



Scottish Report on Medical ACT





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Executive Summary

Medical ACT funding is available to support the additional costs of teaching undergraduate medical students within the NHS in Scotland. This funding is provided by the Scottish Government and distributed to NHS Boards by NHS Education for Scotland (NES).

This report has been produced by NES in conjunction with a wide range of stakeholders who are involved in the teaching of undergraduate students. The aim of the report is to provide an update on the improvements in teaching which have arisen due to developments made in the management of Medical ACT funding over the last 4 years when a new allocation model was introduced in Scotland.

The key aims underpinning the management of Medical ACT are;

- to deliver the highest possible quality of medical education within the NHS to support the training of medical students in Scotland
- to ensure a transparent and equitable approach to the distribution of ACT funding
- to achieve best value through robust performance management of the use of ACT funding.

The report highlights the progress made in recent years and the impact of redistributing significant amounts of funding between Health Boards in Scotland. It highlights significant achievements and changes delivered through the effective use of ACT funding. At all times the focus has been on the attainment of excellence and innovation in teaching.

The report should be of interest to NHS medical staff and other professionals engaged in undergraduate medical education as well as the medical schools and undergraduate students.

Much of the report is focused on the moves to ensure Medical ACT funding is supported by a robust system of performance management to ensure the £70m allocated by the Scottish Government is used most effectively to deliver the highest possible quality of teaching within the NHS.

Case studies are used in the report to high-light some examples of the innovative use made of this funding over recent years.

Overview

The following section provides a summary of some key questions which are regularly asked about ACT funding.

What is ACT funding?

Medical ACT funding is provided to the NHS in Scotland to cover the additional costs of teaching medical undergraduate students. In 2008/09 the funding amounted to £70m and is provided by the Scottish Government Health Directorates (SGHD).

This funded is managed on behalf of SGHD by NES. Every year NES distributes the £70m to all NHS Boards in Scotland who are engaged in undergraduate teaching based on the number of students and the amount of teaching provided by each Board.

When the new allocation model was introduced in 2004 a set of guiding principles were agreed at the outset with stakeholders. These principles (listed below) have underpinned the development of the Medical ACT Allocation Model and remain appropriate today;

- An open and transparent approach
- The use of one national rate for all teaching
- Equity of approach across Scotland
- Equity of funding for teaching in hospital and Primary Care settings
- Use of Scottish Funding Council student numbers to drive the overall allocation model
- An emphasis on the development of robust performance management systems

These principles are explored further in the following sections of the report.

How does the Allocation Model and Glide-path Work?

The new allocation model was introduced by NES in April 2005 following an extensive consultation exercise.

The Allocation Model uses a two stage approach. The first stage allocates total ACT funding to University Medical School areas based on the total number of medical students funded by the Scottish Funding Council (SFC) in that area. However, this money does not transfer to the universities. Instead, the second stage of the model allocates the funding within each Medical School area to NHS Boards delivering teaching for the students from the relevant Medical School. All funding is provided directly to NHS Boards by NES.

The impact of the introduction of the new model was a significant reallocation of resources from two of the original 'teaching' Boards (NHS Lothian and NHS Greater Glasgow and Clyde) to the other NHS Boards in Scotland. However, it was recognized that there would need to be a transition period to implement the new model due to the significant shift in resources between Health Boards and the need to avoid de-stabilising existing services. As a result a glide-path was introduced to facilitate this transition.

NHS Greater Glasgow and Clyde and NHS Lothian have not received any uplifts to their historic ACT allocations over the last four years and all available uplift funding has been distributed to the other Boards based on how far away each Board was from their share of the total ACT funds indicated by the model.

What is the role of SGHD, NES, Regional Groups, Medical Schools, NHS Boards?

SGHD

SGHD are responsible for medical workforce planning within the NHS in Scotland and within that context agreeing the policy for the education of undergraduate medical students within the NHS. SGHD also determine the overall level of Medical ACT funding available and ensuring the accountability of NES and other NHS Boards.

