



**Clinical Academic (Research) Careers Scheme  
for Nurses, Midwives and Allied Health Professionals  
in NHS Lothian**

**Annual Report  
2011**

## Summary

This is the first annual report of the Clinical Academic (Research) Careers Scheme (CARC) for Nurses, Midwives and Allied Health Professionals (NMAHP) in NHS Lothian. The Scheme was established to develop NMAHP clinical research capacity and capability in NHS Lothian. Its ultimate aim is to promote quality NMAHP clinical research which provides an evidence-based foundation for improvements in NHS Lothian services for patients and their families.

The Scheme was conceived in 2008 and the details of a workable proposal developed over subsequent months by representatives of NHS Lothian and the Centre for Integrated Healthcare Research. The final proposal was endorsed by NHS Lothian's Executive Management Team in February 2010 and funding secured for 5 years through a Partnership Agreement between NHS Lothian Research and Development Office, NHS Education for Scotland, the University of Edinburgh, Edinburgh Napier University and Queen Margaret University in November 2010.

The structure of the Scheme entails three demonstration sites. Each site will consist of a collaboration between NHS Lothian service leads and academic leads from at least one of the partner universities. Available funding permits the establishment of two 0.5 wte clinical research posts per site; one at Advanced Practitioner (post-doctoral) and one at Senior Practitioner (part-time PhD) level. To aid the development of research skills amongst NMAHPs who are embedded within service these posts are available to employees of NHS Lothian only.

A Scheme Management Group has been established to manage operational aspects and a Steering Group to oversee the overall direction of the initiative.

To date two demonstration sites have been funded. The first of these was a Critical Care/University of Edinburgh collaboration. Two nurses have been appointed and commenced employment in their CARC Scheme posts in January 2011. The second demonstration site comprises a Substance Misuse Directorate/Edinburgh Napier University collaboration. This site is in the process of recruiting and postholders should be in place by Autumn 2010.

The relatively small number of doctorally-qualified NMAHPs within NHS Lothian has been the main challenge for application teams, especially collaborations between NHS Lothian and Queen Margaret University. As a result it has not been possible to fund a third demonstration site which meets the Scheme funding criteria. Therefore, in May 2011, the funding partners considered and approved a proposed amendment to the Scheme. This amendment sanctions the establishment of the third demonstration site on the basis of two Senior Practitioner posts (i.e. two part-time PhDs) and no Advanced Practitioner post. A further call for applications will be issued if it appears probable that viable bids will be forthcoming on this basis and it is hoped that a third demonstration site will be funded by October 2011.

The Management Group has established a framework for both the support and progress monitoring of demonstration sites.

The Management Group has prepared a brief for the commissioning by tender of Phase 1 Evaluation (first 30 months) of the Scheme. This will be advertised in June 2011.

The main objectives over the coming year are to fund a third site, to recruit to the posts in the Substance Misuse/Edinburgh Napier University and third demonstration site, support and monitor the progress of all sites, and commission independent researchers to evaluate the Scheme over its first 30 months of operation.

## 1. Introduction

### 1.1. Scope of Report

This is the first annual report of the Clinical Academic (Research) Careers Scheme (CARC) for Nurses, Midwives and Allied Health Professionals (NMAHP) in NHS Lothian. It describes the development, progress and management of the Scheme from its initial conception in September 2008 to June 2011.

### 1.2. Summary of the Scheme

In recent years the Scottish Government in partnership with NHS Education for Scotland (NES), the Scottish Funding Council and the Health Foundation has invested in a number of initiatives to support the embedding of NMAHP research and development within clinical practice. This has included the establishment of the national Chief Scientist Office (CSO) NMAHP Research Unit, the NMAHP Research Training Scheme and the NMAHP Research Consortia. The benefits of this investment are being realised, and it is imperative that these are built upon. There is a need to plan for the future research workforce and to do this in such a way that reflects the NHS Career Framework and responds to the recommendations of the UK Clinical Research Collaboration (UKCRC, 2007) to establish NMAHP clinical academic career pathways. Nationally, NHS Education for Scotland in collaboration with NHS Boards and academic partners has created a set of principles in accordance with the career framework to support the development of a national approach to NMAHP clinical academic (research) careers (NES, 2011).

The CARC Scheme is NHS Lothian's partnership model for developing such a career pathway which is firmly embedded within clinical practice whilst involving full collaboration with academic partners and placing an emphasis on supervision and training.

The Scheme was first conceived in September 2008 following discussions between representatives of NHS Lothian and the Centre for Integrated Healthcare Research (CIHR). Over a period of 5 months a proposal was drafted and refined before being presented to a number of potential partners. Verbal commitments of funding for the Scheme over a five year period were offered by NHS Lothian Research and Development Office, Edinburgh Napier University, the University of Edinburgh, Queen Margaret University and NHS Education for Scotland. The final proposal received endorsement from NHS Lothian Executive Nurse Director and AHP Director and was presented to, and approved by, the NHS Lothian Executive Management Team in February 2010. A timetable of Scheme milestones is presented in Appendix A.

The key features of the Scheme are:

- 6 clinical academic (research) appointments at senior and advanced practitioner levels across 3 clinical demonstration areas.
- Clinical demonstration areas selected in relation to strategic research priorities, local service plans and supportive infrastructure especially the existence of well-established, active and successful research groups (of whatever professional mix)
- Defined allocation of clinical and research time embedded within clinical service setting
- Team organisation of the post holders with clear operational management, supervision and support arrangements
- Funded clinical research training relevant to each career stage (i.e. PhD and Clinical Research Fellow)
- Principle of separation of funding stream for research from clinical budgets (clinical parts of posts are already establishment and funded from current general budgets therefore incurring no additional cost to NHS Lothian).

The benefits of the Scheme include defined research outputs in terms of research training, career development and succession planning, completion of relevant clinical research studies, publications and positive evidence-based impact on clinical service delivery. It will also serve to further establish a culture of enquiry and research-mindedness within the NMAHP professions.

## **2. Achievements**

### **2.1. Partnership Agreements and Funding**

Funding arrangements were formalised by the signing of a Service Level Agreement between NHS Lothian and NHS Education for Scotland in March 2010 and a Partnership Agreement between NHS Lothian, Edinburgh Napier University, the University of Edinburgh, Queen Margaret University and NHS Education for Scotland in November 2010. These agreements established non-recurring funding of £40,000 for development activities relating to the Scheme in 2009/2010 plus £150,000 per annum for a five year period commencing 2010/11 for Scheme implementation (see Appendix B).

### **2.2. Management of the Scheme**

An operational Management Group comprising representatives of NHS Lothian and the three partner universities was established in Autumn 2009 and formally constituted in November 2010 following signing of the partnership agreements. The Management Group meets every two months or more frequently as required.

