in Swaziland, especially higher-level medicine books... I was a generalist before, and the course focused my interests and skills.

'I had all the equipment that I needed, and I had all the books and reference works that weren't available in Swaziland, especially higher-level medicine books. Also, at the time, access to the internet back home was difficult', said Clementine, who studied at the University of Nottingham. Furthermore, as other interviewees also noted, teaching styles are different. 'We were exposed to different ways of doing things, especially during the practicals. The paediatric setting was different in Nottingham, so I noted how things were done, and study here gave me an opportunity to apply some of these things at a later stage, such as how best to conduct the physical assessments of children. I was a generalist before, and the course focused my interests and skills.'

I don't think the emphasis on quality would have been achieved elsewhere ... There was a real emphasis on professionalism and thoroughness.

Samson agreed: 'There was a great emphasis on quality assurance. I don't think the emphasis on quality would have been achieved elsewhere.' Although he studied solely by distance whilst living in Kenya, Samson was impressed by the academic standards imposed by the University of Sunderland. 'The whole course was very closely monitored; even though the course was a practical one about systems, there were very strict academic rules and this shapes you into a certain way of thinking. There was a real emphasis on professionalism and thoroughness.'

The award gave me a lot of confidence; the confidence that I could meaningfully contribute, and practically participate.

Lamin talked about his interaction with renowned lecturers at the London School of Economics and Political Science, and the opportunity to be taught by authors of books he had read before travelling to the UK. He added that 'the award gave me a lot of confidence; the confidence that I could meaningfully contribute, and practically participate'. Furthermore, links with the UK are not limited to the duration of the award. Lamin later returned to the UK on several official visits, including participating in a health development programme run by the Overseas Development Administration (ODA), now DFID.

There are many specialist research centres and international collaborations which make the UK an excellent place for internationally-focused research. Patricia, after speaking with the World Health Organization's Regional Advisor for Europe, chose Robert Gordon University because of a special WHO collaborative centre that had been established there. Furthermore, she identified the multidisciplinary nature of UK universities as being of particular benefit. 'My tutor would say, "I don't know much about this new area of methodology, but the nursing department is specialising in this", so I would be referred to them. Similarly, for statistics I was referred to the maths department, and I even went to the University of Glasgow to study with their pharmaceutical economics department.'

We found that awards often cut across disciplinary boundaries, and help develop a wide set of transferable skills

Scholarships and Fellowships encourage the development of transferable skills, and the ability to contribute significantly beyond the immediate area of expertise. As the statistical analysis of our survey data demonstrated, there is much interaction and overlap between disciplines, such as health and education, to take but one example. In addition, the interviews highlighted the importance of policy in the health sector, and the significant contribution each interviewee has made in this regard.

Returning to the Gambian civil service following his MSc, Lamin worked in several government departments, before spending six years at the Ministry of Health as Permanent Secretary. 'As a generalist public servant, the government can send you to serve in any ministry, but then they also had committees – planning committees, coordinating committees – where a senior civil servant was required to contribute. I realise that I was really well equipped and prepared, and able to participate.' In many developing countries, it is not enough to be a specialist in one role, but necessary to be capable of fulfilling several.

I realise that I was really well equipped and prepared, and able to participate.

Patricia developed a technical model whilst working towards her PhD, the use of which extended beyond the PhD. 'I still identify with and use the model – it helped me see a certain way of looking at things, and the processes that are interacting. In fact, I used the model when I recently presented a paper in Iceland, about the challenges facing small island states.' She said that her award helped in many ways with the things she does today, including a strong grounding in methodological research. 'The award changed me. I get a lot of students who visit me for help in organising their theses, from many departments – law, such as pharmaceutical legislation; a Master of Arts student looking at how being a small state impacts on the availability of medicines; and even a student from the faculty of geology.'

I still identify with and use the model – it helped me see a certain way of looking at things.

As with several of the interviewees, such as Clementine and her work with the Ministry of Health in Swaziland, Patricia's work in the field of health strongly overlaps with politics and policy. 'The PhD trained me for my role. I realised, with the help of my tutors, that there is a much bigger picture that must be considered. My post is a technical one, but it's also much more political; it's not just public health.'

I realised, with the help of my tutors, that there is a much bigger picture that must be considered.

