Clinical Research Network

NHS
National Institute for Health Research

Annual Activity Report 2011/12

Issued: 27 September 2012

CONTENTS

1. INTRODUCTION

The NIHR Clinical Research Network

The National Institute for Health Research (NIHR) Clinical Research Network is an essential element in achieving the government's vision "to create a health research system in which the NHS supports outstanding individuals, working in world-class facilities, conducting leading-edge research focused on the needs of patients and the public."

The role of the Clinical Research Network is to provide researchers with the practical support they need to make clinical studies happen in the NHS, so that more research takes place across England, and more patients can take part.

This practical support includes:

- Reducing the "red-tape" around setting up a study, including the provision of streamlined research management and governance activities for NIHR supported studies
- Enhancing NHS resources by funding the people and facilities needed to carry out research "on the ground"
- Helping researchers to identify suitable NHS sites and recruit patients to take part in research studies
- Advising researchers on how to make their study "work" in the NHS environment

The Clinical Research Network comprises eight national networks:

- Six topic specific Clinical Research Networks, which focus on specific disease areas: Cancer, Diabetes, Dementias and Neurodegenerative Diseases, Medicines for Children, Mental Health and Stroke
- A Primary Care Research Network
- A Comprehensive Clinical Research Network, which supports all those health areas not covered by the topic Networks, and which provides full geographical coverage of England

Information included in this report

This report provides key activity data from the Clinical Research Network. The data are presented in four parts:

- Clinical Research Network High Level Objectives
- Clinical Research Network Portfolio activity
- NHS Research Management and Governance activity
- Life-sciences industry studies

It is **important to note** that data on studies and patient recruitment are uploaded to the Clinical Research Network Portfolio by a study's Chief Investigator (or their delegate) on an ongoing basis. Investigators are encouraged to upload data promptly, so that data reporting is accurate. However, to ensure maximum data capture, this data upload can occur up to six weeks after the end of each quarter, with an absolute cut-off imposed at 30 June each year. For this reason, data reports for the same quarter may change over the course of the reporting year. Plans are in place to improve the reporting of our data which will take effect in the first quarter of 2012/13.

Period covered by this report

This report covers activity in the period 1 April 2011 to 31 March 2012, and includes the annual data refresh which took place on 30 June 2012. This report, therefore, captures the full financial year 2011/12 activity.

Where figures are given for "year to date", this refers to the Clinical Research Network financial year, which is 1 April 2011 to 31 March 2012.

The information contained in the report represents the most complete information available at the time of publication.

Dissemination

This report is produced by the Clinical Research Network Coordinating Centre, which is responsible for collating and publishing activity and performance data for the NIHR Clinical Research Network as a whole.

It is the policy of the Clinical Research Network Coordinating Centre to be open and transparent in its activities and its associated impact. All quarterly and annual Activity Reports are therefore published on our website, and can be accessed using this link: http://www.crncc.nihr.ac.uk/about_us/performance_objectives.htm

The data presented in this report may be quoted in presentations and papers. However, we would ask that the title and issue date of the report are used, to avoid any confusion about the period to which the figures relate and the time at which the data were reported.

Further information

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2. CLINICAL RESEARCH NETWORK HIGH LEVEL OBJECTIVES

2.1 Introduction

The Clinical Research Network High Level Objectives are our overarching objectives for the five-year period 2010-15. However, High Level Objective 1 takes 1 April 2009 as the start point.

The objectives are focused on delivery outcomes. They act as a management mechanism for driving forward our performance, and provide defined and agreed criteria for gauging improvement over time.

Table 2.1 presents the following information:

- Objective: the organisational goal for the Clinical Research Network
- Measure: the number or quantity that will be used to measure progress against the objective
- Target: the value of the measure that is the target value
- Timescale: the date by which the target value will be achieved, and therefore the timescale for the Clinical Research Network to reach the target (from the start date of 1 April 2010)

The introduction of the High Level Objectives has necessitated some new information gathering requirements and also some changes to underlying information systems.

These changes have been rolled out in a phased way, with full reporting on all High Level Objectives having commenced from April 2011.

Table 2.1: Clinical Research Network High Level Objectives 2010-2015

Objective		Measure	Target	Timescale
1	Double the number of participants recruited into NIHR CRN Portfolio studies	Number of participants recruited in a reporting quarter into NIHR CRN Portfolio studies	125,000	4 years (31 March 2014)
2	Increase the proportion of studies in the NIHR CRN Portfolio delivering to recruitment target and time	**2A:** Proportion of **commercial** contract studies achieving or surpassing their recruitment target during their planned recruitment period, at confirmed Network sites	80%	2 years (31 March 2012)
		2B: Proportion of **non-commercial studies managed by Registered CTUs** achieving or surpassing their recruitment target during their planned recruitment period	80%	3 years (31 March 2013)
		2C: Proportion of **non-commercial studies not managed by Registered CTUs** achieving or surpassing their recruitment target during their planned recruitment period	80%	5 years (31 March 2015)
3	Increase the percentage of commercial contract studies delivered through the NIHR CRN	Number of commercial contract studies on the NIHR CRN Portfolio as a percentage of the total commercial MHRA CTA approvals for Phase II–IV studies, on an annual basis	60%	4 years (31 March 2014)
4	Reduce the time taken to achieve NHS Permission through CSP for NIHR studies	Proportion of studies obtaining NHS Permission within 40 calendar days (from receipt of a valid complete application)	80%	3 years (31 March 2013)
5	Reduce the time taken to recruit first participant into NIHR CRN Portfolio studies	**5A:** Proportion of **commercial** contract studies achieving first participant recruited within 30 calendar days of NHS Permission being issued or First Network Site Initiation Visit, at confirmed Network sites	80%	2 years (31 March 2012)
		5B: Proportion of **non-commercial studies managed by Registered CTUs** achieving first participant recruited within 30 calendar days of NHS Permission being issued	80%	3 years (31 March 2013)
		5C: Proportion of **non-commercial studies not managed by Registered CTUs** achieving first participant recruited within 30 calendar days of NHS Permission being issued	80%	5 years (31 March 2015)
6	Increase the percentage of NHS Trusts participating in NIHR CRN Portfolio studies	Proportion of NHS Trusts recruiting each year into NIHR CRN Portfolio studies	98%	3 years (31 March 2013)