A Scheme Steering Group has been established to oversee the broad direction of the Scheme and its management by the Management Group. The first meeting of the Steering Group will occur on 16 June 2011 and annually thereafter.

Membership of the Management and Steering Groups are listed in Appendices C and D respectively.

Based on the funding available for the Scheme the Management Group established a budget across the lifetime of the Scheme as shown in Appendix E (NB. This Appendix takes account of the Scheme amendment described below in 4. Amendment of the Scheme). Comparison of the total sums in Appendices B and E indicates that there will be a budgetary surplus of approximately £85,000 over the lifetime of the Scheme if the Advanced Practitioners (Clinical Research) are employed for a period of 3 years only. Hence, there should be scope to extend the contracts of some or all of these postholders for a further period within the current funding. However, it has always been the expectation of the Management Group that these postholders should generate income through research grant funding during the first three years which can contribute to the extension of these contracts upto the end of the lifetime of the Scheme.

The Scheme funds are managed by NHS Lothian's Research and Development Office Accountant. See Section 5. below for a summary of the Scheme accounts.

### **2.3. Administrative Support**

Administrative support for the Scheme is provided by staff at the recently established Health Services Research Unit ([www.hsru.ed.ac.uk](http://www.hsru.ed.ac.uk)) which is hosted by Edinburgh Clinical Trials Unit at the Western General Hospital, Edinburgh. This has facilitated the organisation of calls for applications to become a demonstration site on the Scheme through use of the Unit's website and administrative support for the Review Panel considering applications.

## **2.4. Human Resources Aspects**

### **2.4.1. Job Descriptions and Knowledge and Skills Framework Outlines**

The Management Group has developed appropriate job descriptions for the two grades of post relevant to the Scheme: Advanced Practitioner (Clinical Research) and Senior Practitioner (Clinical Research). These have been considered by the NHS Lothian Job Evaluation Panel and accepted at Agenda for Change Bands 7 (£30,040-41,157) and Band 6 (£25,427-34,189) respectively.

Knowledge and Skills Framework (KSF) outlines have also been developed for these two grades of post by the Management Group. These outlines were considered by the Quality Assurance Panel in June 2011. A small number of amendments suggested by the Panel have been accepted by the Management Group. The outlines should be finalised and approved during June/July 2011.

### **2.4.2. Secondment Arrangements**

The Management group has liaised with NHS Lothian Secondments Department to establish the current Secondment Policy and informational requirements to establish internal secondment agreements with staff. A secondment agreement template is now in place to be used in those instances where successful applicants for CARC Scheme posts are already employed by NHS Lothian. Secondment agreements have been set up successfully with two postholders in the first of our CARC Scheme demonstration sites, namely Critical Care/University of Edinburgh.

### **2.4.3. Postholders' Status in Universities**

The partner universities have expressed different preferences regarding the status of post-doctoral CARC Scheme postholders within their institution. The postholder aligned with the University of Edinburgh holds Honorary Research Fellow status. The postholder aligned with Edinburgh Napier University will hold Research Fellow status. This issue is no longer relevant with regard to postholders aligned with Queen Margaret University (see 4. Amendment of Scheme below)

## **2.5. Demonstration Sites and Appointments**

### **2.5.1. Application Process**

#### **2.5.1.1. Cycle 1**

The first call for applications to become a demonstration site occurred in May 2010. An adapted version of the Chief Scientist Office grant application form plus a guidance document outlining the main criteria for CARC Scheme funding were developed by the Management Group and made available for potential application teams via the HSRU website. A Review Panel including external members was convened to consider the applications received (see Appendix F). Reviewers were provided with a scoring template based on the funding criteria for the Scheme. The Panel then met in July 2010 to consider the applications. Application teams were invited to attend the Review Panel meeting to give a brief presentation and field questions from the panellists.

Five applications from a range of clinical specialties in collaboration with the three partner universities were received following this call. One application was assessed as fulfilling the Scheme criteria and being of sufficient quality to be funded: Critical Care/University of Edinburgh. Two other application teams (Learning Disabilities/Queen Margaret University and Telehealth/Edinburgh Napier University) were encouraged to consider re-working their proposals and re-apply at a later stage.

### **2.5.1.2. Cycles 2 and 3**

A second call for applications limited to proposals aligned with Edinburgh Napier University or Queen Margaret University was instigated in August 2010. This resulted in three applications. However, none of these were aligned with Queen Margaret University. Since the Review Panel meeting in relation to this call had to be postponed due to adverse weather conditions it was decided to issue a third call for submissions in December 2010 limited to applications aligned with Queen Margaret University. This resulted in one further application which was considered by the Review Panel at the same time as applications received in Cycle 2.

The Review Panel met in March 2011 to consider these applications. Two applications were assessed as being of sufficient merit but since both were aligned with Edinburgh Napier University (and parity of distribution of the demonstration sites among the three partner universities is an implicit principle of the Scheme) one was funded (Telehealth/Edinburgh Napier University) and the other was given the position of first reserve (Substance Misuse/Edinburgh Napier University). Subsequently however the Telehealth team had to withdraw their application prior to commencing recruitment since it had become unlikely that the team would be able to appoint to the Advanced Practitioner (Clinical Research) post. The anticipated candidate for this post had gained employment elsewhere in the interim and no other potential candidates could be identified. Hence in May 2011 the Substance Misuse/Edinburgh Napier University team were informed that their bid had been funded as the second CARC Scheme demonstration site.

The Review Panel were unable to fund the one application received which was aligned with Queen Margaret University because the application team had been unable to identify a potential candidate for the Advanced Practitioner (Clinical Research) post.

## **2.5.2. Funded Sites**

### **2.5.2.1. Critical Care/University of Edinburgh**

This demonstration site is a collaboration between NHS Lothian Critical Care Directorate and the School of Health in Social Science, University of Edinburgh.

This application was titled 'Improving recovery from critical care - a clinical and academic collaboration'. The programme of work involves:

- the expansion of an existing research environment which successfully combines the expertise of both NHS practice and academic institutions,
- the development of research and practice in the area of treatment and rehabilitation of survivors of Intensive Care.

Recovery from critical illness is an area of increasing importance to the NHS, and has significant potential for theory building and development of social science academic interests. Making social theory relevant to practice is a key feature of the collaboration underpinning the proposal.