NES

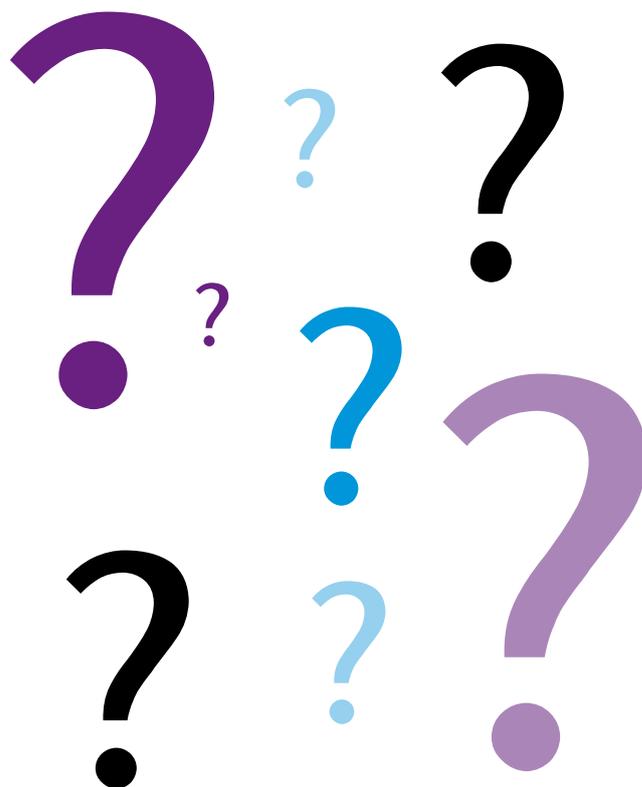
NES are responsible for managing Medical ACT funding. NES receives the funding from SGHD and distributes it to NHS Boards. NES is also responsible for setting the policy for the use of Medical ACT funding, managing the ACT allocation model and performance managing the processes to ensure NHS Boards make best use of the funding.

NES discharges these responsibilities in the context of the Governance Framework for Medical Education published in 2008. This sets the governance arrangements which apply to postgraduate medical education and where relevant undergraduate medical education.

NES is advised by a national advisory body, the Medical ACT Working Group, which draws together representatives from all stakeholders involved in undergraduate medical education.

Regional Groups

At present 4 Regional ACT Groups operate across Scotland to bring together stakeholders involved in the teaching of students from each Medical School. Scotland has 5 Medical Schools, Aberdeen, Dundee, St Andrews, Edinburgh and Glasgow. One Regional ACT Group operates across Dundee and St Andrews given their geographical proximity and overlap with



Health Boards providing teaching to the students from these two Schools.

The Regional ACT Groups are responsible for the planning of future teaching requirements and setting priorities for development. In addition, the groups have delegated responsibility from NES to approve proposals for the use of new funding. They also oversee the preparation of Accountability Reports for NES and follow-up performance issues identified by Medical Schools.

Each Regional Group has a Chairman who is appointed by the Group and reports to the national Medical ACT Working Group. The group is also supported by an ACT Officer who co-ordinates the work of the Group and provides a link to NES on performance data and the allocation model.



Medical Schools

Medical Schools have overall responsibility for the teaching of undergraduate medical students, the setting of the undergraduate curricula and meeting the standards for undergraduate medical education set by the General Medical Council (GMC). This responsibility includes ensuring the quality of clinical placements provided within the NHS. In discharging this responsibility they are supported by NES on the performance management of teaching within the NHS funded through Medical ACT.

NHS Boards

NHS Boards are responsible for the delivery of teaching to undergraduate medical students and ensuring appropriate quality standards are met. A wide range of undergraduate teaching is funded by ACT including clinical placements within hospital and Primary Care settings as well as direct teaching activity such as lectures, tutorials and teaching within clinical skills centres.

NHS Boards are accountable to NES for the use of Medical ACT funding and the delivery of high quality medical education provided through the use of this funding.

In most Boards this responsibility has now been taken on by Directors of Medical Education.