2.2 Summary data on performance to date

Table 2.2: Clinical Research Network High Level Objectives – summary on performance to date

Objective	Final Target		2010/11 Performance	2011/12 Performance					
	Target	End Date		Target	Q1	Q2	Q3	Q4	Annual Performance
1	125,000 [1]	31 March 2014	**141,175** [1]	125,000 [1]	149,196	159,963	152,583	133,798	148,885 [1]
2A	80%	31 March 2012	**21%**	80%	32%	54%	36%	54%	45%
2B	80%	31 March 2013	**100%**	60%	33%	29%	80%	60%	54%
2C	80%	31 March 2015	**38%**	50%	35%	33%	43%	46%	40%
3	60%	31 March 2014	**58%**	52%	62%	80%	59%	92%	73%
4	80%	31 March 2013	**8%**	70%	17%	27%	24%	27%	24%
5A	80%	31 March 2012	**52%**	80%	64%	49%	57%	73%	61%
5B	80%	31 March 2013	**22%**	40%	19%	26%	24%	24%	23%
5C	80%	31 March 2015	**38%**	40%	40%	27%	33%	38%	34%
6	98%	31 March 2013	**97%**	97%	98%	99%	99%	99%	99%

[1] Quarterly average

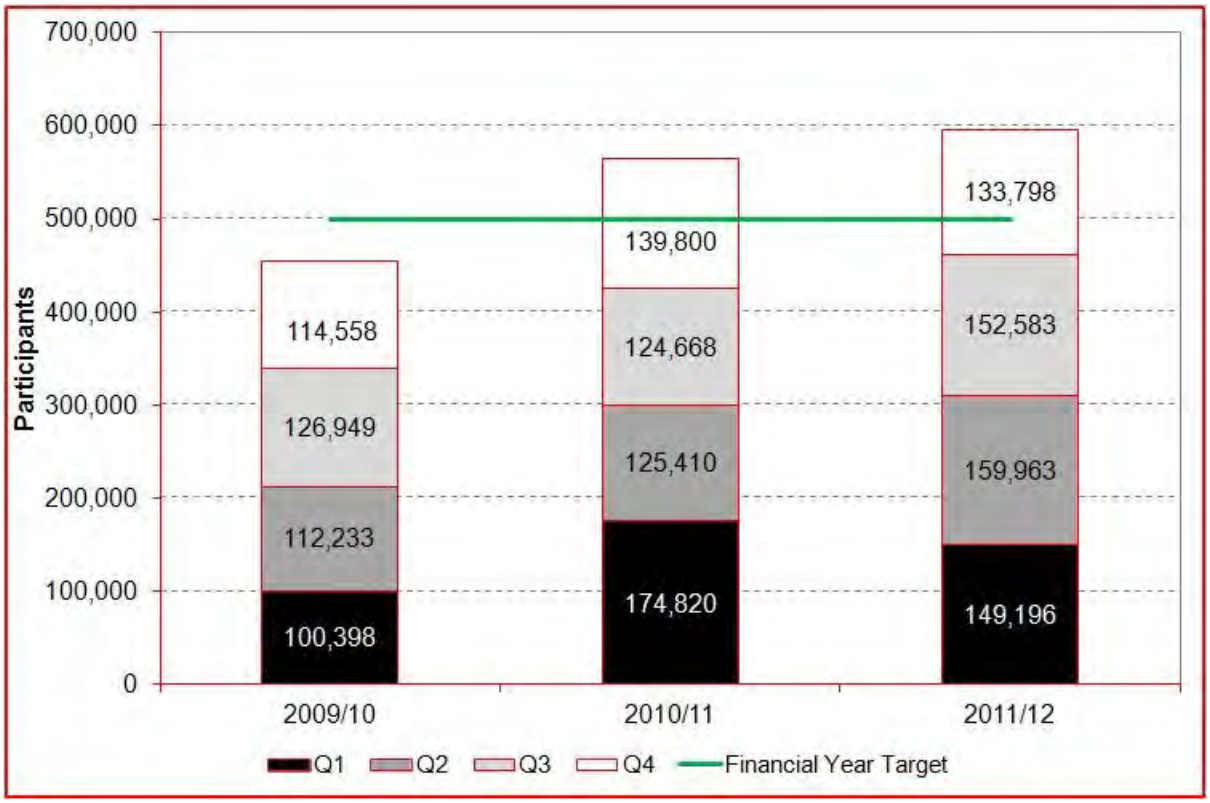
Key:

RAG	Threshold for Performance against Annual Performance target
Red	Less than 90% of Annual Performance target
Amber	90% or more of Annual Performance target, but less than 100% of Annual Performance target
Green	100% or more of Annual Performance target

High Level Objective 1

Double the number of participants recruited into NIHR Clinical Research Network Portfolio studies

Fig 2.3: Total number of participants recruited into NIHR Clinical Research Network Portfolio studies



Our initial objective was to attain a recruitment rate of 125,000 patient recruits in a quarter. This was achieved in 2010/11.

To maintain ambition in the 2011/12 financial year, the CRN set out to recruit a minimum of 125,000 participants in each and every quarter, which would lead to us recruiting in excess of half a million patients into clinical research across the year.

This too has been achieved.

- In 2011/12, the CRN recruited 595,540 participants to NIHR CRN Portfolio studies
- This represents an increase of 30,842 patients (or 5%) on the previous year

We do however note some "market trends" that potentially could affect our ability to maintain this level of patient recruitment in the future.

- There has been a decrease in the number of non-commercial studies entering the CRN Portfolio. If this trend continues, the size of our Portfolio can be expected to reduce over time.

- We are seeing a reduction in the proportion of observational studies on the Portfolio. Observational studies tend to require larger patient numbers than interventional studies, so ultimately this could mean recruitment of smaller numbers of participants.

As there is no opportunity for us actively to manage the non-commercial Portfolio, by selecting a balance of studies that would maintain recruitment, we must seek to off-set any reduction in Portfolio size by:

- *Active performance management of recruitment*. At this point, not all studies recruit the full complement of participants. If we improve our ability to do this, we could off-set the effects of a down-sized Portfolio. To achieve this, we require information systems that provide management data in a timely fashion and we need researchers to submit their data into our systems on schedule. Our new portfolio management system, which will come into service in the 2013/14 financial year, should enable us to make further progress.