Advances in the technology and treatment of critically ill patients result in an increased number of survivors from Intensive Care Units (ICUs). Increased survival rate is accompanied by increasing numbers of frail patients. Intensive care focuses on physical survival, but the way an episode of critical illness profoundly impacts on the life of the survivor and changes relationships within a family is so

far not well understood. The support patients and their families need to adapt to life after critical care and reintegrate into social life and activities after such a dramatic experience is lacking. This period of adaptation is prolonged, and the problems survivors face are multifaceted, ranging from physical symptoms of extreme fatigue and weight loss, to psychological issues such as depression and post traumatic stress.

There is a need for research evidence regarding models of intensive care treatment which help recovery, and the kind of services that can support survivors and their families from the time of ICU discharge, to rehabilitation in hospital wards, to discharge from hospital and back home. This research needs to adopt a mixed methods approach in order to capture both staff and patient experience. It needs to consider organisational and financial implications in order to inform the planning of sustainable service redesign.

The CARC programme of research will contribute to such evidence. It centres on two project areas:

1. *Information for patients about their period in ICU.* Patients are unconscious for periods of time whilst in ICU, and suffer hallucinations for periods afterwards. Provision of information about what happened to them in ICU may be a way of helping patients re-establish continuity in their lives and supporting recovery.

Corrienne McCulloch has been appointed as Senior Practitioner (Clinical Research) which she combines with her existing role as Senior Research Nurse (Critical Care) in the Clinical Research Facility. She commenced her PhD studies in this area of research in January 2011 under the supervision of Dr. Sheila Rodgers and Dr. Jenni Tocher from Nursing Studies at the University of Edinburgh.

2. *Redesign of clinical rehabilitation services towards outcomes that are defined by survivors and their family and other informal carers.* Ongoing research projects will identify clinical interventions that can improve recovery. This project will work with survivors, their families and staff to identify how the organisation of care needs to change to make such interventions sustainable and address patients' priorities for rehabilitation.

Dr Pam Ramsay has been appointed as Advanced Practitioner (Clinical Research) which she combines with her existing role as Critical Care Research Co-ordinator. She is involved in two externally funded studies that focus on recovery from critical care, acting as Principal Investigator on the Relinquish Study. Since coming into post Pam has engaged closely with service leads and critical care nurses to take forward initiatives relating to improving recovery and patient experience. Her overall programme of work is summarised in Appendix G.

This CARC Scheme demonstration site was built on an established and dynamic NHS-academic collaboration, with both Scottish, UK national and international research collaborations (for example Griffiths University in Australia).

Both postholders have structured support and supervision mechanisms. The Senior Practitioner (Clinical Research) is supported by her PhD supervisors, and

also has regular meetings with the Lead Practitioner Research. The Advanced Practitioner (Clinical Research) receives joint supervision from the Consultant in Critical Care, Head of Nursing Studies and Lead Practitioner Research, as well as holding regular meetings with the Clinical Nurse Manager. In addition she has an external mentor, Dorothy Armstrong, Programme Director, NES and Nursing Adviser Scottish Public Services Ombudsman.

#### **2.5.2.2. Substance Misuse/Edinburgh Napier University**

This demonstration site is a collaboration between NHS Lothian Substance Misuse Directorate, Edinburgh Napier University and the University of Edinburgh.

The broad outline of this team's successful application was:

"The central theme of this research programme is how people's lives can be changed as a result of service redesign in alcohol and drugs services. The key drivers for the redesign are the Scottish Government's recovery agenda, partnership working (involving service providers and service users), a new care pathway, integrating drug and alcohol services, and the Government's HEAT (Health Efficiency Access Treatment) targets to reduce waiting times. The research will focus on how professionals respond to this change, how this affects their therapeutic relationship with service users and their families, and service users' experiences of care within the context of their wider families and communities. The research will comprise a framework which makes explicit the service model being adopted, the theory of change underpinning that model (and the policies from which it derives), and the reappraisal of the model and theory during the life of the programme."

The team's research questions are:

1. What is the nature and extent of partnership working between service providers and with service users after the development of the Service Development Plan?
2. Does the Service Development Plan promote a recovery ethos and practice in and between organisations and between service providers and service users?
3. What is the impact of the Service Development Plan on substance users':
  - choice of services, and engagement with services?
  - recovery in, and from addiction?
  - impact on services?

This demonstration site is currently in the early stages of organising recruitment to their two CARC Scheme posts.

#### **2.5.3. Site Support and Monitoring Framework**

The Management Group has adopted three methods of supporting and monitoring the progress of demonstration sites:

- Each site has an allocated Management Group representative to participate in the recruitment process, advise on the establishment of relevant structures and procedures within the terms of the Scheme (e.g. line management and supervisory responsibilities, secondment agreements), and provide a face-to-face contact to aid support and monitoring of progress.
- Each site is required to provide a formal 6-monthly Progress Report to the Management Group (Appendix H)
- CARC postholders are invited to attend a support group three times a year with the Chair of the Management Group. This focuses on ensuring that employment conditions and management/supervisory arrangements within

demonstration sites are running smoothly from the postholders' perspective, and instigating solutions with sites where problems are identified.

## **2.6. Evaluation Framework**

The Management Group has developed and agreed an evaluative framework for the CARC Scheme as a whole. The Scheme will be evaluated in two phases: Phase 1 covering the first 30 months of the Scheme (trigger date January 2011 when the first CARC postholders came into post) and Phase 2 covering the final 30 months. The evaluation for each phase will be carried out by independent researchers following a competitive tender process. Each phase evaluation study will be required to adopt mixed methods to evaluate progress on the outcomes specified in the original CARC Scheme proposal.

The Management Group intends to commission the Phase 1 evaluation by advertisement in June 2011. The brief for this commission including details of deliverables and timescales is shown in Appendix I. The cost of the Phase 1 evaluation to the Scheme has been set at £20,000 and will not cover full economic costs (FEC). It is anticipated that this evaluative work is most likely to be of interest to independent research organisations.

No decision has yet been taken on the commissioning process for the Phase 2 evaluation.

## **3. Challenges**

Once signing of the five-way partnership agreement was completed in November 2010 the Management Group aimed for three demonstration sites to be funded and two postholders to be recruited in each of the sites by the commencement of the Autumn 2011 university semester. This has been partly achieved; the Critical Care/University of Edinburgh site has been up and running with postholders in employment since January 2011 and it looks probable that the Substance Misuse/Edinburgh Napier University site will be able to recruit to their posts within this timeframe. Within the parameters of the Scheme it has proved difficult to fund a third demonstration site involving primary academic alignment with Queen Margaret University. There are two reasons for this:

- **Post-Doctoral Candidates**

The principal aim of the CARC Scheme is to promote high quality NMAHP clinical research within NHS Lothian by supporting the development of the research skills and knowledge of NMAHP staff in parallel with their clinical skills development. To this end the bar was set high in establishing the funding criteria for demonstration sites. Experience from the application cycles described above indicates that the current body of NMAHPs within NHS Lothian who are qualified to PhD level and are interested in this career path lacks the critical mass necessary to support three demonstration sites as originally intended within the parameters of the Scheme. This is a particular problem for Allied Health Professionals who represent a much smaller proportion of the NHS Lothian workforce than Nursing and Midwifery. This has proved the greatest challenge for potential NHS Lothian/Queen Margaret University collaborative application teams.

