



The Open University

EAST OF ENGLAND RESEARCH AUDIT REPORT

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EXECUTIVE SUMMARY

The East of England Strategic Health Authority's vision seeks to improve patient safety and the patient's experience. Research has a central place in providing the evidence to underpin innovative service delivery. Nurses, midwives, allied health professionals and clinical scientists are expected to be major influences in the conduct of health services research and applied research that influence service delivery most directly. The SHA has an award scheme, CARA [Clinical Academic Research Awards], that currently funds research opportunities. This audit project was commissioned to provide the baseline evidence of current research activity, among these professional groups, upon which future investments could be built. The project proposal is reproduced in Appendix 1.

This report presents a snapshot audit of research activity in the first quarter of 2010. The audit team pieced together the information from diverse sources. The data gathering methods included analysis of written reports, telephone interviews, email exchanges and site visits. The team approached leaders of the target professional groups, R&D offices and educational leads, where relevant, in all the acute and mental health Trusts, all primary care Trusts/community health service organisations and the higher education institutes in the region. We also approached a number of regional and national bodies. We obtained data from 22 of the 26 acute and mental health Trusts in the region, 10 of 15 PCTs/Community Health Services and 4 of the 6 higher education institutes [HEIs]. The most research active Trusts and the most active HEIs did participate in the audit and provided usable data.

The most widely represented group were research nurses/midwives who worked in the majority of NHS Trusts and were engaged in a wide spectrum of clinical research in all the major medical specialties. There were around 416 research nurses/midwives reported in the survey but none was apparently undertaking research specific to nursing practice.

We identified 104 NHS staff in our target group who were studying for Master's degrees with a significant research component. The most frequently encountered modes of research in these projects were retrospective analysis of clinical cases, evaluation, or an attitude survey among colleagues. There was almost no research aimed at the clinical base of the professions involved. The place of study was local to the region in around 75% of reported cases.

We identified 22 staff undertaking MPhil or PhD studies. The place of study was equally likely to be within the region or outside the region, often depending upon the availability of a supervisor with relevant expertise. The content of this research was more likely to be based on the science underpinning clinically relevant research questions.

The HEIs identified 75 staff from the East of England region on their higher degree courses. Their enrolled numbers were much higher but they served national and international demand so it was not possible to match data from NHS Trusts. Indeed, NHS staff often chose to study at HEIs outside the region.

We undertook telephone interviews with 15 CARA award holders, all of whom were undertaking clinically relevant projects. These demonstrated support for the scheme, highlighted the difficulty of balancing study and service delivery and underlined the importance of a research culture to encourage application and participation.

The main recommendation is for a structured approach to investment in research so that important clinical issues are identified by clinical teams, addressed by relevant research and fed back into the service. This requires a partnership between research active practitioners in the NHS and academics in the HEIs who share the desire for research to improve practice and patient safety. Such a structured approach will ensure a more rapid adoption of the results of research by the professional groups. Further investment in higher education places should be accompanied by investment in supporting research and fostering a research climate through such a structured approach.

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1 INTRODUCTION AND BACKGROUND

In a key strategic document¹, the East of England Health Authority has articulated its vision for the development of healthcare in the region. A major part of improving the experiences of patients and the quality of care they receive is centred on the role of research in providing the evidence to underpin and enhance professional practice. The Strategic Health Authority is keen to ensure that research is an integral part of the development of all professions in the NHS and not just the medical profession. It considers that nurses, midwives, allied health professionals [AHPs] and clinical scientists are in the best position to contribute to the service development, health services research and applied research agendas which ensure that scientific findings are actually incorporated into practice in ways that benefit patients and the NHS. It has an existing scheme, Clinical Academic Research Awards [CARA], which funds a number of places at Master's, PhD and postdoctoral levels, but the response to funding calls is patchy and not fully representative of the professional distribution across the region.

The reasons for the unsatisfactory uptake of research opportunities among nurses and midwives [NaMs], AHPs and clinical scientists are not fully understood. Indeed, the numbers of such professional groups undertaking higher education studies with funding outside the CARA scheme was not centrally documented. There was, therefore, a requirement for investigation and better understanding and analysis before appropriate interventions could be developed and applied.

In addition to the higher education issues, there was only incomplete knowledge of the details of research activity among these professional groups and poor documentation of the projects they were undertaking. Further, little was recorded of how these projects could influence the development of professional practice for the benefit of patients. The following areas of uncertainty were evident:

The number of NaMs, AHP and scientific staff undertaking higher degree studies with a significant research element and their places of study.

The numbers of nurses and other health professionals having time allocated to research, and the nature of their research.

¹ NHS East of England (2009) *Towards the best, together. A Clinical Vision for our NHS, now and for the next decade*. Cambridge, NHS East of England. Available at: [http://www.eoe.nhs.uk/downloadFile.php?doc_url=1236793405_LMRv_towards_the_best_together_\(published_march_2009\).pdf&area_id=02](http://www.eoe.nhs.uk/downloadFile.php?doc_url=1236793405_LMRv_towards_the_best_together_(published_march_2009).pdf&area_id=02)

The nature of research being undertaken by NaMs, AHPs and clinical scientist staff in fulfilment of the requirements for higher degrees.

In addition, the Strategic Health Authority sought to find examples where a research project or programme of applied research could be shown to have played a significant part in increasing the efficiency or quality of service delivery.

The Open University agreed to undertake an audit of research activity among NaMs, AHP and clinical scientific staff in the region. A copy of the research proposal is in Appendix 1. This project formed part of a larger collaborative project led by the University of East Anglia and was undertaken under the existing contractual arrangements.

2 INITIAL APPROACH

The project plan emerged in stages and was developed in close collaboration with the Strategic Health Authority team [Professor Mike Cook and Liz Cory] through regular meetings.

The initial idea was to contact all the Trusts in the region and ask for data about research activity and higher degree participation and to match this with data obtained from the higher education institutions in the region. Within each Trust, we considered approaching R&D Offices and the directors of relevant professions. We also planned to approach the Comprehensive Local Research Networks and the National Institute for Health Research to obtain further data on health services research and applied research in the region. Details of the contacts are in Appendix 2.

It was felt that the most fruitful line of approach was to contact Trust R&D Offices and HEI course leaders as the starting point or entry point to each organisation. We used email to make contact and offered to visit each institution to assist data gathering and offered to discuss the project by telephone. The idea is simple to describe but rather more complex to realise. It required several iterations and considerable detective work in identifying the most relevant persons in each organisation.

There was, however, a good measure of willingness to engage with the project and nearly all the 26 Acute and Mental Health Trusts and over half the 15 PCTs/Community Health Services approached agreed to help and provide data. Over half of the 6 HEIs similarly agreed to assist. We organised site visits to one HEI, undertook in-depth telephone interviews with two others and used email to engage with the remainder. We were able to obtain data from nearly all Trusts and are confident that we have sampled the larger and more research intensive Trusts in the region. The data supplied are recorded by Trust and discussed in the 'Findings' section of this report, where data from all sources are combined.