- *Encouraging research funders to work with us and their researchers to improve feasibility*. Currently, poor/unrealistic feasibility is leading to researchers seeking extensions from funders. These extensions mean additional money has to be spent in order to generate a result from the study, and this diverts funds away from potential new studies. If we can improve feasibility, we may help funders to release finance for new research that will reverse the downward trend on number of new studies. Delivering outputs from studies as rapidly as possible is also essential, so that research is translated into clinical practice and adoption across the NHS.

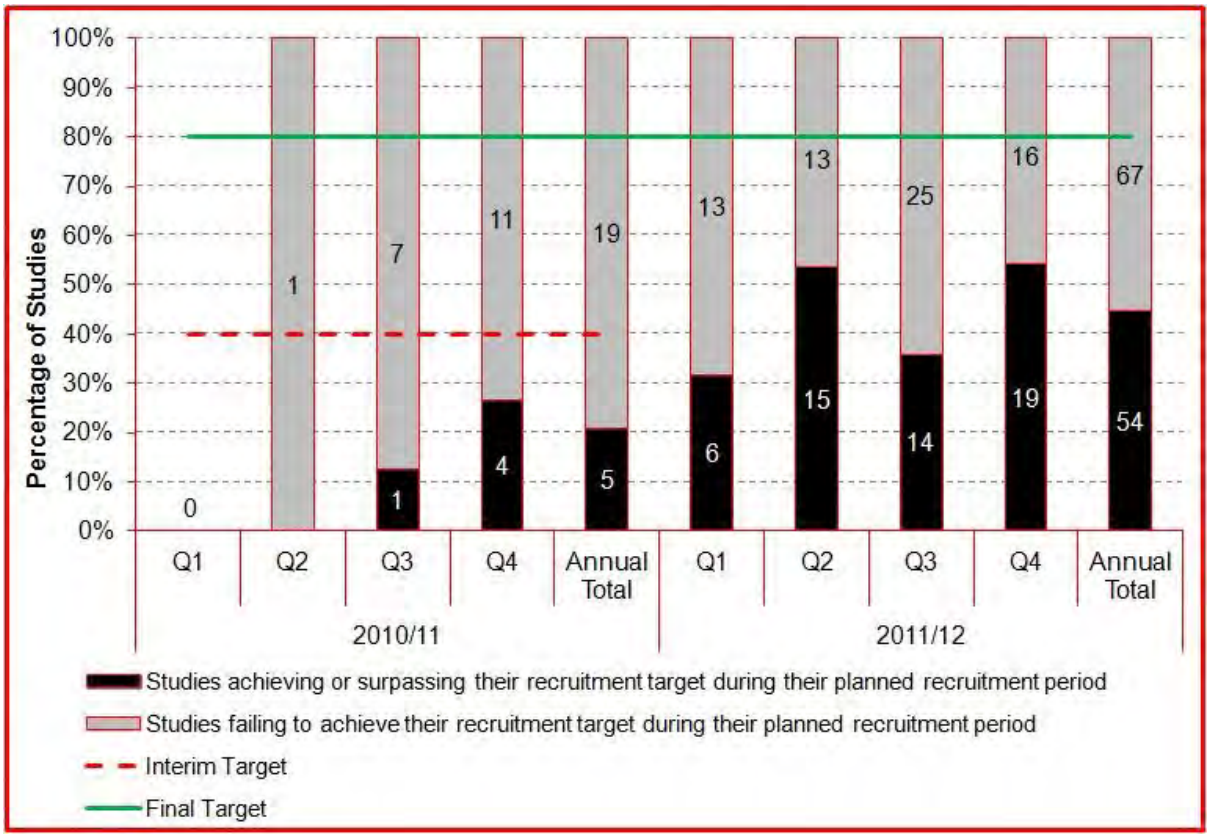
- *Engagement through Attributing the costs of health and social care Research & Development (AcoRD)*. We will use the opportunities afforded by the AcoRD guidance to work actively with the members of the Association of Medical Research Charities to deliver their studies to time and target.

High Level Objective 2

Increase the proportion of studies in the NIHR CRN Portfolio delivering to recruitment target and time

High Level Objective 2A: Proportion of commercial contract studies achieving or surpassing their recruitment target during their planned recruitment period, at confirmed Network sites

Fig 2.4: Commercial contract studies, recruitment to time and target



45% of commercial studies recruited to time and target in 2011/12.

This is more than double last year 2010/11 (21%), and therefore represents a significant improvement, which we attribute to Networks taking a more proactive role in managing studies that fall behind their recruitment trajectory.

The pattern of improvement from quarter to quarter has varied, however this reflects the fact that there is less opportunity to make a positive intervention in studies that opened more than 12 months ago. As these studies work their way through the system, and are then accounted for in our figures on closure, we are liable to see fluctuations in delivery percentages from quarter to quarter. Annual data for this HLO are therefore more reflective of actual performance.

An additional 8% of studies were near misses – those which exceeded the planned recruitment time by up to 10% or under-recruited by less than 10%.

If we include these near misses in our performance considerations (as the individual Industry sponsors agree is valid), 53% of studies were within 10% of target.

Nonetheless, this is still some way off our target of 80% of commercial contract studies delivered to time and target.