Principles for use of ACT Funding

During the consultation process immediately prior to the introduction of the new allocation model in 2005, a number of key principles were established with stakeholders. These principles remain in place and provide the foundation upon which subsequent Medical ACT developments have taken place. Each of these principles are explored in more detail below;

An open and transparent approach

Historically, Medical ACT was distributed to the four main 'teaching' Health Boards based on amounts received in previous years. There was no equity of funding across these four Health Boards and in addition other Health Boards providing undergraduate teaching did not receive a fair share of the funding. The funding was fully embedded within service costs and the benefits to the education of medical students could not be directly identified.

This principle of an open and transparent approach was designed to ensure that in future all Medical ACT funding is distributed to all Health Boards undertaking undergraduate teaching on an equitable basis using an agreed methodology.

The use of one national rate for all teaching

As noted above, historically only the four main teaching Health Boards received a Medical ACT allocation from SGHD.

This principle was designed to ensure all Health Boards received a comparable level of ACT funding based on the relative amount of undergraduate teaching carried out.

The use of an allocation model not a system of cost reimbursement

Prior to the introduction of the new allocation model a number of attempts had been made to introduce a robust costing model to identify appropriate

levels of Medical ACT funding. However, it was recognised that any costing model would be difficult to introduce and ensure comparability given the different approaches adopted to the management of undergraduate teaching within the NHS and the different curricula developed by the five Medical Schools in Scotland.

This principle of using an allocation model rather than a cost reimbursement model was adopted to ensure all undergraduate students in Scotland were supported by an equitable amount of ACT funding. In addition, the introduction of an allocation model ensured Health Boards were motivated to deliver the maximum quantity and quality of teaching and achieve best value rather than trying to justify higher levels of costs. This was also a pragmatic approach given that the absolute amount of ACT funding available to the NHS in Scotland was fixed regardless of changes to the cost base.



Equity of approach across Scotland

As noted above this principle was adopted to ensure all Health Boards across Scotland receive the same relative share of total ACT funding available based on the amount of teaching being carried out.

Equity of funding for teaching in hospital and primary care settings

Previously all Medical ACT funding had been distributed directly to the four main teaching Health Boards with a small fixed amount top-sliced to support GP ACT for teaching in Primary Care. At the time the new allocation model was introduced the importance of encouraging teaching in a wide range of settings, including Primary Care, was recognised. As a result it was decided all teaching was to be treated equitably and Health Boards now receive the same relative ACT allocation for teaching delivered in all settings including Primary Care.

Use of SFC student numbers to drive the overall allocation model

This principle was adopted to ensure all undergraduate students attract a similar level of funding regardless of where they are taught within the NHS or the curriculum followed by any of the Medical Schools.

SFC numbers were chosen to drive the overall allocation model as the numbers are determined independently from the allocation model. In addition, this approach ensures the ACT allocation model is not be used to influence Medical School curriculum development.

Emphasis on future performance management arrangements

As Medical ACT funding had previously been fully embedded within total service costs no evidence was available to determine whether the funding was being used effectively to deliver high quality medical education.

This principle was introduced to ensure future Medical ACT funding distributed to Health Boards was used to achieve best value and provide evidence of the quantity and quality of training provided. It was recognised that this principle was a pre-requisite to ensuring levels of ACT funding provided to NHSScotland are maintained in future.