3 INITIAL CHALLENGES

Our first attempt at data gathering offered a number of challenges to the aims of the project. These enriched our understanding but limited the possibilities for coherent data on research activity. They are described and explained in Appendix 3 and listed below.

R&D is now more rigidly defined and more narrowly focussed so that some relevant activity falls outside the R&D office remit

Various networks fund and support research but it is predominantly biomedical in nature

Trusts have varying policies regarding the recording of research projects that form part of higher degrees

Individuals frequently opt to study outside the local region

Higher education institutes serve national and international markets and cannot always identify local candidates.

4 SECOND PHASE ACTIVITY

In the light of the information difficulties described above, we decided to go back to the Trusts as the main sources of usable data, whilst continuing to seek data from the HEIs. We had to broaden our data gathering methods to include the directors of the key professions and, at the risk of possible duplication of requests, we contacted those directors of nursing, the directors of AHPs and leaders of clinical scientists, for whom we had contact details. The replies we received came very slowly and from few places.

During this phase of the project, we made contact with CARA candidates and others engaged in higher education who wished to share their experiences. We conducted 12 telephone and three email interviews with CARA candidates and took notes of the main points of the discussion. We developed a broad interview schedule, to ensure that we covered all the important topics, but kept the interview style as open as possible so as not to preclude new areas of importance or interest. The interview schedule and interview data are presented in Section 5.3.

We obtained information from a further seven telephone conversations, face-to-face meetings or email exchanges. These are reported in section 5.4. Many individuals with whom we interacted had experienced some quite challenging situations on their journeys to higher education or knew of the difficulties others had endured.

The direct approach to professional directors yielded a little more information to add to the data from R&D contacts and HEIs. It is fair to say that the response rate from the professional directors was disappointing [only 1 in 10 replied]. This may have been due to the short timescales that were inevitably part of the package, or the difficulty of finding the right person to answer the questions or a lack of information to provide. It is also fair to mention that the people we contacted were already busy and there were no direct incentives to engage with the project and its aims.

All data gathered from professional directors is combined with R&D data and reported and discussed in the ‘Findings and Commentary’ section of the report, below.

5 FINDINGS AND COMMENTARY

The main findings from this audit of research activity are presented in two tables, below. The first presents findings by Trust and the second by higher education institute. In both tables, the data from responding organisations are listed in full and the non-responding ones by name. We received data from all of the 19 Acute Trusts, from three of seven Mental Health Trusts, 10 of 15 PCTs/Community Health Services in the region and from four of six Higher Education Institutes, although some had very little, or no, relevant activity. Although inevitably a partial view, we are confident that we have captured the bulk of relevant activity through the various sampling means adopted.

5.1 Data from Trusts

The Trust data are presented in Table 1 and show the following main points.

Table 1. Data from Acute, Mental Health and Primary Care Trusts

	PhD				Masters				Researchers			
	N	MW	AHP	CS	N	MW	AHP	CS	N	MW	AHP	CS
Acute Trusts												
Basildon and Thurrock University Hospital NHS Foundation Trust	1							2	6			
Bedford Hospital NHS Trust									5			
Cambridge University Hospitals NHS Foundation Trust (Addenbrooke's)	3			2	6		1		~160			

Colchester Hospital University NHS Foundation Trust					4		1		12			
East and North Hertfordshire NHS Trust	*/				1		1		36		1	
Hinchingbrooke Healthcare NHS Trust					2		2		2			
Ipswich Hospital NHS Trust	1				1		1		12		3	1
James Paget University Hospital NHS Foundation Trust		1			~3				~25	~6	1	
Luton and Dunstable Hospital NHS Foundation Trust	-	-	-	-	1	-	1	-	7			
Mid Essex Hospital Services NHS Trust	1								15			
Norfolk and Norwich University Hospital NHS Foundation Trust					5		2		52			
Papworth Hospital NHS Foundation Trust	1		1		5		5		24			
Peterborough and Stamford Hospitals NHS Foundation Trust				1	3		3					
Princess Alexandra Hospital NHS Trust, Harlow									7		3	
Queen Elizabeth Hospital, King's Lynn NHS Trust	-	-	-	-	5				3			
Southend University Hospital NHS Foundation Trust			2					1	5			
West Hertfordshire Hospital NHS Trust	*/				*/				5			
West Suffolk Hospital NHS Trust									30			
East of England Ambulance Trust			1				3					
TOTALS	7	1	4	3	36		20	3	406	6	8	1

*/ E, N & W Herts - 2 or 3 NaMs and AHPs doing higher degrees, included in N Herts data

	PhD				Masters				Researchers			
	N	MW	AHP	CS	N	MW	AHP	CS	N	MW	AHP	CS
Mental Health Trusts												
South Essex Partnership University NHS Foundation Trust			1	1			1					
Hertfordshire Partnership NHS Foundation Trust	2											
Norfolk and Waveney Mental Health NHS Foundation Trust				1	1		1	5				
Awaiting data from: Bedfordshire & Luton Mental Health and Social Care Partnership NHS Trust, Cambridge and Peterborough NHS Foundation Trust, North Essex Partnership NHS Foundation Trust, Suffolk Mental Health Partnership NHS Trust												
TOTALS	2		1	1	1		2	5				

	PhD				Masters				Researchers			
	N	MW	AHP	CS	N	MW	AHP	CS	N	MW	AHP	CS
PCTs & community providers												
East & North Hertfordshire PCT					2				2			
NHS Bedfordshire									1			
NHS Cambridgeshire			1		1		2					
NHS Luton	1				3							
NHS Mid Essex	1				1							
NHS Norfolk									1		1	
NHS Peterborough					8							
NHS South East Essex							1					
NHS South West Essex					6							
NHS West Essex					10		3		1			
Awaiting data from: NHS Great Yarmouth & Waveney , NHS North East Essex, NHS Suffolk , West Hertfordshire PCT												
TOTALS	2		1		31		6		5		1	

The staff group most commonly engaged in research comprised research nurses. There were 416 research nurses and midwives identified to be working in the region. Their activities were distributed across a wide range of clinical specialties. They were funded through national and local research networks, by research charities, through commercial income and sometimes through Research Council grants. There was a skewed distribution of these nurses with 160 working at Addenbrooke's Hospital and over 50 at the Norfolk and Norwich Foundation Trust.

The overwhelming impression of the research undertaken by research nurses was that it was biomedical in nature. Sometimes nurses may take a specialist role in patient recruitment or patient information, for example, but the clinical trial/research itself was aimed at a medical problem. Most often, the research nurse was providing professional assistance to the project and never leading the project. We found no examples of research nurses being engaged in research that was specifically aimed at the practice base of nursing as a profession and no example of a research nurse being engaged in a health services research project, other than as part of a higher degree.