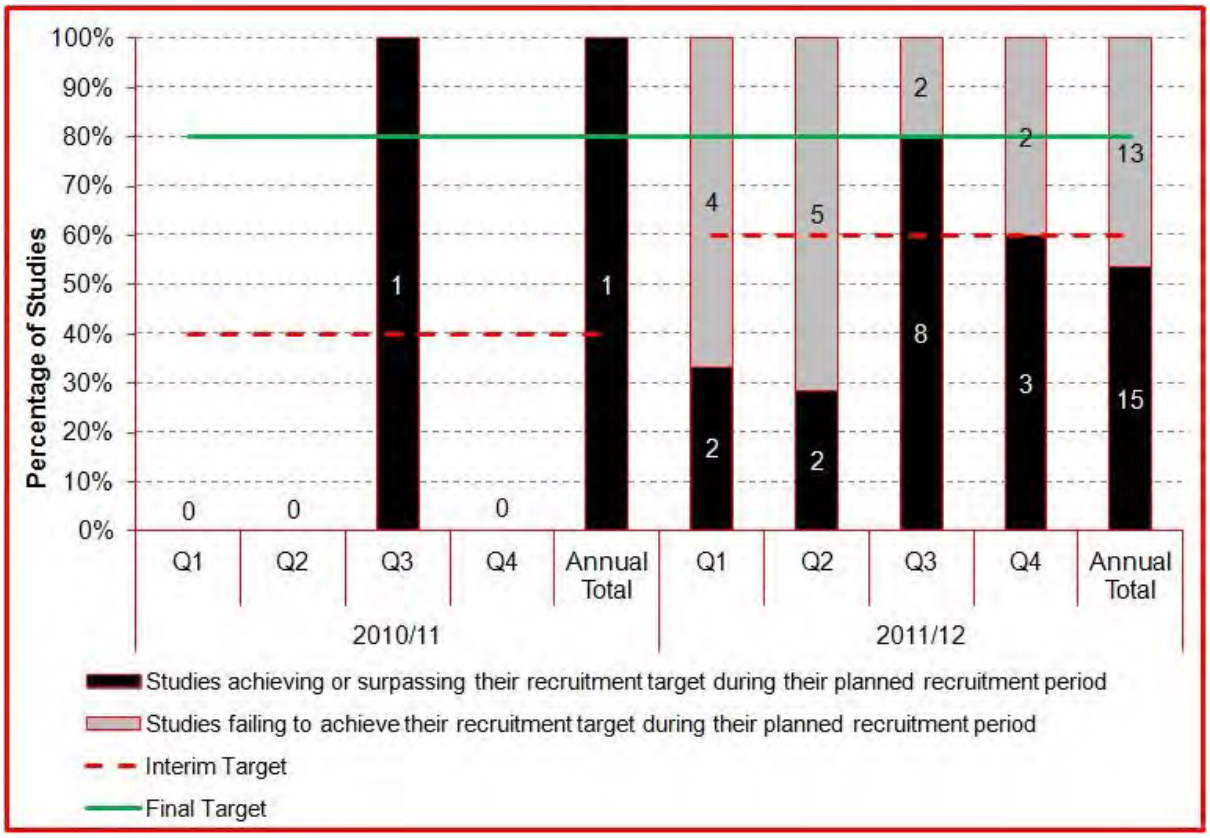
For the 2012/13 year, delivery on Industry studies will remain our highest priority, and we are pursuing a number of approaches, including:

- *Central contact centre.* In 2012/13, we will introduce a central contact centre, so we can streamline the "way in" to the Network service to ensure a consistent approach and level of service.

- *Service Improvement Programme*. We have initiated several projects to improve various aspects of commercial study performance. The results of these will impact in 2012/13.

High Level Objective 2B: Proportion of non-commercial studies managed by Registered CTUs achieving or surpassing their recruitment target during their planned recruitment period

Fig 2.5: Non-commercial studies managed by Registered CTUs, recruitment to time and target



54% of studies successfully met the objective, 6% below our target for the 2011/12 year, which was 60%. As we would expect, performance is better on this set of studies ie non-commercial studies managed by Registered Clinical Trials Units (CTUs) than on those **not** managed by Registered CTUs, as the former should benefit from the impact of CTU study management resource and expertise.

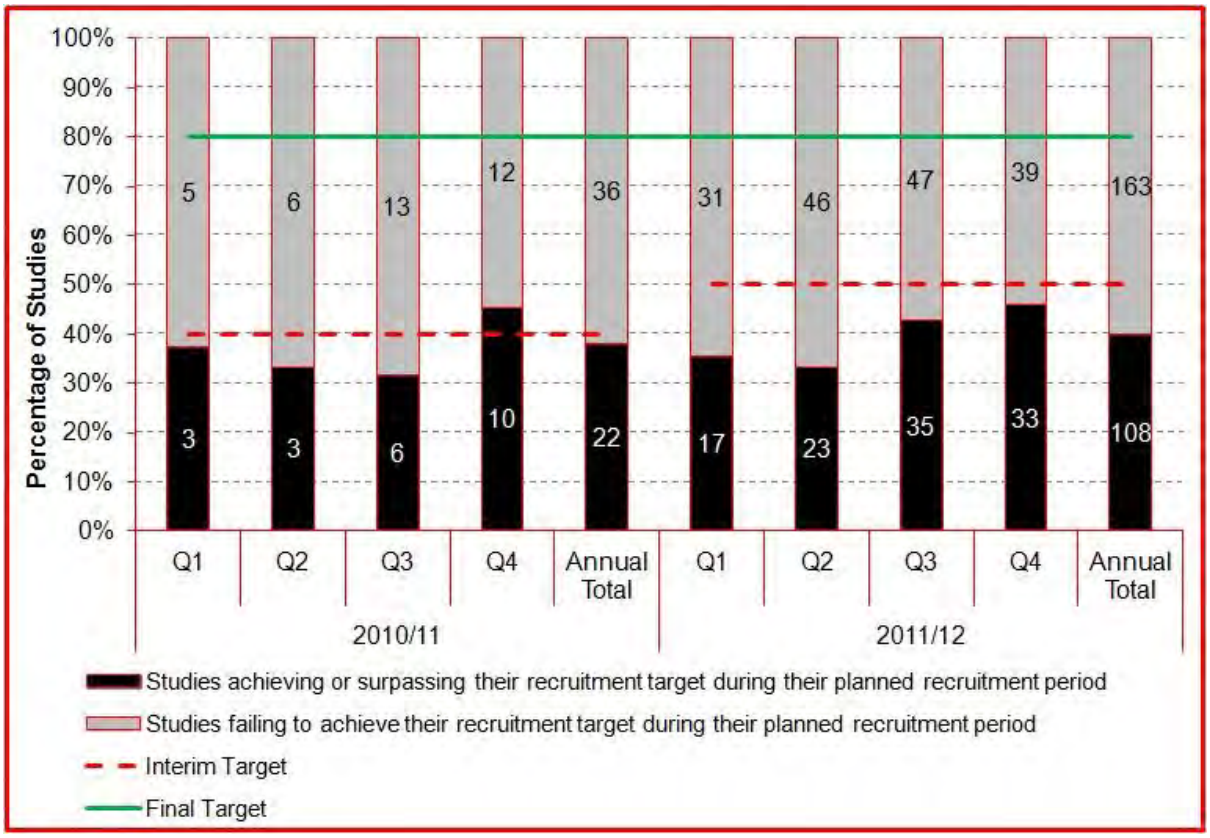
At the end of 2011/12, a total of 28 studies fulfilled the criteria for inclusion, of which 15 met this objective. The small number of studies is as expected at this stage. There is a tendency for studies managed by Registered CTUs to be larger and recruiting for longer than those not managed by Registered CTUs, which means that there are few studies which started on or after 1 April 2010 and have already closed (and hence are measured in this objective). However this does mean that the analysis should be treated with caution, as it is difficult to assess meaningful trends in our performance based on a small cohort of studies.