Use of ACT Funding

2008/09 ACT Allocations

Breakdown of Medical ACT allocation figures for 2008/09 by Medical School

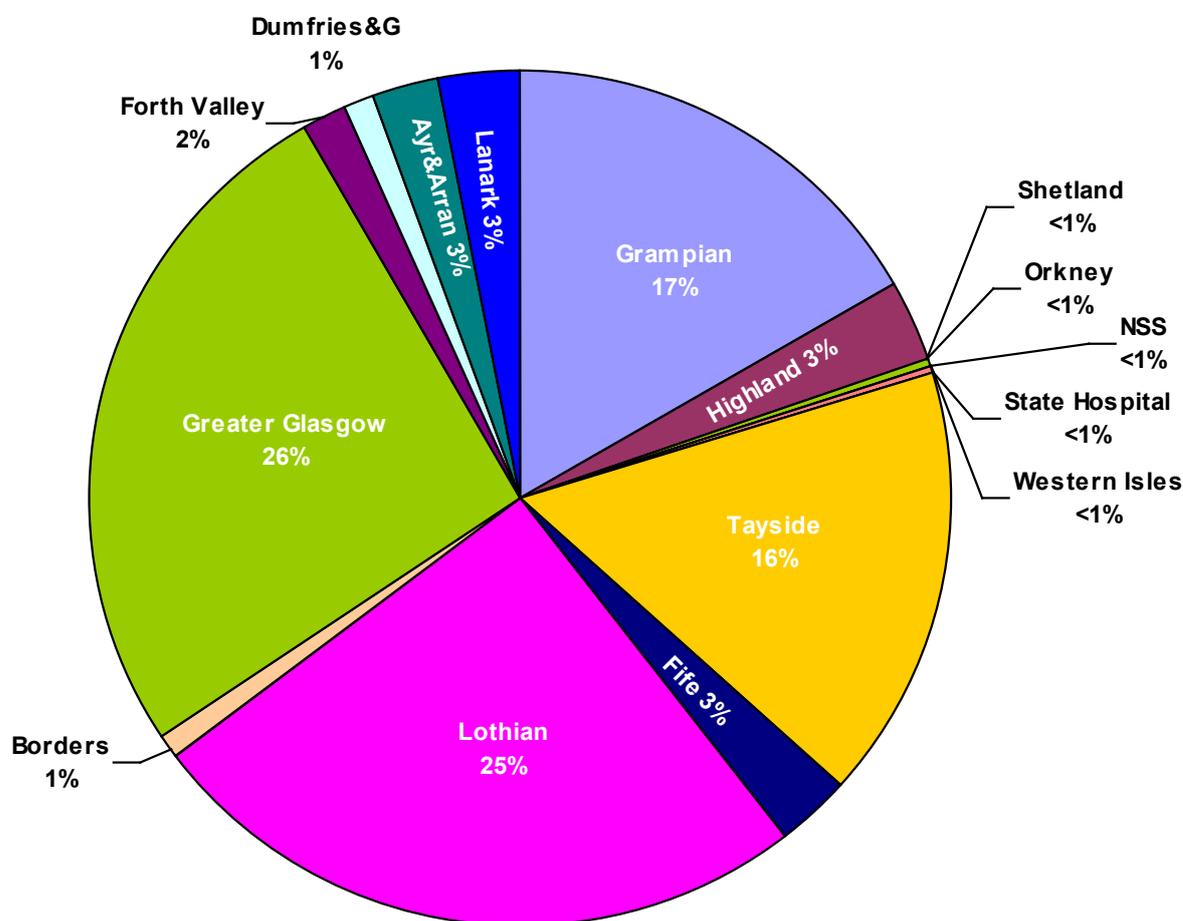
Medical School	Aberdeen	Dundee	Edinburgh	Glasgow	St Andrews	Total
	£'000	£'000	£'000	£'000	£'000	£'000
	13,923	12,412	19,421	23,222	805	69783
% of total	20%	18%	28%	33%	1%	100%
Student Numbers	799	716	1,003	1,136	368	4,022

The figures for St Andrew's university are significantly lower than universities with similar student numbers as they only teach medical under-graduates up to year 3. After year 3 St Andrew's students transfer to Manchester university to complete their degrees. However, from August 2009, 55 students from St Andrew's university will transfer to other Scottish Universities to complete their degrees.

Breakdown of Medical ACT allocation figures for 2008/09 by Health Board

Health Board	Total Allocation £'000	% of total	Health Board	Total Allocation £'000	% of total
Ayrshire & Arran	1,762	3	Lanark	2,083	3
Borders	511	1	Lothian	17,581	25
Dumfries & Galloway	819	1	Orkney	21	-
Fife	2,035	3	Shetland	72	-
Forth Valley	1,126	2	Tayside	11,461	16
Grampian	11,627	17	Western Isles	141	-
Greater Glasgow	18,327	26	NSS	47	-
Highland	2,158	3	State Hospital	12	-
			Total	69,783	100

This is shown diagrammatically in the pie chart below.