- **Strategic Priority Mappings**

The funding criteria for demonstration site applications included the requirement for alignment with the strategic research priorities of both NHS Lothian and the primary higher education institution. In the case of NHS Lothian and Queen Margaret University this mapping has, to date, proved a challenge.

#### **4. Amendment of the Scheme**

As a consequence of the challenges described above and the difficulties in funding a third demonstration site the Management Group arranged a meeting of the Scheme funders in March 2011 to discuss possible ways forward. This resulted in Queen Margaret University proposing an amendment to the Scheme (see Appendix J). A subsequent meeting of the funders in April 2011 agreed to this proposal. This means that the third demonstration site will now comprise two posts at Senior Practitioner (Clinical Research) level (i.e. two part-time PhD posts) and no post-doctoral Advanced Practitioner (Clinical Research) post.

The funders were in agreement that regrettably a pragmatic amendment was needed and the solution arrived at was the preferred amongst a number of options considered. All agreed that the underlying principles of the Scheme should be preserved as far as possible but that the most important of these is that the Scheme, in whatever form, must be a success i.e. lead to excellence in clinical research outputs and building NMAHP research capacity and capability in NHS Lothian.

Subsequent to this decision discussions have commenced between the AHP Director, NHS Lothian and the Dean of School of Health Sciences, Queen Margaret University in order to clarify areas of shared strategic research priority. This mapping exercise will inform the clinical focus of subsequent CARC Scheme applications. A further call for applications has been placed on hold until the outcome of these discussions has been finalised. It is anticipated that if shared priorities can be established that this call will be issued in July/August 2011.

There are cost implications of this decision. Specifically, the amendment commits the Scheme to funding the salary of a Senior Practitioner (Clinical Research) at Agenda for Change Band 6 plus PhD tuition fees over the 5-year period of the Scheme as opposed to the salary of an Advanced Practitioner (Clinical Research) at Agenda for Change Band 7 for 3 years with the option of contract extension based on performance as originally envisaged. This equates to an additional fixed cost to the Scheme of approximately £34,000 over the lifetime of the Scheme. However, some if not all of this additional cost would be mitigated by the reduced cost of extending the contracts of the two, as opposed to three, Advanced Practitioners into years 4 and 5. These reduced costs would be approximately £27,100 and £27,800 in years 4 and 5 respectively. The anticipated costs tabulated in Appendix E take account of the amendment.

The Management Group is currently seeking advice from the Research and Development Office regarding the most appropriate method of formally amending the Partnership Agreement signed by all parties.

#### **5. Accounts**

The Scheme funds are managed by NHS Lothian's Research and Development Office Accountant. As of 30 April 2011 all scheduled income to the end of financial year 2010/11 (total £190,000 as per the Partnership Agreement) had been credited by the partners to the CARC Scheme account. Expenditure to 31 May 2011 was as planned and is tabulated in Appendix K.

#### **6. Wider NMAHP research capacity and capability developments related to the Scheme**

The roll-out of the CARC Scheme initiative has prompted several positive and unanticipated developments in the wider field of NMAHP research capacity and capability in Lothian.

Within the existing demonstration site in Critical Care the University of Edinburgh have allocated a MRes studentship to be awarded within the overall programme of recovery from critical illness. Initial discussions are underway with the Critical Care directorate to match this funding so that two studentships can be taken forward. It is envisaged that these will commence in September 2011. Edinburgh Napier University have also expressed an intention to fund an MRes studentship to sit within the Substance Misuse demonstration site.

Further, some services that considered applying to become a CARC demonstration site, but were not in a position to do so because of the absence of established research capacity at post-doctoral level, have expressed a desire to develop NMAHP research capacity and capability in their area by other means. This has led to a range of discussions between these services and the universities to explore innovative approaches, particularly at the early career stage (Masters level). For example, Cancer and Palliative Care services in partnership with Edinburgh Napier University are considering a proposal to develop two part-time MRes studentships over 2 years. A new model for engagement has been proposed which would invite applications from nurses to undertake a Masters research methods module leading to the development of a research proposal. Two research proposals would then be selected to be taken forward as MRes studies in September 2011, with the tuition fees being paid by Edinburgh Napier University. It is anticipated that 5 nurses will commence the module in June 2011. There are further plans to extend this model to other areas such as Mental Health.

## 7. Objectives for 2011-2012

The main objectives for the CARC Scheme Management Group for the remainder of the financial year 2011/12 are:

- To recruit to the two posts in the Substance Misuse/Edinburgh Napier University demonstration site by August 2011 with a view to postholders commencing by the start of the Autumn 2011 university semester.
- To issue a further call for applications leading to the funding of the third and final demonstration site comprising a collaboration between NHS Lothian and Queen Margaret University. The aim is to achieve this by October 2011 with a view to recruitment to the available posts by the beginning of the Winter 2012 university semester.
- To continue to provide support to all CARC postholders and demonstration sites by the means described in 2.5.3 above.
- To monitor the progress of demonstration sites by the means described in 2.5.3 above.
- To commission independent researchers by September 2011, following a competitive tendering process, to perform the Phase 1 Evaluation of the Scheme.

## 8. References

NHS Education for Scotland (2011). *National Guidance for Clinical Academic Research Careers for Nursing Midwifery and Allied Health Professions in Scotland*.