We expect the number of studies to increase during 2012/13, which will enable better analysis of our performance data during the coming year.

Whilst our improvement priority remains commercial studies, we expect that the learning we gain will also be able to be deployed into delivery of non-commercial studies, to achieve systemic improvements across the Portfolio as a whole.

High Level Objective 2C: Proportion of non-commercial studies not managed by Registered CTUs achieving or surpassing their recruitment target during their planned recruitment period

Fig 2.6: Non-commercial studies not managed by Registered CTUs, recruitment to time and target



40% of non-commercial studies not managed by Registered CTUs recruited to time and target in 2011/12. The positive trend in Quarters 2, 3 and 4 is encouraging, and annual performance is an improvement on the previous year (which was 38%), although still below our interim 2011/12 target of 50%. In 2011/12 a further 9% (n=24) of studies were near misses; those which exceeded the planned recruitment time by up to 10% or under-recruited by up to 10%.

Performance on this objective is a noted area for improvement in the coming year and close working with funders will be essential. We will be tackling this through:

- *Active performance management.* As our organisational performance management approach becomes embedded, we expect to see improvement on this measure.

- *Improved feasibility*. We are developing new and better computer-based tools to support more accurate feasibility and more timely management information to support performance management.

- *Funders project*. We are working with funders to encourage them to engage actively with the CRN to explore mutual benefits in setting up and delivering studies more effectively. Specifically, we are supporting funders to encourage researchers to be more accurate in setting patient recruitment targets.

High Level Objective 3

Increase the percentage of commercial contract studies delivered through the NIHR CRN

Fig 2.7: NIHR CRN adopted studies as a proportion of MHRA CTA approvals

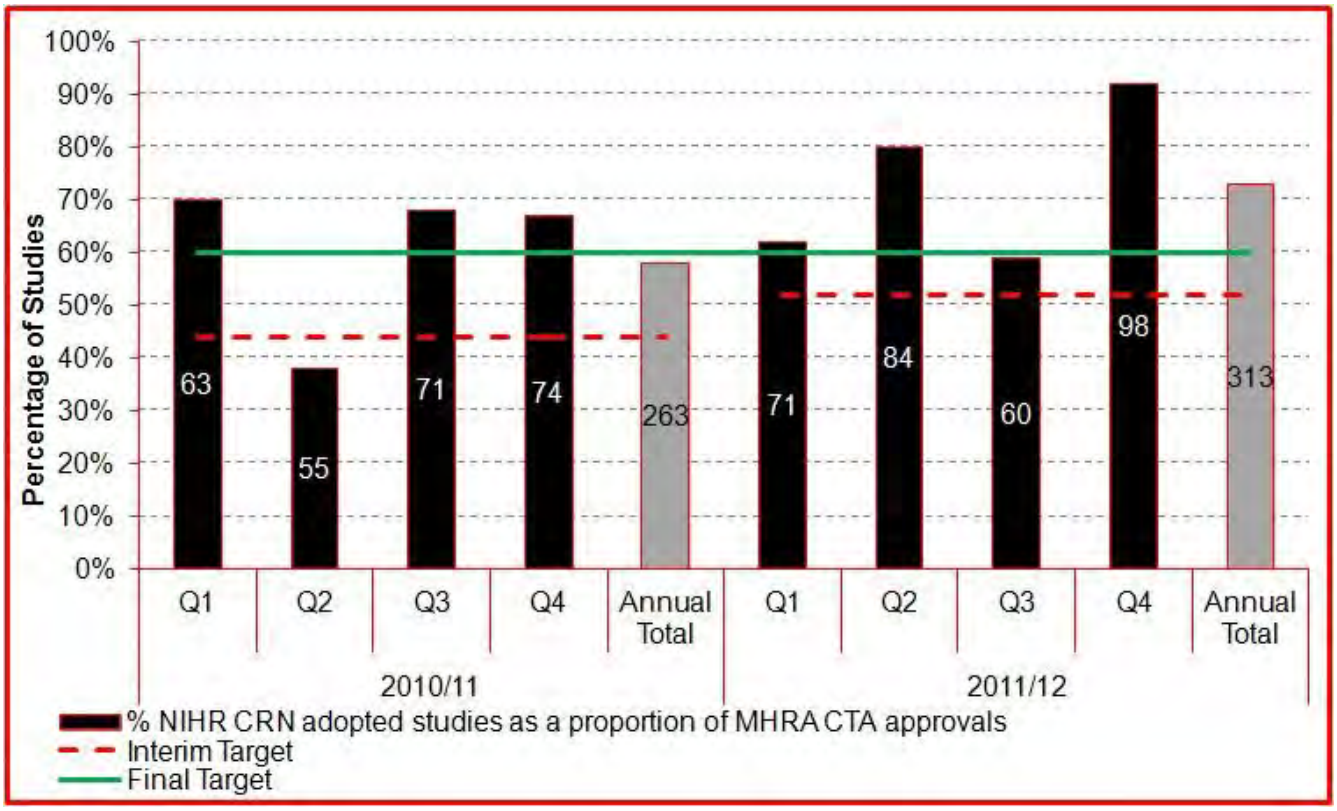


Figure 2.7 demonstrates the number of commercial contract studies on the NIHR CRN Portfolio as a percentage of the total commercial Medicines and Healthcare products Regulatory Agency (MHRA) Clinical Trial Authorisation (CTA) approvals for phase II to IV studies of investigational medicinal products.

In 2011/12 the NIHR CRN supported the delivery of 73% (n=313) of studies approved by the MHRA during the same time period.

This significantly exceeds our planned interim target of 52% and our final target of 60%.