In some Trusts, the funding available from the Comprehensive Local Research Network has been used to part-fund posts relevant to a particular research interest. We were aware of such posts in radiography, physiotherapy, pharmacy and dietetics. There may have been more such posts receiving network funding but we did not explicitly enquire about them.

We identified 104 NHS staff who were registered for Master's degrees with a major research component, by virtue of requiring a mini thesis or dissertation as part of the degree. There is some doubt about the accuracy of this estimate because it relied, in part, on informal knowledge rather than explicit records. The majority of these people were reported to be studying in local HEIs but a significant minority, 25%, were studying outside the region. In one case, this was a direct consequence of course availability. In other cases, the reason is less clear. We came across examples of staff moving post from outside the region having already registered for a degree. There are undoubtedly some cases where there was no availability for a chosen course of study, in the local region, at the time of application.

We were not able to obtain details of the precise subjects that formed the research components for all of these degrees, from Trust sources. There was no consistent regional policy on capturing such details of what were often categorised as 'student projects' or 'educational projects'. We identified Trusts where it was policy to record the project title in the R&D office. We came across other Trusts where such activity was known to take place but there was no record kept of the nature of the projects nor of their total number.

There were two Trusts that offered explicit advice to Master's students to undertake research for their degree that did not require ethics approval or research governance approval. There were other Trusts that acknowledged the reality that almost all Master's research projects were retrospective case reviews, evaluations of a recent intervention or questionnaire-based attitude surveys among professional colleagues. Such research can have merit in teaching people some of the relevant research methodology. Its nature, however, takes it away from the clinical challenges facing each profession that are worthy of study and can be met through research. The pragmatism of project selection does not allow the Master's degree to be a foundation for continuing academic study in the same subject area. It does not provide any sort of bridge between the large body of practising professionals and the academic community and it does not get the best value out of investment in time and resources made available for research in the various NHS Trusts.

We identified 22 people undertaking MPhil or PhD studies. This figure is likely to represent a slight underestimate of the true total. Where Trusts were supporting the student, there was knowledge of the activity. We came across a few students who were managing their own careers and undertaking higher degree studies at their own cost and in their own time.

The MPhil and PhD students were widely distributed across the professions and widely geographically distributed in terms of the host HEI. The same issues of project recording that affected Master's degree data, also affected PhD data. It was much more likely, however, that the candidate would be pursuing a more clinically relevant research topic that could form the basis of continuing academic enquiry after the completion of the degree studies.

The wide geographical distribution tends to be explained by the location of appropriate supervisors and job changes during the course of a degree, which could last for more than six years part-time. There may be other, as yet, unexplored reasons affecting choice of location.

There was a further category of student we encountered: those studying for professional doctorates. Such degrees are normally undertaken part-time, mid-career and include a taught component, a professional workplace development element and an original, work-based research project that is externally examined. The course at the University of Hertfordshire takes a minimum of 5 years and can be longer. We did not receive any explicit information on such degrees from any Trusts despite the Hertfordshire course having around 18 East of England participants, some of whom may be in managerial positions. It may be that some of the doctoral students reported may in fact be undertaking professional doctorates although the degrees are not at all equivalent.

No Trusts could offer examples of applied research that had demonstrably made a difference to service delivery, Appendix 5. There are projects listed in Appendix 4 which are classified as Health Services Research but it is difficult to determine the professional group of the principal investigator.

5.2 Data from Higher Education Institutes

The data on numbers of Master's degrees and above from Higher Education Institutes are presented in Table 2, together with their main areas of research interest.

Table 2. Data from Higher Education Institutes

Higher Education Institutes	PhD/ MPhil [E of E]	Masters [E of E]	Research interests of staff
Anglia Ruskin University			Children and young people, older people, mental health, research methodologies.
University of Bedfordshire	-2	-	IHR – Health inequalities; Chronic disease management; Health policy, organisational development & educational research.
University of East Anglia	39 (0)	9 (5)	Adult and child nursing, midwifery, professional education & practice, organisational development.
University of Essex	62 (24)	15 (7)	Population health, service user experience, service delivery & organisation, developing professional practice
University of Hertfordshire	45 (24)	30 (15)	CRIPPAC - Adolescent, child & maternal health; Older people's health; Public health & health protection; Patient experience & public involvement
University Campus Suffolk			Adult and mental health nursing, midwifery, interprofessional studies, health promotion, public health, educational technology

It is clear from the table that we had difficulty in obtaining good quality data about East of England higher degree activity from all the HEIs. Our initial vision of matching Trust and HEI data was unattainable. The HEIs serve national and international markets. Not all of them were able to indicate which of their students originated from an East of England NHS Trust. Where this information was available, we have included it in Table 2. As an illustration, the University of East Anglia had 25 students registered on a relevant Master's course and their PhD programme. It transpired that 19 of these students were overseas students and not all of the remainder were from the East of England. The University of Hertfordshire, in contrast, recruited 12 of 18 students on its Master's in Clinical Research course from the East of England.

We had initially hoped to be able to marry the data sets from Trusts and HEIs. For the reasons already well aired, this was not possible. There is no relationship between the total number of Master's and PhD students in the region's HEIs and the number identified from Trust sources. Data gaps and

the unknown numbers of national and international registrants compound the problem.

Many of the HEIs had extensive research programmes and considerable external grant funding, some of which is discussed in Appendix 4. It was rare, however, for Master's degree research projects to be closely associated with these grant-funded areas of investigation. This represents, perhaps, a missed opportunity. We were told informally on a number of separate occasions that research involving patients or NHS staff was to be avoided because of the excessive bureaucracy that would be encountered in establishing projects within the NHS. Students were advised to find projects that avoided such difficulties.

5.3 Data from CARA students

We contacted 18 CARA candidates and conducted interviews with 15 of them (83% response rate). Seven of the respondents were from the current cohorts and eight from the previous cohort. We used a semi-structured interview schedule, described below, with five main themes and 3-4 sub-themes. These had been identified from interviews and discussions outside the CARA process. The first 12 interviews were by telephone and the remainder were by email. The latter interviews were focussed on the five main themes, without the sub-themes. Interview notes were reviewed independently by two team members to elicit the important categories of response and to provide quantification of their being cited in the interviews. The findings are presented and discussed around the main themes.

CARA award recipient Semi-structured interview schedule

The CARA process

What was good about it, could it be improved, support required?

The decision to study for a higher degree

Career progression, academic interest, opportunism?

The Choice of an HEI

Availability of course, location, key people?

Arriving at a research topic

Interest, clinical need, supervisor's influence?