Available online at <http://www.nes.scot.nhs.uk/about-nes/publications/national-guidance-for-clinical-academic-research-careers-for-nursing-midwifery-and-allied-health-professions-in-scotland>

## 9. Appendices

### Appendix A. CARC Scheme Milestones: September 2008 - June 2011

September 2008	First conceptualisation of model through discussions between representatives of NHS Lothian and Centre for Integrated Healthcare Research.
October 2008 - March 2009	Establishment of working group and drafting of the CARC Scheme proposal.
March 2009 - February 2010	Widening of working group membership to include Queen Margaret University, Edinburgh Napier University and University of Edinburgh. Consultation on draft proposal. Discussions with potential partners and receipt of verbal commitments to contribute funding to the Scheme over 5 years from NHS Lothian Research and Development Office, NHS Education for Scotland, Edinburgh Napier University, University of Edinburgh and Queen Margaret University.
February 2010	Final draft of proposal endorsed by NHS Lothian Executive Management Team.
March 2010	Signing of Service Level Agreement between NHS Lothian and NHS Education for Scotland.
May 2010	Official launch of the Scheme. Issuing of first call for applications to become a demonstration site for the Scheme.
July 2010	Applications Review Panel conditionally funds Critical Care/University of Edinburgh application as the first demonstration site.
August 2010	Second call for applications to become a demonstration site. CARC Scheme job descriptions approved by NHS Lothian Job Evaluation Panel.
November 2010	Signing of partnership agreement between NHS Lothian, University of Edinburgh, Queen Margaret University, Edinburgh Napier University and NHS Education for Scotland. Formal constitution of Scheme Management Group and Steering Group. Funding in place to support first demonstration site.
December 2010	Third call for applications to become a demonstration site.
January 2011	Dr. Pam Ramsay and Corrienne McCulloch commence in CARC posts in Critical Care demo site as Advanced Practitioner (Clinical Research) and Senior Practitioner (Clinical Research) respectively.
March 2011	Review Panel conditionally funds the Telehealth/Edinburgh Napier University application as a demo site with Substance Misuse/Edinburgh Napier University application as first reserve.
May 2011	Funding partners approve proposal to amend Scheme such that third demonstration site (involving Queen Margaret University) will comprise two Senior Practitioner (Clinical Research) posts as opposed to one plus an Advanced Practitioner (Clinical Research) post. Withdrawal of the Telehealth/Edinburgh Napier University application. Review Panel conditionally funds the Substance Misuse/Edinburgh Napier University application as a demonstration site.
June 2011	First Annual Report. First meeting of the Scheme Steering Group.

## Appendix B. CARC Scheme Funding

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
NHS Lothian Research and Development Office		£60,000	£60,000	£60,000	£60,000	£60,000
Edinburgh Napier University		£20,000	£20,000	£20,000	£20,000	£20,000
University of Edinburgh		£20,000	£20,000	£20,000	£20,000	£20,000
Queen Margaret University		£20,000	£20,000	£20,000	£20,000	£20,000
NHS Education for Scotland	£40,000	£30,000	£30,000	£30,000	£30,000	£30,000
Annual totals	£40,000	£150,000	£150,000	£150,000	£150,000	£150,000
Total funding						£790,000

## **Appendix C. Membership of Management Group**

### **NHS Lothian**

Andy Peters, AHP Research & Development Facilitator (Chair)

Juliet MacArthur, Lead Practitioner Research (Vice-Chair)

Dr. Janet Hanley, Research Manager (Capacity and Capability)

### **School of Nursing, Midwifery & Social Care, Edinburgh Napier University**

Professor Catriona Kennedy, School Director for Research and Knowledge Transfer

### **School of Health Sciences, Queen Margaret University Edinburgh**

Dr. Elaine Bannerman, Senior Lecturer

### **School of Health in Social Science, University of Edinburgh**

Professor Pam Smith, Professor of Nurse Education

## **Appendix D. Membership of Steering Group**

### **NHS Lothian**

Professor David Newby, Director Research and Development Office (Chair)

Melanie Hornett, Executive Nurse Director

Lynne Douglas, AHP Director

Sarah Sinclair, Head of Patient Focus, Public Improvement

Dr. Michael Brown, Consultant Nurse, Learning Disabilities

Geoff Hunter, Senior Personnel Manager

Glen Merritt, Management Accountant Assistant, R&D Office

### **Edinburgh Napier University**

Dr Jayne Donaldson, Head of School of Nursing, Midwifery and Social Care

### **University of Edinburgh**

Professor Liz Bondi, Head of School of Health in Social Science

### **Queen Margaret University Edinburgh**

Dr. Fiona Coutts, Dean of School of Health Sciences

### **NHS Education for Scotland**

Dr. Lesley Whyte, Programme Director, Nursing and Midwifery

## Appendix E. CARC Scheme Costs

### Anticipated Costs\*

	<u>Recurring costs</u>				
	2010/11	2011/12	2012/13	2013/14	2014/15
<b>Salaries (incl. employers costs @ 25%)</b>					
4 x 0.5 wte (top of AfC Band 6)	£85,449	£87,864	£89,849	£92,133	£94,472
2 x 0.5 wte (top of AfC Band 7)**	£50,311	£51,729	£52,896	£0	£0
<b>Tuition fees (annual) (inflation applied from Yr2 onwards)</b>					
4 x part-time PhD	£7,253	£7,435	£7,620	£7,811	£8,007
<b>Conference attendance and travel</b>	£2,050	£2,101	£2,154	£1,104	£1,144
<b>Consumables</b>					
Stationery, office supplies	£600	£615	£630	£323	£335
<b>Computer support &amp; maintenance incl. VAT</b>	£1,384	£1,418	£1,454	£1,490	£1,527
<b>TOTAL RECURRING COSTS</b>	<b>£147,047</b>	<b>£151,162</b>	<b>£154,603</b>	<b>£102,861</b>	<b>£105,485</b>

\* As per advice from R&D Office Accountant and Procurement. Based on 2009 costs plus inflationary costs of 2.5% per annum, planned implementation year of 2010/11, and inclusive of impact of amendment to Scheme agreed by funders in May 2011.

\*\* Band 7 posts to be established as 3 year contracts initially. Possibility of extension to years 4 and 5. Expectation of generation of research grant income as part of this role.

<u>Non-recurring costs</u>	
<b>Independent evaluation</b>	£40,000
<b>Sundries incl. VAT</b>	
6 x desktop computers incl. std. software	£6,697
3 x network ready printers	£1,257
3 x laptops incl. std. software***	£3,415
3 x BeCrypt licence	£296
6 x office non-consumables	£1,583
<b>TOTAL NON-RECURRING COSTS</b>	<b>£53,248</b>

\*\*\* NVivo and SPSS software site licences available through the 3 universities so will be installed on laptops as long as these are purchased via each university's procurement arrangements.