Furthermore, skills are transferable. Samson's work with information systems is applicable in many areas. 'My knowledge in systems in a healthcare context can spread, for example, to financial management in healthcare facilities. This knowledge was all from the course, and can especially help in small facilities managed by communities. Once you understand systems you can make wide-ranging changes.' He added that his work calls for him to be multi-skilled. 'The nature of the course gave me that capability, and helps me to be able to deal with things, especially at management level. Health is affected by so many things, outside the strictly health area.' Samson has also helped set up Women Deliver Kenya, an offshoot of the main Women Deliver advocacy group for maternal health, since completing his Scholarship. 'We are trying to make sure there is a political commitment to and investment in maternal health. I've also been involved in developing guidelines for doctors, given the knowledge that I already have in health systems.'

My knowledge in systems in a healthcare context can spread, for example, to financial management in healthcare facilities... Health is affected by so many things, outside the strictly health area.

Summary

We found that having a Commonwealth Scholarship or Fellowship made a difference in achieving impact in key areas

In each of the areas considered, Commonwealth Scholarships and Fellowships have made a difference in achieving impact – from Masters' degrees to six-month Fellowships, from Distance Learning Scholarships to three years of PhD study in the UK. Awards can focus the abilities of a 'generalist' to produce a specialist, or broaden the range of specialist knowledge that an individual already possesses. Awards have a catalytic effect that far outlasts the time spent studying and researching, and this often produces outcomes that challenge existing practices and knowledge, often on a scale that reaches beyond national boundaries.

As the analysis in section four of this report suggests, for many alumni, the opportunity to study a degree at a UK institution would have been difficult without a Scholarship or Fellowship.

For Clementine, there were few opportunities to study a similar paediatric course in Swaziland or even neighbouring countries. 'The closest course was a certificate, offered by Red Cross Hospital in Cape Town [South Africa], but I wanted a higher qualification in order to realise my goals. If I hadn't received the Scholarship, I would have tried to pay for myself to do the certificate course through correspondence.' Similarly, there was no opportunity at the time of Lamin's Scholarship to study demography in the Gambia; indeed, the University of The Gambia was not founded until 1999.

Patricia had started studying in the UK, but was unable to secure funding and returned to Malta. 'It would have been very difficult to study without the funding', she said. 'As soon as my studies started to really develop, my initial funding had run out.'

The skills you learn are directly transferable, even before you finish the course.

For our Distance Learning Scholars, the ability to study at home for a Master's degree is of great benefit. 'The skills you learn are directly transferable, even before you finish the course', said Samson. 'Whilst I was studying, I got involved in several things beyond ActionAid International [his then employer]; other organisations would call me and I would help them. They were conducting a large public health programme involving public health and health, and I was able to analyse their systems and make the necessary recommendations.'

Such opportunities are not present in India or surrounding countries... Without the award, my professional growth would have been incremental but, with the award, it is exponential.

The international reputation of the epilepsy surgery programme at King's College Hospital was a strong draw for Bhaskara to conduct his Fellowship in the UK, but King's also allowed him to update his skills in cutting-edge developments in the field. 'This is a highly technology-dependent subject and new technologies are confined to places like the United States, Western Europe and Canada; such opportunities are not present in India or surrounding countries.' He added that 'the Commonwealth Fellowship made a substantial contribution to my personal and professional growth. Without the award, my professional growth would have been incremental but, with the award, it is exponential.'

Conclusion

A high standard of health throughout a population is an essential precondition for socioeconomic development and poverty elimination. In this report, we have argued that higher education, and international scholarships in particular, can play an effective role by providing skills, expert knowledge and experience that cannot be obtained in award holders' home countries, and by increasing capacity and stimulating research in the health sector. As part of the CSC's evaluation programme, we have examined the scope of award provision in the health sector over the past 50 years and looked at evidence of the impact of our 3,700-plus health alumni in areas of key importance for global health – not least the Millennium Development Goals and DFID objectives.

The CSC has supported candidates from across the Commonwealth through awards in many health disciplines, particularly in the areas of maternal and child health, HIV/AIDS, malaria and other infectious diseases, and clean water and sanitation. Our overview of these key areas confirmed that, whilst there is a commonality of issues across regions, some are better equipped to tackle them than others. Furthermore, we have also seen suggestions of strong linkages between priority areas in development – for example, climate change and health – and therefore a multidisciplinary approach is to be encouraged.