Balancing clinical practice and study

Backfilling, Trust support, flexible rosters, colleagues?

5.3.1 The CARA Process

The main mode of learning about the opportunity afforded by the CARA process was through a manager or senior colleague (10/15) and only one respondent was personally aware. Some Master's candidates wanted more help with filling in the form correctly or more advice on how to formulate a research project (5/15). These came from the less research-active clinical areas and found the interview process quite daunting (2/15). The more senior applicants tended to come from research active groups and were more interested in meeting their fellow CARA award holders, in organising exchanges of experiences and in offering help to others. This group generally found the CARA application process to be user friendly.

The value of the award was seen by the majority as too little to achieve their target (8/15) and others thought their research was not feasible within the resources offered (3/13). Others were unclear about the payment mechanism or had not drawn down their award (3/13). There was some hesitancy to begin a project with insufficient funding guaranteed (2/13). There were, however, those who thought the funding to be appropriate and generous (2/15).

5.3.2 The decision to study for a higher degree

The most commonly stated motivation was some form of career enhancement, whether it was the attainment of a senior position or earning the opportunity to be more influential in their clinical practice (8/15). Others had long nurtured an interest in research, were following up a previous research topic or needed research in their jobs (5/15).

Another reason offered was to provide a legitimate circumstance to ease the clinical pressures through protected time for research (2/15). Later discussion shows that this may be hard to realise. A higher degree was not primarily linked by respondents to service improvements although the chosen topic usually was, as discussed below.

5.3.3 The Choice of an HEI

The choice of HEI in which to conduct the higher degree activity was dominated by location or the existence of a functioning network relationship with an HEI (8/15). Obviously, there has to be a suitable course available with spare capacity. Prior contact with an HEI was also mentioned (2/15) and a similar number (2/15) explicitly stated their choice was made because of the quality/nature of the course. We did not always know the chosen HEI but a third intended to study outside the region (5/15)

5.3.4 Arriving at a research topic

In every case where the issue of the research was discussed or raised, the chosen topic was deeply rooted in current or planned clinical practice (12/15). This is a very positive aspect of the CARA scheme. Some were following up ideas that had been formulated over a number of years (4/15); some others were responding more to newly identified opportunities (5/15).

We might have expected the supervisor/mentor to play some part in the choice of project. Mentors were consulted by some in writing their proposals (3/15). A more interesting issue arose over the decision that PhD candidates have to make about choosing their supervisor. Essentially they have a choice of aligning themselves with an active clinical/research group that is in a relevant field or finding a senior colleague from their own professional group. The former choice might well involve selecting a medical or basic science supervisor, the latter may require a wide catchment area. Either way, this choice can influence the eventual topic of research (2/15).

5.3.5 Balancing clinical practice and study

This challenge was raised by two thirds of the respondents (10/15). It took the form of clinical pressures being more powerful than academic ones and there always being reasons to give up academic time to support colleagues and the service. This seemed to be particularly prevalent in disciplines where the research tradition was less well developed and vocational training methods and clinical experience determined career progression (3/15). People in this situation could never be sure of protected time.

For those opting to study later in their careers, the option of part-time study was the only practicable choice. This brought an additional problem in that these students often had a full home life and were not able to find any personal time to complement their official time for research. The matter of timing of research training was raised (2/15) and both respondents felt that it should come early in the career path.

The CARA funding concept was calculated on a number of days per week for study. For higher grade staff, the award was equivalent to less than a day per week and some were looking at taking blocks of time to do research (3/15) so as to make better use of the available resource. The more senior the applicant, the more they seemed to have greater flexibility in altering their service patterns (2/15) or altering their time commitment to the service (2/15).

5.3.6 Research Culture

It emerged from the analysis of the interviews that the research culture of the applicant's unit was an important factor and it was cited in more than half the conversations (8/15). A research intensity encouraged people to respond to funding opportunities and seemed to bestow a positive attitude

towards completing the CARA process and towards the issue of finding protected time to conduct research. Colleagues were positive and supportive.

Workplaces that were less research intensive made it more difficult for applicants to find the support they needed to opt for research, whether moral or practical in its nature, whether from colleagues or managers. Such workplaces were characterised by senior colleagues who had attained their status and position without recourse to research and did not really appreciate its place or value when set against the pressures of providing the service. Keeping in touch with the service is important and has to set against the feasibility of attaining a higher degree by research on minimum time investment, such as one day per week. Equally important was the difficulty of uncovering positive role models or mentors.

The meaning and impact of research culture must be further explored and examined.

5.3.7 Support Needs

The previous section highlights a need to help those from less intense research cultures to undertake research training and take steps to intensify research activity. It would seem to be a reasonable idea to spend some of the available funding on a facilitator who can help individuals to formulate their project ideas into a reasonable application for CARA funding. The experiences of existing CARA candidates were quite diverse and are described in more detail in Appendix 6. The headline findings that were often encountered, are that:

The call for applications did not reach all interested parties and could be better organised in future.

The application process itself was not too demanding.

All the research projects described had a sound clinical basis

The level of support from colleagues is not generally very high unless there is already a high level of research activity in the unit.

Protected time is easily violated.

It is challenging to balance clinical and academic pressures and workloads.

The level of the awards is one day per week and this is not enough for senior grades.

5.4 Issues of Support

Support issues reported by individuals outside the CARA scheme were very similar to those within the scheme. The main issue was always getting sufficient time to do the research which often meant getting money to backfill their own post. Everyone reported that the pressures to provide a service to patients were very powerful and it was difficult to take time out.

There are a number of issues surrounding the systems within the NHS and HEIs that support research. These affect individuals who have to operate within the system. In describing some of the challenges that arise, we have tried to suggest ways in which the system can be improved for the benefit of present and future professionals who want to develop their research interests. We believe that a new approach is required in order to maximise the benefits from investment in research and to unlock the potential for a research-active professional leadership to transform the delivery of services to patients.

6 A NEW APPROACH, A MANAGED SYSTEM

There are four stages in a research project. These are:

- identification of the clinical need or problem,
- conduct of the study,
- adoption of the findings into practice
- identification of further needs.

They clearly interrelate but we discuss them separately for simplicity of exposition.

6.1 Identification of the clinical need or problem

A managed system must begin with identification of the research problem.

Research has to be a normal part of professional life, if it is to have the transformational effect we desire of it. Research has to demonstrate that it can provide answers to the questions and challenges faced by professionals in the conduct of their normal practice and their collective desire to improve their professions. Research interventions of this nature are neither quick nor easy to negotiate. Working on real problems will involve patients, staff and management and projects will often require ethical clearance and research governance approval. The present approach to research projects, particularly at Master's level, takes students to the outer edges of clinical practice where their efforts will not require complex approvals and will, inevitably, have little impact. The research element of the Master's courses is most frequently more of a methodology training for educational purposes than a foundation for a research career.