We attribute the positive change to two main factors:

- More commercial companies have made a policy decision to work with the CRN on all studies. This is a reflection of the strong working relationships and collaboration that has been built up through stakeholder engagement over time.

- The work we have been doing to engage more actively with Clinical Research Organisations (CROs), as the pharma industry is increasingly making use of CROs for the delivery of clinical trials. We have been increasing our level of engagement with the CRO community, to ensure they see benefits to working with the CRN.

It should be noted that whilst the MHRA figure includes only investigational medicinal products, we have observed an increase in the number of med-tech and observational commercial studies on the Portfolio, that reinforces the point that the CRN is clearly now an

embedded part of delivering commercial contract clinical research in England, which is a positive message for UK plc.

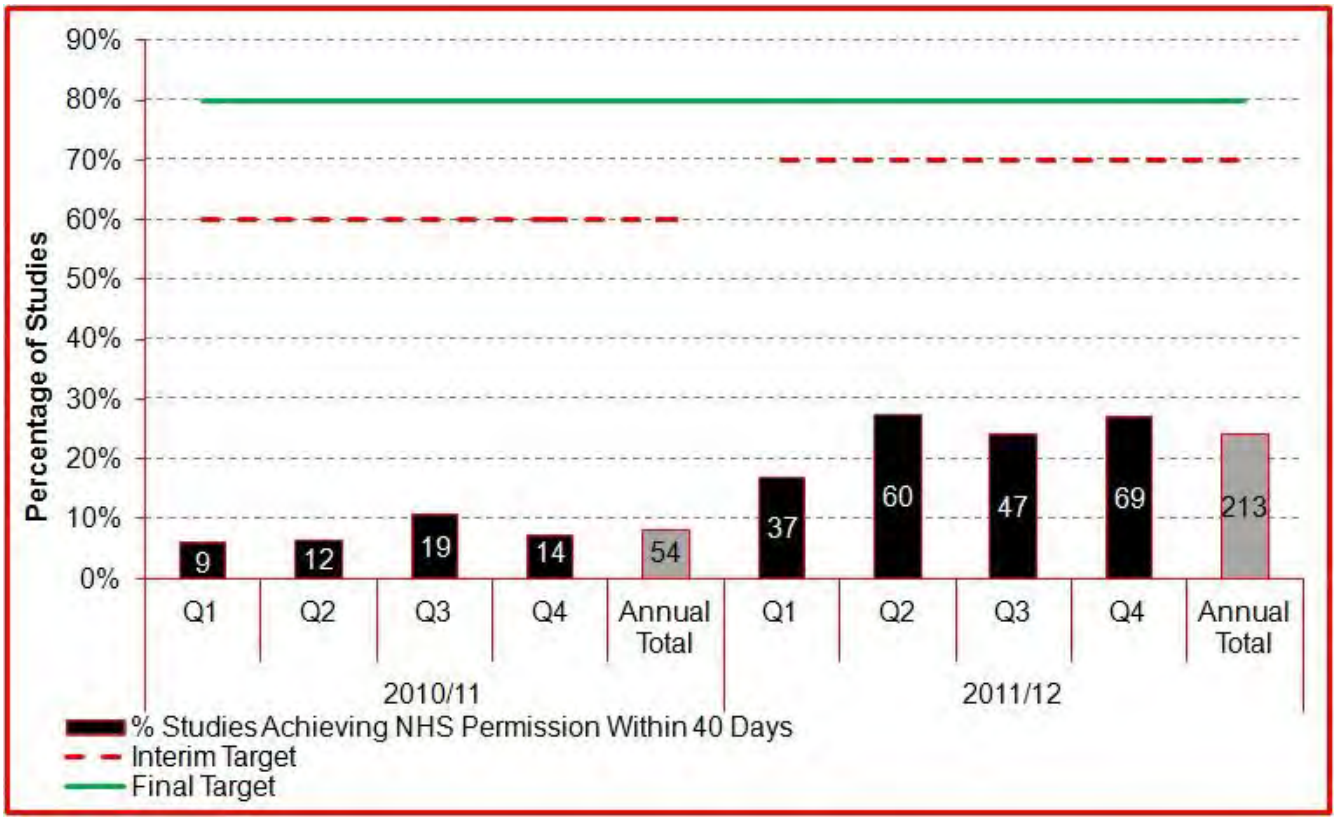
We intend to consolidate performance over the next year by:

- *Stakeholder engagement*. A particular focus will be to market the benefits of working with the NIHR CRN to less engaged sectors of the life-sciences industry (including CROs).

High Level Objective 4

Reduce the time taken to achieve NHS Permission through CSP for NIHR studies

Fig 2.8: Proportion of studies obtaining NHS Permission within 40 days



Across the 2011/12 financial year, 24% of studies achieved NHS Permission within 40 days (average of all study sites). This is a threefold improvement on the previous year, showing that progress has been made.

We attribute this progress largely to the work we have done to improve business processes in CSP. At the start of 2011/12 major changes to CSP principles and process were published to ensure delivery of a more proportionate and pragmatic approach, with decisions based on judgement rather than a tick box approach. A coherent programme of performance management is underway to ensure improvements in activity by Comprehensive Local Research Networks (CLRNs).

However, performance against this objective must be set against a background of significant technical change. The new CSP software was introduced in July 2011, and there were major technical issues during the period following introduction and in Quarters 3 and 4 limiting the continuation of this improvement. A programme of actions to address the technical issues has been put in place and the impact on users has decreased significantly as a result. Work has also been undertaken with the CLRNs to ensure the accuracy of the data presented.