<b>TOTAL SCHEME COSTS**</b>	<b>£704,416</b>
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## **Appendix F. Membership of Applications Review Panels**

### **Panel 1**

#### **NHS Education for Scotland**

Dr. Colette Ferguson, Associate Director, Nursing and Midwifery (Chair)

#### **NHS Lothian**

Dr. Christine Phillips, Deputy Director Research and Development Office

Melanie Hornett, Executive Nurse Director

#### **Edinburgh Napier University**

Dr Jayne Donaldson, Head of School of Nursing, Midwifery and Social Care

#### **University of Edinburgh**

Professor Liz Bondi, Head of School of Health in Social Science

Dr. Chris Weir, Associate Director (Statistics), MRC Hub for Trials Methodology

#### **Queen Margaret University**

Professor Tom Mercer

#### **NMAHP Research Unit, University of Stirling**

Dr. Helen Cheyne, Reader

#### **Alliance for Self Care Research, University of Dundee**

Dr. Thilo Kroll, Senior Lecturer

### **Panel 2**

#### **NHS Lothian**

Dr. Christine Phillips, Deputy Director Research and Development Office (Chair)

Lynne Douglas, AHP Director/Mark Smith, Consultant Physiotherapist

#### **NHS Education for Scotland**

Dr. Lesley Whyte, Programme Director, Nursing and Midwifery

#### **Edinburgh Napier University**

Dr Jayne Donaldson, Head of School of Nursing, Midwifery and Social Care

#### **University of Edinburgh**

Professor Liz Bondi, Head of School of Health in Social Science

Dr. Chris Weir, Associate Director (Statistics), MRC Hub for Trials Methodology

#### **Queen Margaret University**

Professor Alan Gilloran, Vice Principal (Academic)

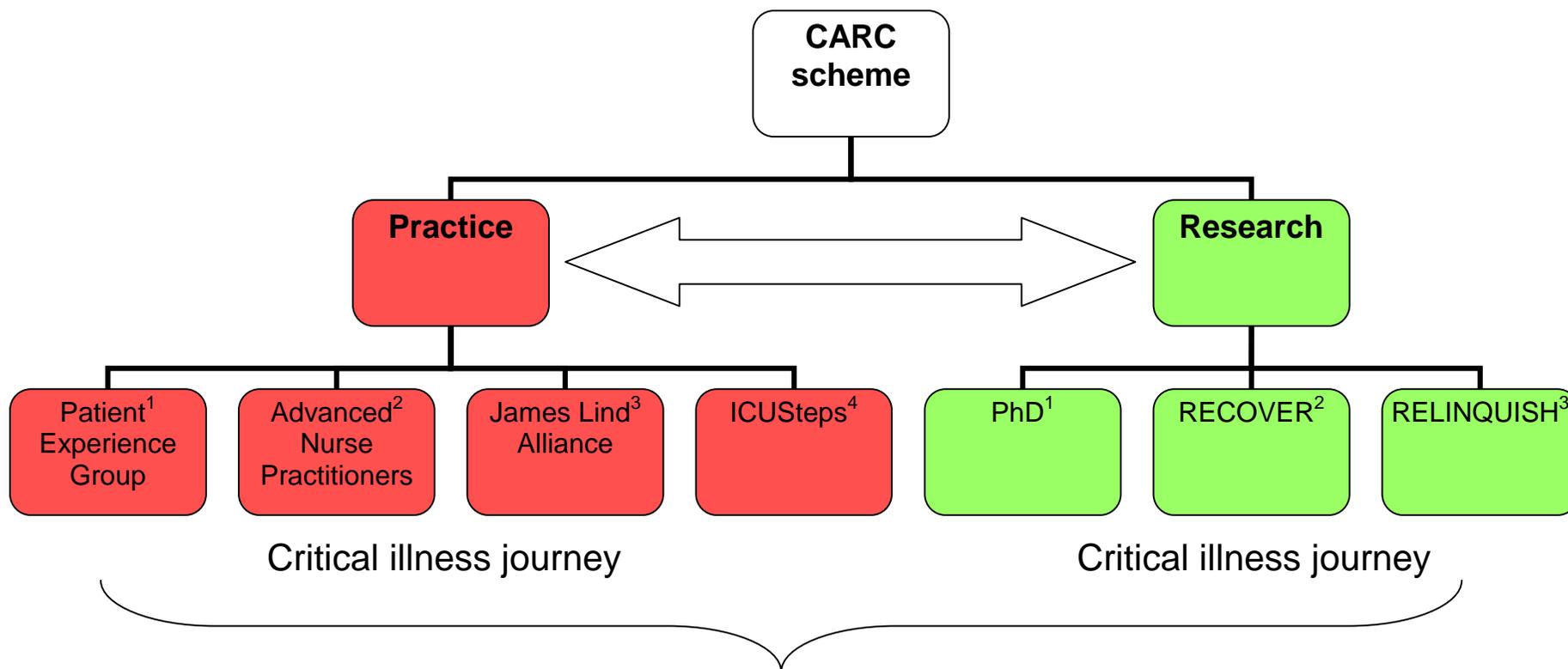
#### **NMAHP Research Unit, University of Stirling**

Dr. Helen Cheyne, Reader

#### **Alliance for Self Care Research, University of Dundee**

Dr. Thilo Kroll, Senior Lecturer

## Appendix G. Programme of Work: Advanced Practitioner (Clinical Research) in Critical Care



### Evidence-based patient centred follow up service for survivors of critical illness

1. Recently established group of ICU nurses from across NHS Lothian
2. There may be a role for the ANPs in the ward-based follow up of survivors
3. A patient representative body which aims to elicit mutual research priorities among patients, relatives and clinicians
4. A ICU patient-led support group based in Milton Keynes. We aim to develop a “satellite” group in Edinburgh/Scotland.

1. Quality of life following prolonged critical illness: a mixed methods study. Predominantly qualitative exploration of the critical illness journey to <6 months after hospital discharge.
2. An RCT of enhanced rehabilitation among ICU survivors. The study has a strong qualitative element including focus groups with (i) patients and family members (ii) ward-based clinicians
3. A longitudinal qualitative study of informal support and perceived healthcare needs to 1 year following hospital discharge.

## Appendix H. Demonstration Site 6-Monthly Progress Report Pro-Forma

<b>Clinical Academic (Research) Careers Scheme for Nurses, Midwives and Allied Health Professionals in NHS Lothian</b>
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<b>Demonstration Site 6 Monthly Progress Report</b>
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**Purpose:** This progress report is the principal means by which the CARC Scheme Management Group will monitor and document the progress of the funded demonstration sites. Funded collaborations are required to provide progress information in this format on a 6 monthly basis for the five years covered by the funding. The Management Group will issue a reminder to demonstration sites approximately a month before each progress report is due. It is the responsibility of the collaboration's service and academic leads to ensure this information is provided on time. Of course, it is likely that leads will need to consult with their postholders for much of the information detailed below. The report should be signed and returned to the Chair of the CARC Scheme Management Group.

Demonstration site: .....

Report due date: ...../...../.....