There are very few methods, currently in use, that allow professional groups to reflect on practice and identify those areas in which improvements could have a strong impact on the quality of care, patient outcomes and patient safety. Some have pointed to the 'consultant nurse' positions as offering the freedom from everyday clinical imperatives to reflect on what could be improved. Others are more wary because of the small number of such posts and their inability to transform the large numbers of middle grade staff who are strongly service orientated. The identification of real clinical problems will engage the bulk of the service providers within the professional groups so that they are receptive to any changes arising from research results, will alter their professional practice and not be immediately resistant.

In manufacturing industries, the quality movement was very successful in raising the standards of factory production. Whilst not suggesting the NHS is a health factory, there may be lessons to learn. One such idea was the introduction of quality circles. These were groups of workers given the time to meet and discuss how to improve the output of their unit. A less ambitious step would be to organise meetings in work time to discuss the bottlenecks in service provision. Such meetings could take place in an extended lunch break, perhaps. A skilled facilitator could ensure all voices were heard. Another possibility is to use nominal group processes to elicit a working consensus. It is a vital building block towards research-conscious service delivery to have real problems identified for higher degree students to take up.

6.2 Conduct of the Study

Ideas for service enhancement need to be transformed into projects. These need not all be full-scale Master's, professional doctorate or PhD projects but could be much more modest. It would be helpful if part of the budget for each professional service could be dedicated specifically to service improvement and projects from a few hours upwards could be funded. Some service problems will require more extensive and more formal study. These projects could, in partnership with HEIs, be transformed into Master's level studies that could be offered to higher degree applicants. An even more powerful situation would be a Master's degree candidate working on a problem devised in their local NHS unit. One could go even further and have a managed system in which a higher degree candidate would be offered a choice of real NHS problems to work on, rather than being influenced by the HEI staff providing the course. The professional doctorate degree might prove useful in this context because of its emphasis on part-time and work-based study. There are also distance learning modules on research methodology available through the Open University and elsewhere.

It is also conceivable that some issues will require teams of researchers to tackle them and take a longer time to complete. HEIs could be more flexible in recognising attachment to a team or part conduct of a project as being activities that could be assessed as meeting the requirements for issue of

higher degrees with research components. The HEIs need also to align their own research activities more closely with the needs of the NHS. This need not compromise academic freedom or stifle richness of methodology but will bring greater harmony between the sectors and a common purpose in improving the patient's experience and the patient's safety.

There is a further case to be made for a greater use of action research techniques where a subject is researched and managed from within the organisation. HEIs have potential to provide mentors and facilitators in partnership with the NHS to ensure high standards and to assess such research within their higher degree awards. Action research offers great potential for enhancing the status of research within professions as it can involve quite large numbers within each initiative.

There is a potential barrier to the strategy of enhancing the place of research in professional practice, which is the lack of role models and mentors. Career development is amplified by mentors, senior staff who assist juniors to learn how to practise effectively and safely. In the NHS, however, professions' experience of research is variable. Some have very strong service principles and have vocationally trained middle managers who are not personally experienced in the use of research and research methods. These people have achieved their high status without research experience and offer little as role models for enhanced research activity. This issue will need to be addressed and involvement of senior grades in identification of real problems is one important step.

6.3 Adoption of findings into practice

There have been numerous attempts to analyse the factors that cause organisations or groups of people to adopt new ideas, new technologies or new methods of working. Top level support and encouragement are always important in legitimising innovative behaviour but beyond that, it is the question of ownership that is most important. In terms of the system for research among NHS professional groups, it is the feeling that the proposed innovation is their solution to their problem or development opportunity that is most likely to cause the adoption of novelty and avoid its rejection².

The new approach to research through a managed system envisaged here could be very helpful in overcoming the barriers arising when solutions are felt to be imposed or are the property and concern of others outside the group. When the problems have been identified by the group and worked on by someone known to them, the barriers to acceptance of the findings are considerably lowered. A positive spiral can develop where success is the founder of further investigation and greater involvement.

² Gale,R, and GrantJ. [1997] Managing Change in a Medical Context: Guidelines for Action. Association for Medical Education in Europe Education Guides. No. 10. *Medical Teacher*,19,4

6.4 Identification of further needs

The new managed system described above is one where research takes many forms and involves many people. Research is not an isolated act that is relevant to a passage in someone's career but an embedded way of operating as a professional. It is our contention that aligning academic studies to real problems is more likely to provide the opportunities for continuing research after formal qualifications.

It is important that there are some career opportunities associated with the commitment to research on real issues. The students will become local champions for their chosen topics and will be ambassadors in demonstrating that investment in research helps the whole team by leading the implementation of their findings. It is important that such career chances are not viewed as a means of escaping from the pressures of service provision but are seen as models of professional leadership that enhance the professions and embed the researcher further in the service.

6.5 Commentary

The present system of research training at Master's level is based around pragmatic project choices that avoid the complexities of project approval in the NHS. This means that the projects have the potential to be dislocated from practice or marginal to the challenges faced by the bulk of practitioners. There is no reason why Master's level students should not work on real problems and there is every advantage in them so doing. It is perfectly possible that Master's students could join existing project teams within HEIs or within the NHS in order to learn research skills and gain research experience.

For the Strategic Health Authority's strategy to be delivered successfully, a more structured and managed approach to research; identifying and solving real problems and involving real teams, will be essential. Further thought and experimentation is required to optimise the delivery of such a managed system.

7 RECOMMENDATIONS

Our experience of the fragmentary nature of data on research activity among NaM and AHP staff indicates that more consistency is required in recording the activity at Trust level.

Recommendation 1: Trusts be required to maintain a register of staff undertaking higher education which includes project details for those undertaking research-based higher degrees.

There is widespread opinion that the types of research project built into research-based Master's degrees, in particular, are useful in methodology training terms but contribute less than they could to the knowledge base of each profession.

Recommendation 2: The Strategic Health Authority should pilot, monitor and evaluate a structured and managed system which will enable Master's students and higher education providers to work on problems and challenges identified from current clinical practice. This should include better ways to elicit the current problems and co-operation from Higher Education Institutes.

At present, there are very few mechanisms through which real clinical problems and challenges can be identified and developed into research concepts.

Recommendation 3: The Strategic Health Authority should instigate and evaluate a number of different methods of consensus forming among professional practitioners about the most pressing and important clinical problems they face.

If the various initiatives and actions relating to higher degrees and higher degree research in the region could be co-ordinated and share a strategic focus, their impact would be greater.

Recommendation 4: The Strategic Health Authority should seek partnerships with higher education providers in the region to encourage them to build their own research activity and capability around the key clinical questions that are generated by professional groups. In this way, they will adopt a managed approach to research and research training.