Our evaluation has found that Commonwealth Scholarships and Fellowships are ideally placed to tackle these issues:

- Awards can act as a catalyst for development; the benefits of a single Scholarship or Fellowship can ultimately reach many people.
- Commonwealth Scholarships and Fellowships allow award holders to challenge existing practices and knowledge, not just in their home countries, but also internationally.
- Awards can 'open doors', and Commonwealth Scholars and Fellows are highly sought after.
- Much of the research undertaken whilst on award is new and innovative, and the skills and knowledge gained by alumni can often be put to use with immediate effect upon their return home.
- Study in the UK has several important advantages, from the easily demonstrable – access to equipment – to the more subtle – increasing confidence.
- Studies or research often cut across disciplinary boundaries; Awards encourage the development of a wide set of transferable skills, and lead to the ability to contribute significantly beyond the immediate area of expertise.

Our evaluation programme to date has provided us with evidence that our programmes are meeting their objectives. Our respondents confirm that they acquired relevant skills and expertise which would not otherwise have been available, and that they have subsequently put these skills into use, with many survey respondents giving detailed examples of the impact that they have had. From the data in this report, we conclude that we are providing training which is relevant to health issues common across many developing regions, and our survey respondents demonstrate how they are putting this training into use, particularly in fighting disease and promoting maternal and child health. The next stage is to further quantify and verify the nature of this impact, in regards to other sectors and programmes, allowing for continuous review and improvement of the CSC's Scholarship and Fellowship schemes, so that they can continue to have a positive impact for decades to come.

Bibliography

Commonwealth Scholarship Commission in the United Kingdom, *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in key priority areas* (2009)

<<http://www.cscuk.org.uk/docs/CSCEvaluationPhase2report.pdf>>

Commonwealth Scholarship Commission in the United Kingdom, *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in the Caribbean* (2009)

<http://www.cscuk.org.uk/docs/Assessing_impact_Caribbean.pdf>

Department for International Development (DFID), *Child Mortality (Factsheet)* (2007)

<<http://www.dfid.gov.uk/Documents/publications/mdg-factsheets/childmortalityfactsheet.pdf>>

Department for International Development (DFID), *Eliminating world poverty: Building our common future*, White Paper (2009)

<<http://www.dfid.gov.uk/Documents/whitepaper/building-our-common-future-print.pdf>>

Department for International Development (DFID), *HIV & AIDS (Factsheet)* (2009)

<<http://www.dfid.gov.uk/Documents/publications/mdg-factsheets/hivaids-factsheet-may09.pdf>>

Department for International Development (DFID), *Malaria (Factsheet)* (2008)

<<http://www.dfid.gov.uk/Documents/publications/mdg-factsheets/malariafactsheet.pdf>>

Department for International Development (DFID), *Working Paper Series: Better Health* (2008)

<<http://www.dfid.gov.uk/Documents/publications/research/wp-health.pdf>>

Report of the Commonwealth Education Conference, Cmnd. 841 (1959)

World Health Organization, *Protecting health from climate change: global research priorities* (2009)

<http://whqlibdoc.who.int/publications/2009/9789241598187_eng.pdf>

World Health Organization, *The World Health Report 2005:*

Make every mother and child count (2005)

<http://www.who.int/whr/2005/whr2005_en.pdf>

World Health Organization, *The World Health Report 2008:*

Primary health care, now more than ever (2008)

<http://www.who.int/whr/2008/whr08_en.pdf>

Appendix 1

Evaluating scholarships: the Commonwealth Scholarship Commission's approach

The Commonwealth Scholarship Commission (CSC) is responsible for managing the UK's contribution to the Commonwealth Scholarship and Fellowship Plan (CSFP), which was established in 1959, based on the principles of mutual cooperation and sharing of education experience. Under the CSFP, 26,000 individuals from all over the Commonwealth have held awards – mainly scholarships for postgraduate study and fellowships at postdoctoral level – in over 20 host countries. At the time of its establishment, the focus of the CSFP was on supporting individuals, and awards were intended to 'recognise and promote the highest level of intellectual achievement'.¹⁹

In the UK, since the late 1990s in particular, CSC policy has emphasised both development impact, largely in relation to the MDGs, and leadership, as well as international collaboration and partnerships, and aims to ensure the relevance of its awards to award holders' home countries. The CSC takes potential in these areas into account explicitly, alongside academic merit, in selecting candidates. It is against these objectives that the CSC is undertaking the evaluation programme of which this report forms part.