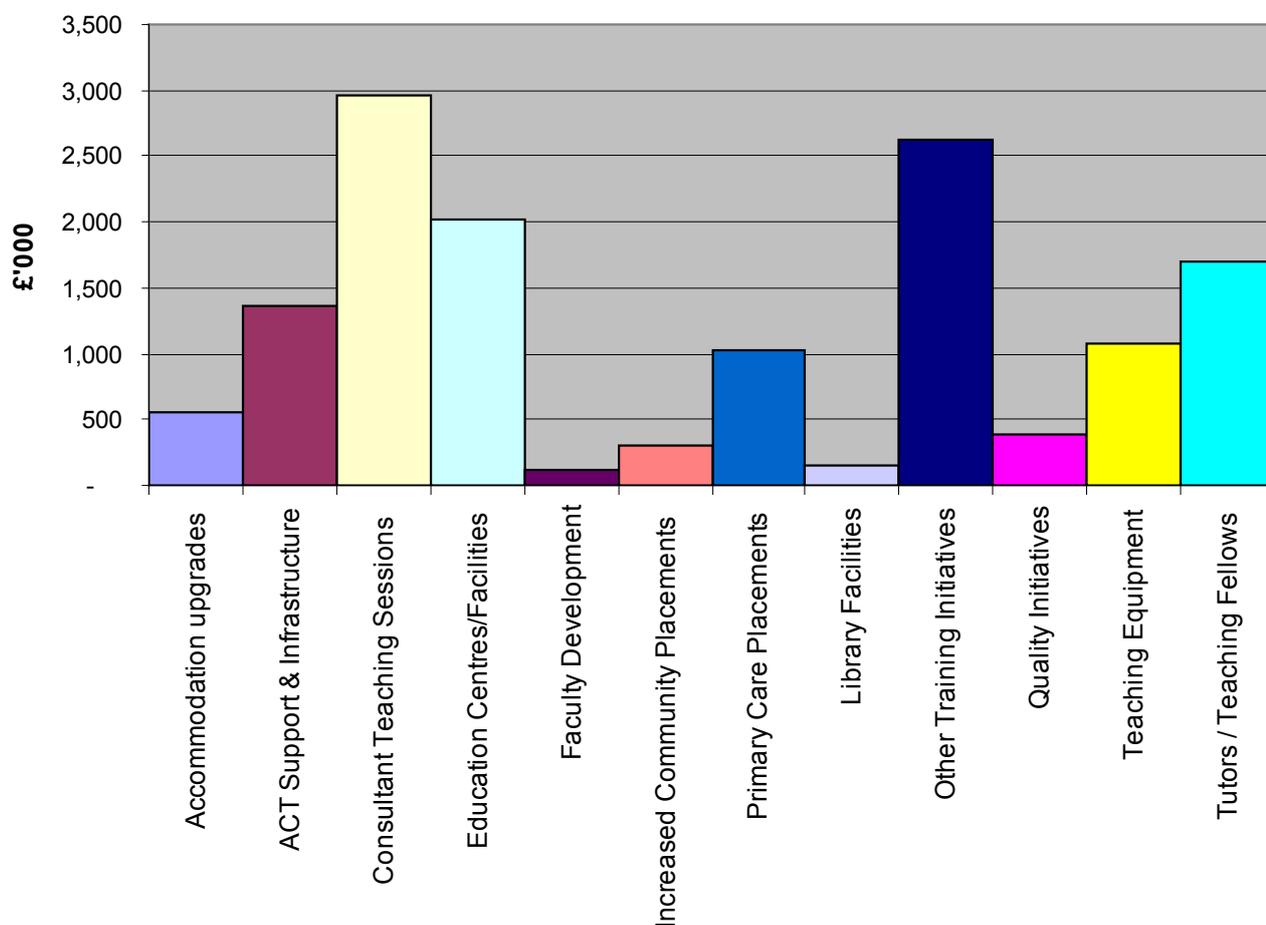


Impact of the Glide-path

Each year when the allocations are issued the use of any additional funding received by each Health Board compared to the previous year has to be approved by NES.

Over the last four years the new allocation model has redistributed £14.3m of additional funds to all Boards engaged in undergraduate teaching other the NHS Lothian and NHS Greater Glasgow and Clyde. This has provided significant amounts of development funding for all those other NHS Boards who had previously not received an appropriate share of the overall funding.