CARA candidates from the less research active areas or Trusts found it difficult to participate in the process. Good research ideas and good research candidates may be being lost to the system as a result of perceived or real difficulties

Recommendation 5: The Strategic Health Authority should provide support to CARA applicants to ensure that the less research experienced staff in the region are not deterred from participation. Support could be provided to convert clinical needs into research topics and in preparation for the selection process.

APPENDICES

APPENDIX 1: PROJECT PROPOSAL

An Audit of Research Activity and Research Capacity in the East of England SHA

1. Introduction

The East of England Health Authority has a strategy of targeted investment to increase the volume of research activity undertaken by nurses, midwives and AHPs. It is particularly keen that such research be consciously aimed at service improvements and be in harmony with the categories of activity described in The Finch report (2007)³. This year, the HA invested in 12 units of research, including three PhD places and three clinical fellowships. In order to ensure the optimum type of investment and the optimum return on that investment, the HA desires an audit of current activity. The initial plans for such an audit are described below. There are some interesting challenges in data gathering. Firstly, there are several higher education establishments within the region who provide relevant higher degree activity but the staff can also study outside their region. Secondly, the financing of research activity is opportunistic and often relies on attracting funding from a number of sources. Thirdly, many nurses, midwives and AHPs are employed primarily as research staff and are often retained on 'soft' monies so that their activities are not always well documented in their host Trusts.

2. Audit plan

The main questions to be addressed are as follows:

1. What is the scale and scope of present research activity among nurses, midwives and AHPs? What degrees are they studying, where are they studying and what are their study topics?
2. What impact will the research have on service delivery and improvement?
3. How does that activity map onto the components of the East of England's vision for healthcare documented in the 2009 report 'Towards the best, together' ⁴.
4. What best could the HA invest in to improve the quality and quantity of research activity in the region?

³ UKCRC Subcommittee for Nurses in Clinical Research (Workforce) (2007) *Developing the best research professionals. Qualified graduate nurses: recommendations for preparing and supporting clinical academic nurses of the future*, London: UKCRC.

⁴ NHS East of England (2009) *Towards the best, together. A Clinical Vision for our NHS, now and for the next decade*. Cambridge, NHS East of England. Available at: [http://www.eoe.nhs.uk/downloadFile.php?doc_url=1236793405_LMRv_towards_the_best_together_\(published_march_2009\).pdf&area_id=02](http://www.eoe.nhs.uk/downloadFile.php?doc_url=1236793405_LMRv_towards_the_best_together_(published_march_2009).pdf&area_id=02)

5. What are the issues around research support that might encourage or discourage the uptake of research opportunities?
6. What impact does research activity have upon career pathways and trajectories?

There is no single coherent source of data to fulfil the requirements of the audit and we will have to piece together information from a number of sources.

3. Methodology

The primary methodology for this audit will be semi-structured interviews with key staff and key opinion leaders in the relevant professions. The starting point will be discussions with the HEIs within the region who should be able to provide information on higher degree activity and registrants. The second activity will be to corroborate this information by asking the secondary and tertiary care Trusts in the region for information on higher degree registrations among their nursing and AHP staff. This action will also serve to uncover information on academic activity hosted outside the region. A third strand will be to interview the recipients of the current research awards to understand the issues from a participant's perspective. The fourth branch of the data gathering will be approaches to funding bodies, such as the topic specific and comprehensive local networks and the NIHR, to uncover any funding support for higher degree activity.

We will not be able to define an exact sample of interviewees at each location because of variations in activity levels. However, we envisage needing to meet and interview, as a minimum, Directors of Nursing and Midwifery and leading AHP researchers in the main Trusts in the region. It is expected that Human Resources may be involved. In the academic institutions we may need to meet with Course Directors, key researchers, Registry staff and possibly Deans. We plan to provide a written explanation of the information we seek, prior to any meetings and we may also elect to conduct some interviews by telephone, if merited. The initial interviews may point to the need for a limited survey and we will organise such, if required.

All interviews will cover all six components of the audit, albeit in varying proportions. Given the required factual content and the likelihood of being offered documentation, it is our intention to extract and note the salient information from each interview and not to record them. This is also pragmatic in that the results are required in a short timescale.

4. Project Management and Reporting

The results of this audit are required by the middle of March 2010. It is important, therefore, to ensure that the project progresses as smoothly as possible and is not unduly delayed. We propose monthly meetings with the project commissioners in mid-January, mid-February and mid March 2010 to report on progress and agree the final report. Key milestones or

important findings will be discussed between meetings and we will be guided by HA input at all times during the audit.

The format of the final report of this audit is yet to be defined precisely. We envisage some form of tabulation by employing Trust with details of the HEI, the degree and research topic and the service impact, as a minimum. There will also be a written component detailing the methodology and data sources.

It is not envisaged that this audit activity falls within the remit of NRES, although an exemption letter may be useful if any part of the audit were ever to be considered for publication outside the HA. It may be courteous to inform the Trusts and HEIs of forthcoming visits and any organisation or individual is free not to be part of the initiative.

5. Timescale

We will commence preparatory work in December 2009 and the HA will make contact with key people in academia and the main Trusts before Christmas. The main interview activity will start early in 2010 and continue intensively through to early March. We will deploy two researchers, working separately or together to ensure coverage. We will set aside two weeks to construct and agree the final report. The project will be completed by the mid-March deadline.

6. Contacts

The project will be undertaken by Heather Owen and Rodney Gale.
Heather Owen is best reached on h.owen@open.ac.uk tel: 01908 653776
Rodney Gale is reached on rodney.gale@gmail.com tel: 07970 614448

7. Staffing

The project will require virtually full time effort from two researchers and appropriate administrative back up to secure appointments and facilitate communications.

APPENDIX 2: CONTACTS

The early phase of the project was devoted to constructing databases of contacts. We did this in close collaboration with the Strategic Health Authority team and received great assistance from them in making contact with relevant individuals in the target organisations.

Our contact list included:

- Comprehensive Local Research Network staff
- Specialist network contacts
- Higher Education Institute directors and course leaders
- R&D managers
- Directors of Nursing
- Directors of Education
- Access to AHP directors
- Access to clinical science managers/directors
- Previous and current recipients of CARA awards

APPENDIX 3: CHALLENGES FACED

Reforms to NHS funding

The recent reform of the R&D funding arrangements in the NHS (Best Research for Best Health) were designed to produce a streamlined system of moving from scientific ideas to new diagnostics and treatments. Broadly, universities are responsible for the science base, while biomedical research centres and units translate the science into novel diagnostics and treatments. These lead to trials and other research that is funded by research councils and charities and supported by the various research networks. The results are then incorporated into practice.