Evaluating scholarships is both challenging and necessary. Meaningful impact evaluation can tell us whether scholarship schemes are meeting their objectives and the nature of their short-term and long-term impacts, and allow us to examine the effects of new policies and practices. It can provide a stimulus to adapt and improve their schemes and can demonstrate their worth to funders and other stakeholders. Some of the challenges include the difficulty of objectively measuring socioeconomic impacts, and untangling attribution and assessing the contribution of the award, along with the more general demands on time and resources and reliance on the participation of award holders and alumni.

The CSC's evaluation programme includes both monitoring of its current award holders and tracing and researching alumni to evaluate long-term impact. During their awards, Scholars, Fellows and their supervisors submit regular formal reports and may also raise concerns and issues through more informal day-to-day contact with award administrators. They are also sent feedback questionnaires, as are nominating and host organisations. The CSC also closely monitors completion and, in the case of doctoral awards, submission rates across its schemes. Results in recent years have been very positive; for example, 96-100% of Master's Scholars commencing studies in 2001-2005 successfully completed their studies, as did 84-92% of doctoral Scholars taking up awards between 1997 and 2002.

The CSC recognises, however, that on-award and immediate post-award monitoring is not sufficient to properly evaluate the impact of the scheme. The imperative for such evaluation was emphasised by an external review of the DFID Commonwealth Scholarship schemes, commissioned by DFID in 2006-2007, which recommended that funding be provided to undertake further impact evaluation work as soon as possible. In 2007, the CSC designed a comprehensive and strategic evaluation programme, added to existing work, with the main thrust being the evaluation of the impact of alumni.

¹⁹ Report of the Commonwealth Education Conference, Cmnd. 841 (1959)

The evaluation programme has three phases, the first of which was to build a database of as much baseline data as possible. This has been completed, and we now have basic details for all of the 16,700 former award holders to the UK since 1960. This database has provided the foundation for initial statistical analysis of the programme over time (allowing us to describe trends in countries receiving awards, gender, subject studies, level of study and so on), and has enabled us to compare our subsequent surveys to the population as a whole. In addition, we have traced and have recent addresses (and in many cases employment details) for nearly 6,000 of these alumni. Phase Two of the programme involved sending an evaluation survey to these 6,000 in 2008; over 2,000 responded, providing detailed information on their career and achievements and their contribution to development priorities. This data formed a major part of the *Assessing impact in key priority areas* report, published in June 2009, and provides much of the data for section four of this report. Phase Three of the evaluation programme involves both further analysis of this data, drilling down into regions and sectors, and also the gathering of further data, case studies and third-party views.

This report, part of the third phase of our evaluation programme, offers a health sector-focus on our data. Bringing together the intended benefits of scholarships and the development challenges in the health sector outlined above, we have focused on what our Scholarships and Fellowships have achieved and are achieving, in terms of who we have trained, in what specific areas, and what impact they have had. We have not only assessed survey responses, as with our previous regional study focusing on the Caribbean, but we have also 'zoomed in' to consider detailed individual case studies, interviewing a number of alumni by telephone to obtain a more personalised and in-depth picture of impact.

Appendix 2

Measuring impact: the methodology behind the study

Our Phase Three studies seek to understand attribution better and provide more detail on impact and other benefits of awards at both individual and wider levels. We have moved beyond the initial alumni survey and tried to provide a degree of quantification where possible. In doing so, we have had to be careful with causation; if an alumnus hadn't received an award, would they have still founded their own medical centre or developed a new national health policy? Our questions have sought, in particular, to avoid painting a simple sequence of events, where, for instance, a scholarship was followed by a promotion which was followed by increased influence with government officials. Instead, we ask exactly what knowledge and skills the Scholarship or Fellowship afforded, whether there were difficulties in implementing these skills and knowledge upon the alumnus' return home, whether similar opportunities exist in neighbouring countries, and so on.

It is useful to clarify some of the terms we use throughout this report. We define Scholars who have studied in the field of 'health' as those studying in one of 14 specific disciplines. Each one of our 16,700 Scholars and Fellows, at time of application, was classified into one of 83 disciplines, partly to identify suitable academic advisers during the selection process, and partly to enable us to keep a record of their fields of study. The health disciplines range from anatomy to psychology, and are listed in Table 3.

Our process of defining and evaluating 'impact' is covered in more detail in our *Assessing impact in key priority areas* report. Impact is both broad and multi-faceted, and ranges from government influence to maintaining contact with professional associations joined whilst on award.