Developments Funded 2005-2009



Approval of Additional Allocations and Role of Regional Groups

From 1 April 2008 NES delegated responsibility for the review and approval of submissions for the use of additional ACT funding to Regional Groups subject to;

- Confirmation from Regional Group Chairmen that all proposals comply with the general principles issued by NES.
- NES reserves the right to carry out a final review of individual proposals where it is deemed necessary.

An evaluation of the new approval process was carried out during 2008/09. This evaluation identified significant benefits from this new approach including ensuring all proposals are fully aligned with regional priorities for ACT funding, eliminating any unnecessary delay in the approval of proposals and the commencement of projects as well as achieving a reduction in bureaucracy.



When the annual ACT allocation letters are issued by NES details are provided to the Regional Groups on the amounts to be approved for each NHS Board. The Regional Groups have established procedures to evaluate the proposals submitted by each Board in their area.

Many Boards input into more than one Regional ACT Group as they teach students from a number of Medical Schools but for the purpose of approving additional allocations NHS Boards have been allocated to the most relevant Regional Group. ACT Officers ensure co-ordination of this process across the Groups as necessary.

Guidelines for use of additional ACT Funding

Guidelines for the use of additional ACT funds are produced by NES in consultation with stakeholders and the Medical ACT Working Group. These guidelines are produced to ensure consistency of approach across Scotland, and that the use of ACT funding is appropriate to the training of medical students within the NHS achieving the best value from the £70m available for this purpose.

Performance Management

Existing Arrangements

The existing performance management arrangements include the requirement for detailed proposals for the use of new funding to be approved. This has enabled NES to track the use of the additional allocations over the last four years.

In addition Annual Accountability reports are required by NES to confirm the use made of ACT funding received by Boards. NES specifies the minimum content required to be included in these accountability reports including details of the use of funds as well as the benefits which been delivered. The Accountability Reports are submitted by Health Boards to the Regional ACT Groups for consideration and submission to NES within an overall Regional Accountability Report.

Current Developments

Quality Measurement using National Standards

NES has developed a range of national quality standards applicable to undergraduate teaching within the NHS. These 7 standards, identified in conjunction with stakeholders through the Medical ACT Working Group and the Scottish Deans Medical Education Group are;

- (1) Facilities
- (2) Organisation
- (3) Delivery of scheduled teaching
- (4) Opportunities for learning and clinical experience and to achieve curricular outcomes
- (5) Availability of educational and pastoral support
- (6) Assessment
- (7) Overall rating of attachment

The intention is to monitor the performance of NHS Boards against these standards using the existing medical schools' student evaluation systems. This will apply to all clinical attachments although these are predominately in the later years.

A pilot phase was successfully undertaken between April and September 2008 during which the Medical Schools collated data from relevant student evaluation exercises to assess the standards. In the pilot phase each standard was rated either satisfactory or unsatisfactory.

Reporting systems and audit follow-up procedures have been developed within each Regional Group. This builds upon existing follow-up and review processes already in place and aims to ensure a consistent approach is adopted across all Medical Schools to facilitate feed-back to NHS Boards. Exception reporting, through Regional Groups and then NES, is to be used to follow up any issues which have been identified but not resolved locally.

NES in conjunction with the Medical ACT Working Group has agreed to roll out the new system from April 2009 for all clinical placements funded by Medical ACT.

Measurement of Teaching Activity for Medical ACT

This project has been developed by NES in conjunction with the Medical ACT Working Group following initial consultation with stakeholders in 2007. The consultation exercise recognised the need to strengthen the existing data used in the allocation model. Initial proposals were based on a move towards a measurement system using Consultant PAs with Health Boards to ensure adequate dedicated teaching time is identified within consultants' (and other relevant staff groups') contracts.

Three main categories of undergraduate medical teaching which is delivered within the NHS has been identified as follows;

Category 1 - Teaching during the course of clinical activity (eg during wards rounds, clinics or in GP Practices).