<b>Review period covered by this progress report</b>	
<b>Infrastructure, resource or process issues which have arisen in this review period</b>	
<b>Activities undertaken in this review period</b>	Advanced Practitioner (Clinical Research):  Senior Practitioner (Clinical Research):  Other by CARC Scheme collaboration as a whole:
<b>Specific outcomes achieved in this review period</b>	Advanced Practitioner (Clinical Research):  Senior Practitioner (Clinical Research):  Other by CARC Scheme collaboration as a whole:

<p><b>Plan of work to be completed before next 6 monthly progress report</b></p>	<p>Advanced Practitioner (Clinical Research):</p> <p>Senior Practitioner (Clinical Research):</p> <p>Other by CARC Scheme collaboration as a whole:</p>
<p><b>Detail any significant departures from the intended plan described in your successful funding application</b></p>	
<p><b>Describe any other issues you think the Scheme Management Grp should be made aware of</b></p>	

**Completed by:**

Print name.....(Demo Site Service Lead)

Signature:.....

Date: ...../...../.....

Print name.....(Demo Site Academic Lead)

Signature:.....

Date: ...../...../.....

## Appendix I. Phase 1 Evaluation Brief

### Commission of Evaluation Study

#### Phase 1 Evaluation of Lothian's Nursing, Midwifery and Allied Health Professions Clinical Academic Research Careers (CARC) Scheme

Bids are invited to evaluate the impact of this initiative.

**Background:** The Lothian NMAHP CARC Scheme is a partnership initiative between NHS Lothian, University of Edinburgh, Edinburgh Napier University, Queen Margaret University and NHS Education for Scotland (NES). The Scheme has a high profile, being regarded as a pilot site to inform the development of similar career pathway initiatives across Scotland in accord with the national NMAHP Clinical Academic Research Career Framework recently developed by NES. The Scheme involves the creation of six NMAHP clinical research posts (each 0.5 wte) within NHS Lothian - three at Senior Practitioner (registering for a 5-year part-time PhD) and three at Advanced Practitioner (part-time, post-doctoral, Honorary Clinical Research Fellow) level. These posts are organised across three clinical demonstration sites and postholders will simultaneously hold clinical posts within these service areas. The Scheme will run for a 5-year period and full details are available in the accompanying document.<sup>1</sup>

**Purpose:** This study will evaluate the impact of the Scheme in its first 30 months of operation (Phase 1) from multiple perspectives e.g. satisfactory progress being made regarding: completion of doctoral research training, completion of research studies, journal publications and conference presentations, grant income generation, impact on service delivery and development, impact on universities' REF submissions, perceptions of multiple stakeholders (e.g. postholders, CARC Scheme Management and Steering Groups, clinical-academic research collaborative teams, host clinical services).

**The Study:** Up to £20,000 is available for a study which will adopt mixed methods to evaluate the CARC Scheme (please see Section 6.9 in the accompanying document for full details of suggested methodology). It is anticipated that qualitative methods such as interviews/focus groups are likely to form part of the study. It is anticipated that successful completion of the study will not require continuous research activity throughout the specified 30 months of Phase 1 but rather periodic activity. A separate open invitation to bid to evaluate Phase 2 (30 months to 5 years) of the Scheme will be advertised at a later date.

**The Investigators:** The investigators and their employing organisation will be independent of the five partner institutions that have developed the Lothian NMAHP CARC Scheme and are listed above.

**Expected Output:** Reporting will be to the CARC Scheme Management Group. An interim report at 18 months and final report at 30 months which review the impact of the Scheme from multiple perspectives as described above will be required. Reports will include identification of factors promoting and hindering successful achievement of the Scheme's objectives. Report findings will inform the management of the Scheme in an iterative cycle of problem-solving in order to maximise the benefits of the Scheme. Scheduled verbal feedback on progress to the CARC Scheme Management Group will be expected. Timely ad hoc verbal feedback to the Management Group will also be expected where problems in the operation of the Scheme are identified by the investigators.

#### **Terms and Conditions**

Applications should be submitted to Edinburgh Health Services Research Unit (HSRU) by .....

All details regarding the application process are available on the HSRU website at [www.hsru.ed.ac.uk](http://www.hsru.ed.ac.uk)

Applications will be reviewed by the Lothian CARC Scheme Management Group.

Funding will be issued in two equal payments at commencement and after satisfactory completion of the interim report. Funding will not support Full Economic Costs.

Reports are expected within 6 weeks of the agreed 18 months and 30 months time points.

Further information available from [Andy.Peters@luht.scot.nhs.uk](mailto:Andy.Peters@luht.scot.nhs.uk)

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<sup>1</sup> 'Clinical Academic (Research) Careers Scheme for Nurses, Midwives and Allied Health Professionals in NHS Lothian'

## Appendix J. Approved Amendment to Partnership Agreement

### Clinical Academic Research Career (CARC) proposal from QMU.

Following the review of the applications for the 3<sup>rd</sup> round of CARC, the scheme was not able to fund three successful bids. As a result an extraordinary meeting of the funding partners was held on 8<sup>th</sup> March 2011 to discuss the way forward for the scheme. QMU was asked to consider three options:

1. Two Senior Practitioner/PhD posts rather than one plus the Advanced Practitioner/post-doc post,
2. An academic post-doc rather than one clearly embedded within NHS Lothian,
3. A staggered start e.g. appoint to the Senior Practitioner /PhD post first and then hope to appoint to the Advanced Practitioner/post-doc post at a later stage.

#### Proposal

A review of the options and possibilities has taken place and the most feasible option to satisfy the aims of the CARC scheme (with QMU's continued participation), at this time is the first one - **Two Senior Practitioner/PhD posts rather than one plus the Advanced Practitioner/post-doc post.** The other possibilities have been explored and cannot be undertaken due to the lack of an appropriate person who is at post doctoral level either now or in the near future. The appointment of a post doctoral practitioner would have been the preferred option for QMU. QMU would not be willing to fill the position with an applicant from another University.

QMU propose that applications for two PhD scholarships are invited from QMU academic staff collaborating with senior clinicians from NHS Lothian (this could incorporate PhD studentship previously submitted to CARC). The applications would require to be located in areas of research that fit with both the REF theme areas for QMU, and the strategic AHP research areas in NHS Lothian. QMU recommends that only one application should be received from each strategic AHP area, which will help to spread the research capacity and capability enhancement opportunities.

The application should ideally identify a candidate who would be eligible for PhD study at QMU. The normal application process for QMU PhD applicants would take place.

#### Research support for AHPs in NHS Lothian

QMU acknowledge that the chosen option does not immediately assist in the growth of research for NHS Lothian AHP advanced practitioners. This highlights, however, a limitation in the CARC scheme criteria (reflected in the lack of eligible candidates) and not QMU's willingness to support advanced researcher development.