The reforms to R&D funding in the NHS have given rise to a more equitable distribution of resources across the country, for the conduct of clinical trials and applied research, but this has been accompanied by a greater degree of rigidity in the definitions of types of research and the modes of supporting them. There is now a central body orchestrating research, the National Institute for Health Research [NIHR]. A project cannot be supported by NIHR resources unless it meets the criteria for adoption and is subsequently registered on the central database. In turn, R&D Offices are funded as part of the NIHR system and their main effort concerns adopted projects. Not all R&D offices now routinely collect information on studies outside the NIHR portfolio.

Within the NIHR portfolio of funding schemes, there is one specific to health services research and service improvement projects that is recognised as appropriate for the receipt of NHS support. This is termed, Research for Patient Benefit [RfPB]. Eligibility for funding rests on a partnership between academia and the NHS and this narrows the range of projects that can be funded.

NIHR Networks

There are 26 Comprehensive Local Research Networks [CLRN] across the country, 3 in East of England, who control the allocation of resources for research and foster the development of research. These networks have the resources to fund sessional time for NHS staff to participate in research. There are topic specific networks operating in parallel in specific centres. All projects adopted and supported by these networks are described on the central database but not in a manner that makes it easy to understand where each project is active. Further, the main project type that attracts network support is a clinical trial.

The overwhelmingly predominant subject of research supported by the comprehensive and topic specific networks is biomedical research. Where NaM, AHP and scientific staff are involved, it is to provide professional

assistance, rather than acting as project leaders. The central research database records the research topic, in 16 biomedical priority areas. The research methodology is also recorded. There is, however, restricted ability to search the database on methodology in order to identify those projects that are health services research. It is possible, through use of the project title, to identify some of the health services research [HSR] activity but there is no way of knowing what proportion is thus identified.

Independent activity

Any Trust is free to undertake research outside the national scheme, should it so choose. No NIHR support funding is available for such activity. This acts to discourage research that is not supported and health services research is affected in that it is not recorded centrally within Trusts unless it is funded from NIHR sources. Some Trusts do record research projects that form part of research-based higher degrees as 'education' projects. In Trusts that did provide information about HSR activity, it was often the experience of the staff and informal information that provided the data.

The CLRNs proved not to have any specific information about HSR, as predicated by the discussion above. We obtained information about the NIHR funded work in the region through the advice of their central commissioning facility. Projects currently active are listed in Appendix 4.

Research in higher degrees

A number of Trusts discussed the research component of higher degrees, mostly Master's degrees. It seems fairly widespread that candidates are encouraged to shy away from any research that might require ethical clearance, research governance approval or Medicines and Healthcare Products Regulatory Authority [MHRA] approval. There is a certain pragmatism attaching to this choice in that it can take a long time to organise several sets of approvals. On the other hand, it means that the type of research undertaken is narrowed to retrospective case note reviews, evaluations and attitude surveys by questionnaire, as the main methodology. One Trust actually went as far as having a specific agreement with their local HEI that the student projects would not be classed as research by the host Trust, although the HEI certainly listed them as research projects. It was widely reported that higher degree research projects seldom tackled the issues facing the delivery of services.

There was not a universal approach to recording such student projects. Some Trusts effectively allowed them to take place but kept no central record of their contents. This presented a challenge in uncovering details of this research activity, which was the most common mode of participation in research outside the cohort of research nurses.

Higher education institutes

We were able to obtain some data from the local HEIs but that presented further challenges. HEIs serve a local, national and international client base and it is not always possible to determine which of their registered higher degree students is an employee of the NHS in the region. This factor is compounded by the observation that many NHS employees choose to study outside their region or are obliged to study outside their region in order to pursue their chosen topics, particularly at PhD level. This means that a trawl of HEI data will include many irrelevant students and, at the same time, provide an incomplete picture of higher education activity in the region. One further confounding variable we encountered in a few places was people organising their own educational activity privately and in their own spare time. There was no obligation to provide any information on this activity to their employer.

Within the HEIs there was often a large cohort of academic staff whose primary employment was to provide teaching on the undergraduate courses for NaM and AHP students. Many of these faculty members are registered for higher degrees at their own institution. We were not able to obtain any usable data on the topics that were pursued by these higher degree registrants and could not, therefore, comment on their relevance to current NHS service issues.

Health services research

Health services research is still the poor cousin of biomedical research. Research among professional groups outside medicine seems to centre on that profession's relationship with medical practice or the patients' experiences. This leads to questions around the interactions with medicine and medical decisions and the effort to define the place of each professional in relation to medicine. A further common mode of enquiry relates to attitudes among practitioners towards the status quo or a perceived beneficial change. There seems to be less research work aimed at defining the scientific basis of the professions and their clinical practices or work aimed at solving current clinical problems.

APPENDIX 4: RESEARCH FOR PATIENT BENEFIT

The National Institute of Health Research [NIHR] has initiated a scheme to ensure that health services research and service development projects have access to funding in an equitable manner across the country. The scheme is entitled 'Research for Patient Benefit [RfPB]' and is a responsive scheme designed to fund the application of proven science to the health delivery context. The fund was distributed to each Strategic Health Authority, according to population. Early experience demonstrated a lack of good quality applications and the Research Design and Support Units, later designated as Research Design Service [RDS], were set up to assist turning service improvement ideas into properly formulated research questions.

There have been a number of rounds of RfPB funding and the successful projects are listed in the table overleaf. It is difficult to determine just how many of these projects had NaM and AHP leadership or even involvement. There are, however, some that do fall into the remit of this audit.

The Research Design Service has been established recently to provide the methodological and application writing skills to help NHS practitioners turn their ideas into research proposals. East of England RDS is hosted by the University of Essex and has active participants in all the major HEIs in the region. We enquired of them as to the number of projects specific to the target group that were in the pipeline but they were unable to supply any data.

The projects funded by the RfPB scheme in the region are listed below. It is difficult to ascertain the professional leadership of these projects when they are clearly non-medical, even with access to the project summary and lay summary.