Appendix 3

A history of Medical Scholarships and Fellowships in the UK

When Commonwealth Scholarships began in 1960, the UK government wanted the Commonwealth Scholarship Commission (CSC) to endeavour to maintain a balance between the arts and the sciences. Medical subjects (both clinical and non-clinical) were included from the beginning. However, in 1965, the government decided that special schemes for Medical Scholars and Fellows should be set up, with a view to increasing Commonwealth cooperation in medicine and particularly to increase the assistance provided by the UK to developing countries. At that time, the UK had 27 medical schools, whereas there were only five in Africa. The aim was to assist developing countries to produce their own qualified people who could establish their own medical and nursing schools. Despite a shortage of undergraduate places in the UK, deans of postgraduate medicine and the Ministry of Health thought that some places could be found for postgraduates from the Commonwealth. The aim was to broaden the award holders' experience in an ordered and systematic course of study (but not for a higher degree).

A total of 150 awards were given in the early years and a special secretariat was set up, headed by a medically-qualified individual. There were no fixed application dates, and so nominations were considered throughout the year. The largest element of the scheme was junior Medical Fellows – people who had already gained higher-level qualifications but who wanted an integrated course to be planned specifically for them, relevant to their future work as consultants, research workers or medical teachers in their specialised fields. There were also 50 Medical Scholarships for students preparing for postgraduate qualification for the Royal Colleges, and a few senior Medical Fellowships and visiting professorships for people who held chairs in their home countries.

India received the most awards under the scheme, but some Indians who were offered awards could not be released from their hospital work to take up the opportunity. Similarly, it was often difficult for medical experts in Africa to be released for training overseas. Nevertheless, Fellowships were taken up by individuals from India, Sri Lanka, Pakistan, Ghana and the West Indies in the early years (as well as small numbers from Australia, New Zealand and Canada). Due to legislation, surgeons were not allowed to practise surgery in the UK, and so could only observe new procedures and techniques. The CSC's 1975 Annual Report said that the most satisfactory awards had been in laboratory-based medicine, particularly pathology and pharmacology.

In 1993, there was a review of the Commonwealth Scholarship and Fellowship Plan in the UK. This recommended that the separate medical scheme should be abolished, but that a new fellowship scheme should be set up covering all disciplines. Medical fellows could then apply and compete with people from other subject areas.

Appendix 4

Top 15 UK institutions with the most health alumni

UK Institution	No. of health-related awards
University of London	230
London School of Hygiene and Tropical Medicine	203
University College London	190
University of Edinburgh	153
Imperial College London School of Medicine at Hammersmith	112
University of Manchester	103
University of Liverpool	100
Leeds Metropolitan University	96
Guy's, King's and St Thomas' Schools of Medicine, Dentistry and Biomedical Sciences	91
University of Glasgow	90
University of Dundee	83
University of Birmingham	82
University of Leeds	77
King's College London	76
University of Strathclyde	75

The Commonwealth Scholarship Commission in the United Kingdom (CSC) is responsible for managing Britain's contribution to the Commonwealth Scholarship and Fellowship Plan (CSFP).

The CSC supports around 750 awards annually. Awards are funded by the Department for International Development (for developing Commonwealth countries) and the Foreign and Commonwealth Office, the Department for Business, Innovation and Skills and the Scottish Government (for developed Commonwealth countries), in conjunction with UK universities. The CSC makes available seven types of award, and also nominates UK citizens for scholarships to study in other Commonwealth countries under the CSFP.

The CSC is a non-departmental public body in its own right, and members are appointed in line with the Code of Practice of the Office of the Commissioner for Public Appointments. The Commission's secretariat is provided by the Association of Commonwealth Universities; financial and welfare support for scholars is provided by the British Council.

The CSFP is an international programme under which member governments offer scholarships and fellowships to citizens of other Commonwealth countries. The Plan was established at the first Commonwealth education conference in 1959 and is reviewed by Ministers at their triennial meetings – the only scholarship scheme in the world to receive such high-level recognition.





5 years of
**COMMONWEALTH
SCHOLARSHIPS**

Commonwealth Scholarship Commission in the United Kingdom
Woburn House
20-24 Tavistock Square
London WC1H 9HF
United Kingdom

Tel: +44 (0) 20 7380 6700
Fax: +44 (0) 20 7387 2655

www.cscuk.org.uk