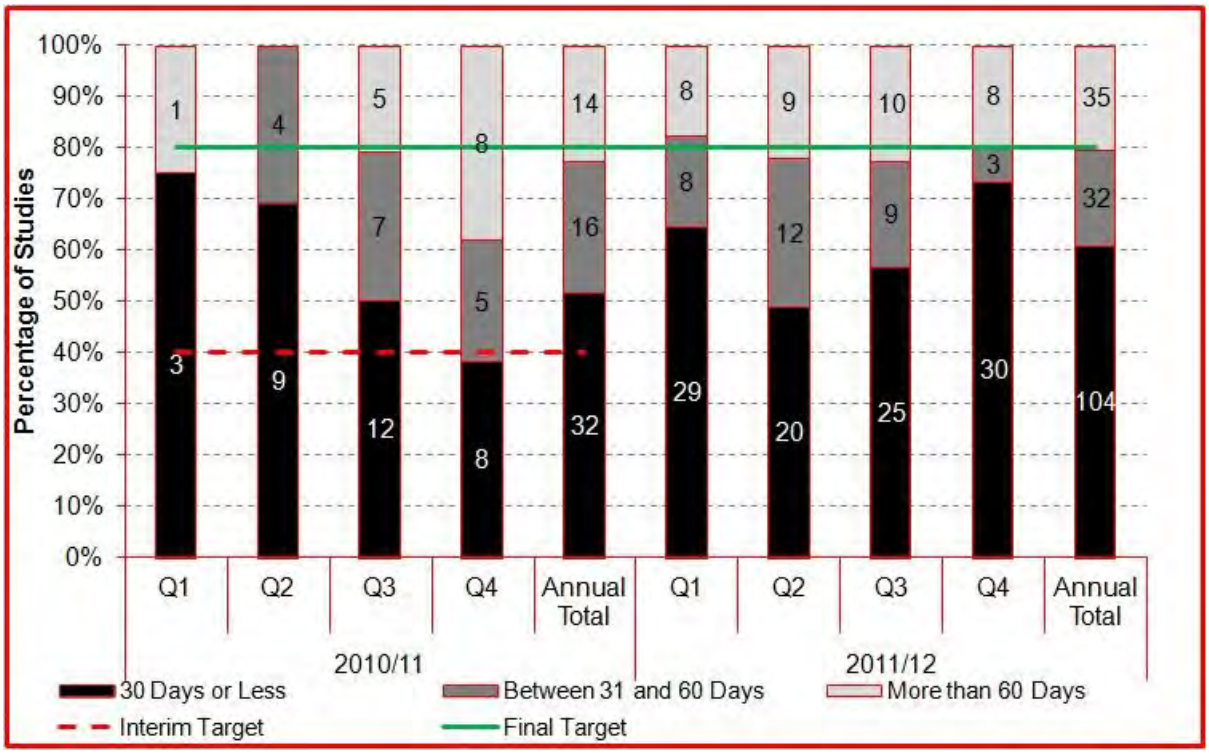
Continuous improvement of the CSP system (on both technical and human aspects) will continue to be a high priority for the 2012/13 financial year.

High Level Objective 5

Reduce the time taken to recruit first participant into NIHR CRN Portfolio studies

High Level Objective 5A: Proportion of commercial contract studies achieving first participant recruited within 30 calendar days of NHS Permission being issued, at confirmed Network sites

Fig 2.9: Proportion of commercial contract studies, by the number of calendar days from NHS Permission issued to first participant recruited



61% of commercial contract studies recruited their first participant within 30 days in 2011/12, which shows continued improvement against 2010/11 performance (52%). This is especially marked considering the number of studies has risen from 32 achieving the target in 2010/11 to 104 in 2011/12.

For the first time, the refreshed annual data excludes studies which have a Network target of less than one participant per month (reflecting rare disease areas and inaccessible populations).

It also uses First Network Site Initiation Visit (SIV) or NHS Permission, whichever is later, to illustrate when the site is actually fully set up to recruit its first participant. This has highlighted the significant percentage of studies which would be incapable of recruiting their first participant within 30 days because the sponsor company has not yet verified to the site that they are able to commence active recruitment. It seems the most significant factor impacting upon this is the SIV date.

An additional 20% of studies recruited their first participant within 30 days, if the start date used is the SIV compared to the NHS Permission date. This highlights that changes around site initiation also need to be implemented by Industry, if we intend to reach our target of 80% of studies recruiting their first participant within 30 days.

In the 2012/13 financial year we will be working on this objective by:

- *Service Improvement Programme – study management project*. A study management project will start in the 2012/13 year, to develop and share a toolkit to support the effective management of both commercial and non-commercial studies. This will include a focus on areas including clinical pathway mapping, recruitment planning and active performance management.

The anticipated toolkit will be in place by spring 2013, and will therefore begin to impact on performance during the year. The toolkit will address performance improvement in HLO 5A, B and C.

High Level Objective 5B: Proportion of non-commercial studies managed by Registered CTUs achieving first participant recruited within 30 calendar days of NHS Permission being issued

Fig 2.10: Proportion of non-commercial studies by Registered CTUs, by the number of calendar days from NHS Permission issued to first participant recruited