Comp	NIHR Number	Project Title	Funding	Organisation Name	Name
1	PB-PG-0706-10051	Relative efficacy and cost-effectiveness of different treatment approaches currently used in the management of epilepsy in people with a learning disability	£249,559	Cambridgeshire and Peterborough Mental Health Partnership NHS Trust	Dr Howard Ring

1	PB-PG-0706-10128	The acceptability, feasibility and effectiveness of individual versus parent enhanced cognitive behaviour therapy in young people with obsessive compulsive disorder	£249,963	Norfolk and Waveney Mental Health Partnership NHS Trust	Professor Shirley Ann Reynolds
1	PB-PG-0706-10478	A randomised, observer-blinded clinical trial of post operative fluid restriction in gastrointestinal surgery	£217,505	Norfolk and Norwich University Hospitals NHS Foundation Trust	Mr Michael Lewis
1	PB-PG-0706-10530	The use of bowel management systems to reduce the incidence of Clostridium difficile	£80,944	Hertfordshire Hospitals R&D Consortium	Prof Graham Ramsay
2	PB-PG-0906-10055	A randomised controlled trial of bovine IgA enriched milk whey protein fraction as prophylaxis against clostridium difficile associated diarrhoea (CDAD) in high risk hospital patients	£128,636	Bedford Hospital NHS Trust	Dr Jeremy Sizer
2	PB-PG-0906-10538	A randomised controlled trial, economic evaluation and qualitative study of supervised consumption in patients managed with opiate maintenance treatment	£249,935	Suffolk Mental Health Partnership NHS Trust	Dr Richard Holland
2	PB-PG-0906-10587	The feasibility and cost benefits of cardiac event recorders in stroke and TIA patients	£133,374	East Norfolk and Waveney Consortium	Dr Kneale Metcalf

2	PB-PG-0906-11098	Assisted eating and drinking in the care of people with profound and multiple disabilities: the social significance of clinical interventions for managing dysphagia	£249,001	Cambridgeshire and Peterborough Mental Health Partnership NHS Trust	Dr Marcus Redley
2	PB-PG-0906-11116	An evaluation of the beneficial and adverse effects of co-trimoxazole therapy in patients with idiopathic pulmonary fibrosis	£156,845	Norfolk and Norwich University Hospitals NHS Foundation Trust	Dr Andrew Wilson
2	PB-PG-0906-11387	The experiences and expectations of older people resident in care homes, their carers and professionals of end of life care and symptom relief needs: a prospective study	£214,489	East and North Hertfordshire Primary Care Trust	Dr Claire Goodman
3	PB-PG-0107-11134	Phase III randomised controlled trial of a breathlessness intervention service for intractable breathlessness	£224,850	Cambridge University Hospitals NHS Foundation Trust	Dr Sara Booth
3	PB-PG-0107-11391	Erectile dysfunction: a randomised controlled trial of lipid lowering	£170,691	East and North Hertfordshire Primary Care Trust	Professor Mike Kirby
3	PB-PG-0107-12011	A randomised control trial of the impact of electronically delivered 'content-free' cueing on psychosocial functioning following brain injury	£249,611	Cambridgeshire Primary Care Trust	Dr Fergus Gracey

3	PB-PG-0107-12101	A randomised trial comparing delivery of cancer systemic therapy in three different settings: patient's home, general practice surgery and hospital day unit	£249,938	Cambridge University Hospitals NHS Foundation Trust	Dr Pippa Corrie
4	PB-PG-0407-13096	Recovery Approaches in Mental Health: Evaluating the Whole Life Manual for Therapy in Persons with Schizophrenia	£230,071	Hertfordshire Partnership NHS Foundation Trust	Professor Hawley
4	PB-PG-0407-13302	An Evaluation of Rheumatology Practitioner Clinics held in Primary Care	£176,493	Norfolk and Norwich University Hospitals NHS Foundation Trust	Dr Richard Watts
4	PB-PG-0407-13349	Planning for End-of-Life Care in Dialysis Patients: Attitudes and Perceptions	£225,000	East & North Herts Trust	Mrs Da Silva Gane
5	PB-PG-0807-14068	What makes older women want to use preventive medications for osteoporosis? A qualitative study of adherence to osteoporosis medication in the 70-85 age group	£190,000	NHS Norfolk	Professor Amanda Howe
5	PB-PG-0807-14149	MRI fluoroscopy for imaging childhood vesicoureteric reflux	£61,000	Cambridge University Teaching Hospitals NHS Foundation Trust	Professor David Lomas

5	PB-PG-0807-14239	A randomised controlled trial examining the use of text messaging to improve adherence to medication in patients with inflammatory bowel disease	£145,000	Norfolk and Norwich University Hospitals NHS Foundation Trust	Dr Zunwu Zhang
5	PB-PG-0807-14027	Will a dedicated service improve medicine administration in older persons with dysphagia: a pilot study?	£150,000	Norfolk and Norwich University Hospitals NHS Foundation Trust	Ms Jennifer Kelly
5	PB-PG-0807-13141	Validation of a family history screening instrument for chronic disease prevention in general practice	£230,000	Cambridgeshire Primary Care Trust	Dr Fiona Walter
5	PB-PG-0807-14102	Interpersonal support as an adjunct to computerised therapy for depression/anxiety: A factorial randomised controlled comparison of clinicians vs. non-clinicians giving brief vs. enhanced support	£250,000	NHS Norfolk	Ms Lina Gega
6	PB-PG-1207-15244	Impact of low health literacy on older patients with chronic illnesses - a systematic review and focus group study	£116,861	Norfolk and Norwich University Hospitals NHS Foundation Trust	Dr Zunwu Zhang
6	PB-PG-1207-14119	Helping adherence with Glaucoma Treatment - A randomised clinical trial	£226,223	Norfolk and Norwich University Hospitals NHS Foundation Trust	Mr David Broadway

6	PB-PG-1207-13321	Improving Preoperative Education for Colorectal Surgery Patients	£207,642	Norfolk and Norwich University Hospitals NHS Foundation Trust	Mr Kevin Sargen
7	PB-PG-0408-16225	The Effects of Maintenance Schedules following Pulmonary Rehabilitation in Patients with Chronic Obstructive Pulmonary Disease	£247,860	Norfolk and Norwich University Hospitals NHS Foundation Trust	Dr Andrew Wilson
7	PB-PG-0408-16296	A pragmatic, prospective, randomised controlled trial comparing upper mini-sternotomy to full median sternotomy as a surgical approach for aortic valve replacement (MiniStern Trial)	£249,235	Papworth Hospital NHS Foundation Trust	Mr Sukumaran Nair
8	PB-PG-0808-16124	An exploration of patient experiences around diagnosis and treatment of dementia: implications for service development	£134,392	East, North and West Hertfordshire Primary Care Trust	Ms Frances Bunn

APPENDIX 5: EXAMPLES OF EFFECTIVE HEALTH SERVICES RESEARCH

In response to our requests for examples of HSR projects that had demonstrably made a difference to service quality or service efficiency, we were offered very little. In three Trusts, we were offered the Master's projects as examples of effective HSR, though they were not, for reasons described earlier, appropriately constructed projects.

In other Trusts, Research for Patient Benefit projects were cited. In these cases, it was not always clear what the role of NaM and AHP staff had been in the conduct of the research.

At Papworth and King's Lynn, there were a number of locally organised projects of an HSR Nature that were reported to us. There are probably equivalent research projects underway elsewhere.

In summary, the response to this aspect of the project was not effective and we were unable to provide any clear examples of HSR making a tangible difference to service delivery. It would be dangerous, however, to assume that none exists. Our data requests were complex and non-standard and we tended to emphasise other aspects of the brief. Further investigation will be required before good examples of HSR can be identified and documented.