Category 2 - Teaching where the student is the main focus of activity (eg lectures, tutorials, assessment and feed-back).

Category 3 - Activities in support of teaching (eg staff development, administrative duties).

These categories of teaching have been reviewed to consider the impact of each on service delivery, teaching time requirements and associated planning for Medical ACT. A template has been developed for use across Scotland to identify and quantify teaching activity within the NHS relevant for ACT against the above 3 headings. Such a standard approach would;

- 1) Ensure the adoption of a consistent methodology to aid NHS Boards delivering the requirements of one or more Medical Schools.
- 2) Ensure the use of standard definitions of teaching time requirements to enable national performance monitoring of teaching delivered through ACT funds.
- 3) Enable the identification of a minimum level of teaching time, defined as consultant PAs, which Boards should ensure are built – where appropriate - into consultant job plans or other staff dedicated teaching time.

Although the template will be based partly on the use of consultant PAs, it will be for NHS Boards to determine the most appropriate staff to deliver this teaching recognising that undergraduate teaching is now delivered on a multi-professional team basis. Variable weightings will not be given to teaching by different staff groups.

A data collection exercise is now underway to identify the levels of teaching activity within each category of teaching and to consider the future use of the template.

Recent Teaching Developments Funded Through ACT

Clinical Teaching Fellow Schemes (Grampian)

The Clinical Teaching Fellow Scheme was originally introduced in 2000 to provide support for the development of undergraduate medical teaching in Grampian but the longer term aim was to produce a pool of future consultants with significant training in Medical Education. Thus the scheme seeks to professionalise teaching and to put training in education on the same footing as research training. Fellows contribute to the delivery of generic teaching e.g. introductory clinical skills, communication skills, but are also members of the Curriculum Steering Group and so participate in the development and implementation of all aspects of the MBChB programme. In addition, all Fellows register for postgraduate educational qualifications and have one or more educational projects which they are encouraged to see through to publication. At the last count, fifteen junior doctors have passed through this scheme. Six of the fifteen are now consultants and three of these work in NHS Grampian. All three have ACT funded educational PAs in their job plans and make a significant contribution to undergraduate medical education. One of the first cohort of teaching fellows is now a Professor of Medical Education south of the border. Thus the scheme is beginning to pay long term dividends.

Clinical Teaching Fellows (Dumfries and Galloway)

The first Clinical Teaching Fellow was appointed in Dumfries and Galloway in August 2006. This has allowed students to be guaranteed 5 structured teaching sessions each week. Other vital roles undertaken by the Clinical Teaching Fellow have included induction, mentoring and assessments. With a Clinical Teaching Fellow in place identification of and support for underperforming students takes place more rapidly and more effectively than before.

Remote and Rural Option (Inverness)

Aberdeen is the northern-most medical school in the UK and has for many years formed a close partnership in teaching with NHS Highland, in particular with Raigmore Hospital in Inverness. Colleagues in Inverness provide outreach services to the Highlands and Islands and act as a tertiary referral centre. The University of Aberdeen is also a major partner in the highly successful research-based Centre for Rural Health in Inverness. Thus it was a logical step to offer our undergraduate students the opportunity to experience healthcare delivery in hospitals and General Practices across the Highlands and Islands. This is now an option offered to fourth and fifth year students, with attachments available to hospitals and GPs in Shetland, Orkney, Wick, Stornoway and Fort William. None of this would be possible without ACT funding support for the local Health Boards and support for student travel and accommodation. There is considerable evidence from other parts of the world, mainly Australia and Canada, that students who train in a remote and rural setting are more likely to return to work there. Medical staffing is a serious problem for Health Boards across the Highlands and Islands and we believe that this scheme has the potential to improve the delivery of rural healthcare significantly in future. We are liaising with our local Post Graduate Deanery to ensure that students who volunteer for the Remote and Rural option are tracked through their Foundation Programme and offered appropriate opportunities for specialty training. The first cohort of fifteen students are now in final year and their future progress is eagerly anticipated.