To facilitate this process QMU would like to offer to:

- establish and lead an AHP research discussion group which would include a selection of NHS Lothian AHP clinical researcher and QMU academics. This would be led by a Research Professor from QMU and would include an appropriate senior representative of NHS Lothian AHPs. This would look at specific examples of research and advise on research development possibilities from both the academic and health service perspectives.
- Introduce and encourage cross institutional research educational possibilities between NHS Lothian researchers and QMU staff e.g. lecture series, professorial lectures etc

- provide a list of key researchers in each of the REF themes who would contribute to or advise this group of researchers,
- conduct a mapping exercise to match researcher interests between practitioners and academics to explore possibilities of working together in key research areas.

The aim of this group would be to support either PhD intended research or grant applications with the view to expanding and sustaining research links. QMU's principle driver is to help give a more structured approach to research mentorship of Lothian AHP clinician scientists.

### **Way forward**

QMU looks forward to gaining support for this proposal and in working closely with NHS Lothian practitioners to further AHP research. Should the panel have any issues regarding this proposal we would be happy to receive these for discussion, before any final decision is made.

Thank you for your consideration.

A handwritten signature in cursive script that reads "Fiona Coutts". The signature is written in black ink and is positioned above a horizontal line that extends to the right.

Dr Fiona Coutts  
Dean School of Health Sciences  
Queen Margaret University, Edinburgh.

**Appendix K. CARC Scheme Expenditure to 31 May 2011 (Demonstration Sites 1 & 2 only)**

	2010-11				2011-12				Total			
	Budget	Actual	Variance	% Variance	Budget	Actual	Variance	% Variance	Budget	Actual	Variance	% Variance
<b>Critical Care</b>												
Band 6 - wte 0.50	£21,362	£3,765	-£17,597	-82%	£21,966	£2,875	-£19,091	-87%	£112,441	£6,641	-£105,800	-94%
Band 7 - wte 0.50	£25,155	£4,726	-£20,430	-81%	£25,864	£3,569	-£22,295	-86%	£77,467	£8,295	-£69,173	-89%
Tuition fees	£1,813	£0	-£1,813	-100%	£1,859	£0	-£1,859	-100%	£9,531	£0	-£9,531	-100%
Conference & Travel	£683	£0	-£683	-100%	£700	£0	-£700	-100%	£2,850	£0	-£2,850	-100%
Consumables	£200	£0	-£200	-100%	£205	£0	-£205	-100%	£834	£0	-£834	-100%
Computer Maintenance	£461	£0	-£461	-100%	£473	£0	-£473	-100%	£2,423	£0	-£2,423	-100%
	<b>£49,675</b>	<b>£8,491</b>	<b>-£41,184</b>	<b>-83%</b>	<b>£51,067</b>	<b>£6,444</b>	<b>-£44,623</b>	<b>-87%</b>	<b>£205,547</b>	<b>£14,935</b>	<b>-£190,612</b>	<b>-93%</b>
Non-Recurring costs	£0	£0	£0	0%	£4,416	£0	-£4,416	-100%	£4,416	£0	-£4,416	-100%
	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>0%</b>	<b>£4,416</b>	<b>£0</b>	<b>-£4,416</b>	<b>-100%</b>	<b>£4,416</b>	<b>£0</b>	<b>-£4,416</b>	<b>-100%</b>
<b>TOTAL</b>	<b>£49,675</b>	<b>£8,491</b>	<b>-£41,184</b>	<b>-83%</b>	<b>£55,483</b>	<b>£6,444</b>	<b>-£49,039</b>	<b>-88%</b>	<b>£209,963</b>	<b>£14,935</b>	<b>-£195,028</b>	<b>-93%</b>
<b>Substance Misuse</b>												
Band 6 - wte 0.50	£21,362	£0	-£21,362	-100%	£21,966	£0	-£21,966	-100%	£112,443	£0	-£112,443	-100%
Band 7 - wte 0.50	£25,155	£0	-£25,155	-100%	£25,864	£0	-£25,864	-100%	£77,467	£0	-£77,467	-100%
Tuition fees	£1,813	£0	-£1,813	-100%	£1,859	£0	-£1,859	-100%	£9,532	£0	-£9,532	-100%
Conference & Travel	£683	£0	-£683	-100%	£700	£0	-£700	-100%	£2,850	£0	-£2,850	-100%
Consumables	£200	£0	-£200	-100%	£205	£0	-£205	-100%	£835	£0	-£835	-100%
Computer Maintenance	£461	£0	-£461	-100%	£473	£0	-£473	-100%	£2,425	£0	-£2,425	-100%
	<b>£49,675</b>	<b>£0</b>	<b>-£49,675</b>	<b>-100%</b>	<b>£51,067</b>	<b>£0</b>	<b>-£51,067</b>	<b>-100%</b>	<b>£205,553</b>	<b>£0</b>	<b>-£205,553</b>	<b>-100%</b>
Non-Recurring costs	£0	£0	£0	0%	£4,416	£0	-£4,416	-100%	£4,416	£0	-£4,416	-100%
	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>0%</b>	<b>£4,416</b>	<b>£0</b>	<b>-£4,416</b>	<b>-100%</b>	<b>£4,416</b>	<b>£0</b>	<b>-£4,416</b>	<b>-100%</b>
<b>TOTAL</b>	<b>£49,675</b>	<b>£0</b>	<b>-£49,675</b>	<b>-100%</b>	<b>£55,483</b>	<b>£0</b>	<b>-£55,483</b>	<b>-100%</b>	<b>£209,969</b>	<b>£0</b>	<b>-£209,969</b>	<b>-100%</b>
<b>GENERAL A/C</b>												
Independent Evaluation	£20,000	£0	-£20,000	-100%	£0	£0	£0	0%	£20,000	£0	-£20,000	-100%
General costs	£40,000	£225	-£39,775	-99%	£0	£0	£0	0%	£40,000	£225	-£39,775	-99%
	<b>£60,000</b>	<b>£225</b>	<b>-£59,775</b>	<b>-100%</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>0%</b>	<b>£60,000</b>	<b>£225</b>	<b>-£59,775</b>	<b>-100%</b>
<b>TOTAL</b>	<b>£60,000</b>	<b>£225</b>	<b>-£59,775</b>	<b>-100%</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>0%</b>	<b>£60,000</b>	<b>£225</b>	<b>-£59,775</b>	<b>-100%</b>
<b>GRAND TOTAL</b>	<b>£159,351</b>	<b>£8,716</b>	<b>-£150,635</b>	<b>-95%</b>	<b>£110,966</b>	<b>£6,444</b>	<b>-£104,522</b>	<b>-94%</b>	<b>£479,933</b>	<b>£15,160</b>	<b>-£464,773</b>	<b>-97%</b>