Matthew Hay Project (Aberdeen)

The Matthew Hay Project is a joint NHS/University construction (now known as the Suttie Centre for Teaching and Learning in Healthcare) with an estimated cost of £21 million. Construction began in July 2007 on the central Foresterhill campus and it is anticipated that the facility will be operational in time for the academic year 2009/10. This building includes a new purpose-built Clinical Skills Centre as well as facilities for Resuscitation Training and Anatomy teaching. It will be the hub of all NHS teaching of undergraduate medical students including clinical assessments (OSCEs), but importantly it will be a multi-professional facility that will also be used for training of existing healthcare professionals. ACT funding has made a highly significant contribution to the provision of audio visual and IT facilities in the building. This includes a digitised video recording system throughout the clinical skills facility to enable clinical examination, communications skills, simulated emergencies etc to be recorded and analysed afterwards. An ACT funded stereoscopic 3D projection system will also provide sophisticated imaging for clinical anatomy teaching. This will be a state of the art building fit for the 21st century, with an ethos that combines learning and caring for all healthcare professions.

Improved Teaching Facilities and Interactive Student Tutorials - Borders

Student tutorials at Borders General have benefited from ACT funding paying for the development of a multipurpose seminar room with video conferencing facilities. Plans are in place to use the videoconferencing facility for interactive tutorials for students.

An Innovation in Community Medicine Teaching at St Andrews

With the support of Medical ACT, the Community Medicine strand of the medical course at St Andrews has been evolving and growing over the past 3 years into what is being viewed as innovative programme. This is directly in support of the School's aim of allowing the students increasing amounts of early patient contact during their years at St Andrews. From August 2009 a significant number of students will be staying in Scotland for their clinical years and joining the other four medical schools in Scotland, Dundee, Aberdeen, Glasgow and Edinburgh. It is important that St Andrews students are able to join any medical school for their clinical years and have a similar clinical experience to those students that they will be joining. The Community Medicine strand to the medical course is an extremely valuable component of this early clinical experience and will continue to be developed over the coming years.

The Community Medicine placements have been designed to reinforce teaching in all other areas of the medical course by allowing students to see the relevance of the basic sciences to clinical medicine whilst giving them opportunities to practise communication and clinical skills and consider ethical issues and the "art" of medicine.

This has been achieved with the support of Medical ACT which funds practice placements, programme development activities and clinical direction and input.

Appointment of Additional Teaching Sessions – Ayrshire and Arran

ACT funding has enabled NHS Ayrshire & Arran to recruit a new teaching post in Obstetrics & Gynaecology. ACT funding provides eight sessions at staff grade level.

These sessions have already delivered the following benefits to the delivery of teaching within Ayrshire & Arran.

- An increase in direct teaching sessions for students.
- More opportunities for bedside teaching.
- Involvement in both 2nd year clinical practice sessions and 3rd year problem based learning teaching.

The advantage of these additional sessions is recognised by staff across the Board and has led to improving cohesion in the teaching delivery at Crosshouse Hospital in obstetrics and gynaecology. Early feedback data indicates that the new appointment has improved the student experience.

Teaching Leads (Tayside)

Teaching Leads have been appointed in surgery, child health and obstetrics & gynaecology. Their role is to ensure that the curriculum set out by the Medical School is delivered to a standard that satisfies the University's Quality Assurance Framework and the NES Quality Assurance Standards. A lead person implements teaching innovation within clinical groups and strengthens the NHS/University links by representing undergraduate teaching issues at various academic and clinical group meetings. The Leads coordinate and develop teaching opportunities for students within their departments, revise and update teaching material and promote staff development within their clinical group.

Senior University Teacher in Medical Education (West of Scotland Boards)

A Senior University Teacher in Medical Education with responsibility for the development and support of NHS funded Educational Supervisors was appointed in October 2007. There are over 500 educational supervisors in 26 hospitals throughout the West of Scotland Region and so most NHS staff development activities are in workshop form covering a whole range of good educational practice. A postgraduate certificate in healthcare education is in development so that educational supervisors can gain accreditation for training. There is also a focus on scholarship and a Centre for Educational Scholarship was launched in September 2008. This aims to promote excellence in teaching, learning and assessment in a multi-professional environment, by providing academic programmes and promoting research for all Medical and Healthcare professionals who teach.