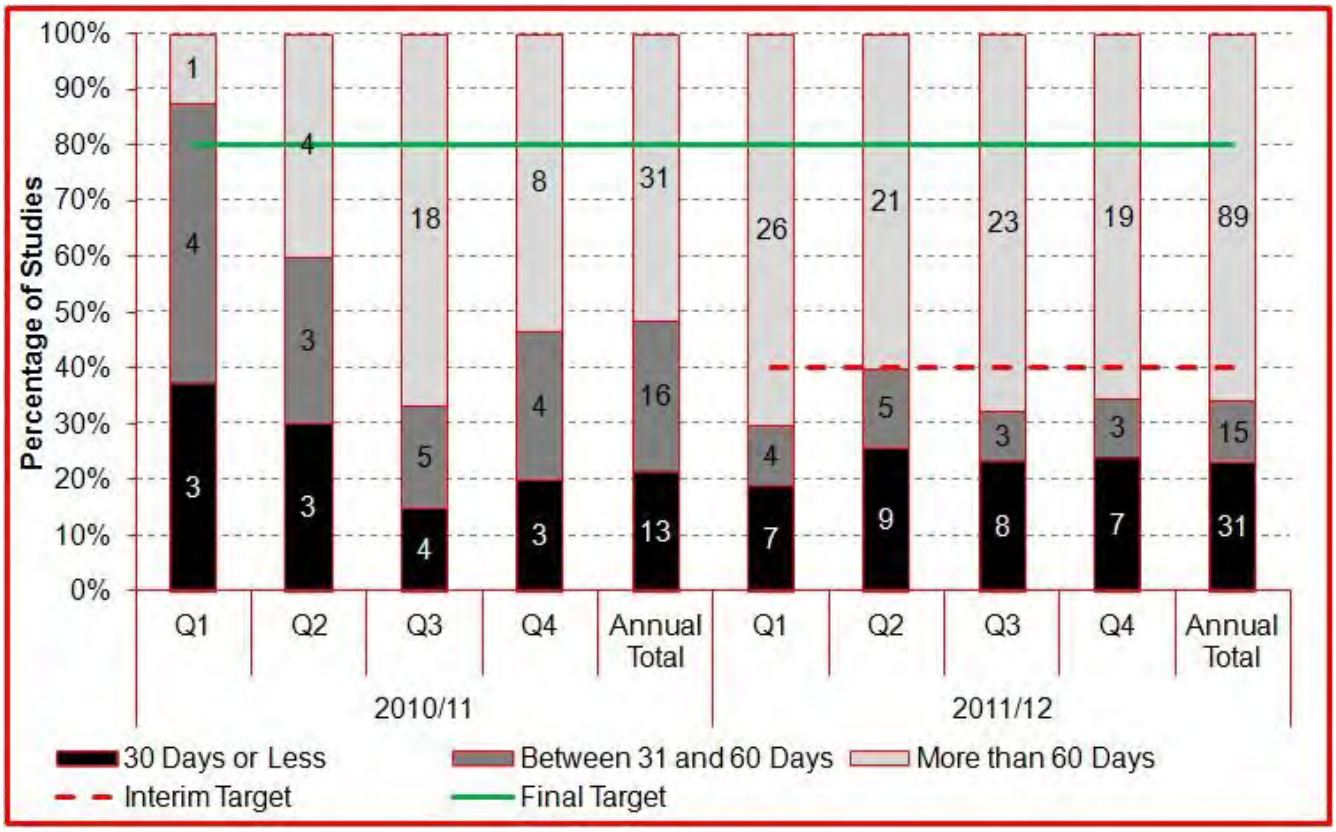
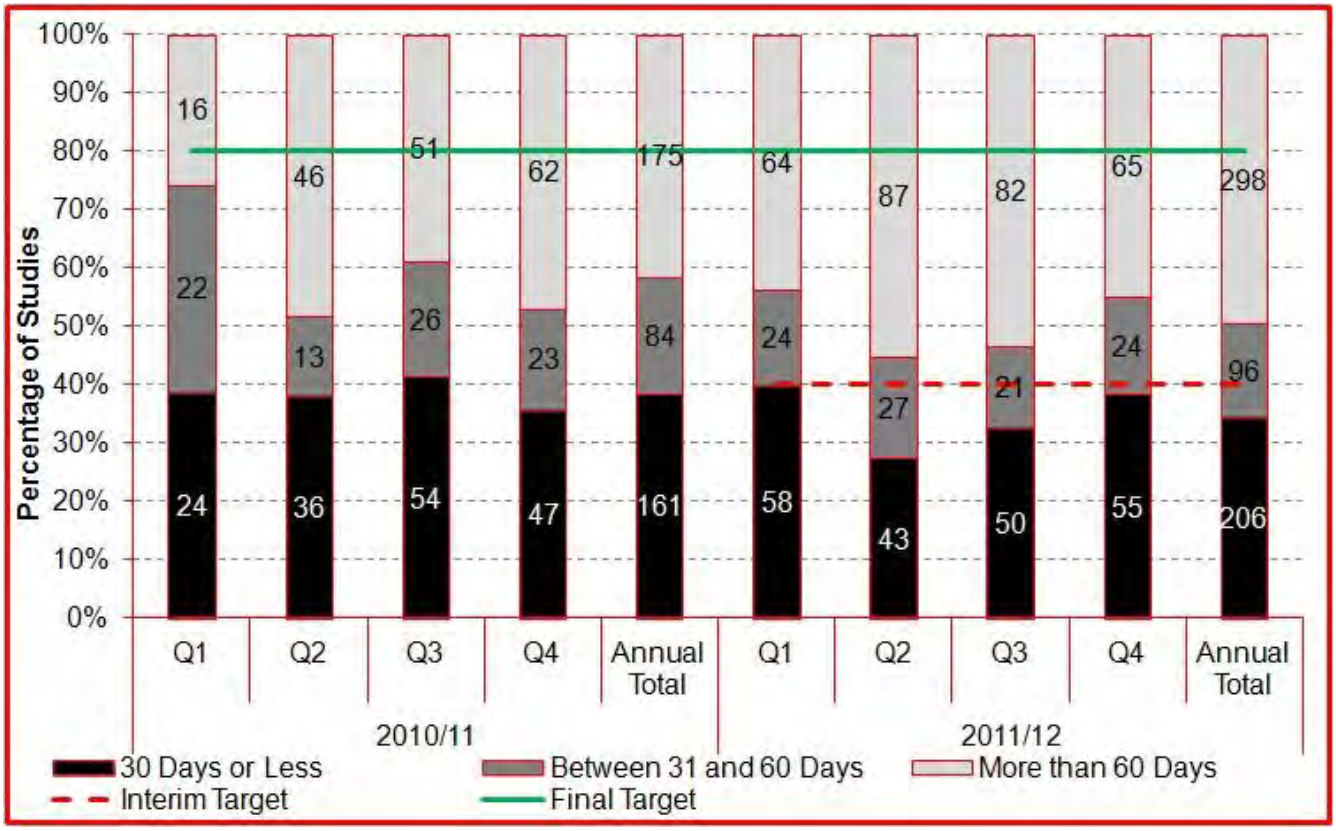


Figure 2.10 shows that 135 studies fulfilled the criteria for inclusion in the objective this year, compared with 60 in 2010/11. Our performance on this objective has been relatively static in 2011/12, at 23%, which is just above 22% performance in 2010/11.

The lack of quarter on quarter or year on year improvement on this objective highlights that there is work to be done with CTUs and to speed up the identification and recruitment of the first participant into studies.

High Level Objective 5C: Proportion of non-commercial studies not managed by Registered CTUs achieving first participant recruited within 30 calendar days of NHS Permission being issued

Fig 2.11: Proportion of non-commercial studies not managed by Registered CTUs, by the number of calendar days from NHS Permission issued to first participant recruited



As figure 2.11 shows, our success rate for the year on this objective is 34%, which is a little below our interim 2011/12 target of 40%. Overall there has been a slight dip in performance from the previous year 2010/11 (38%) but the figures have improved incrementally over the last three quarters which is encouraging.

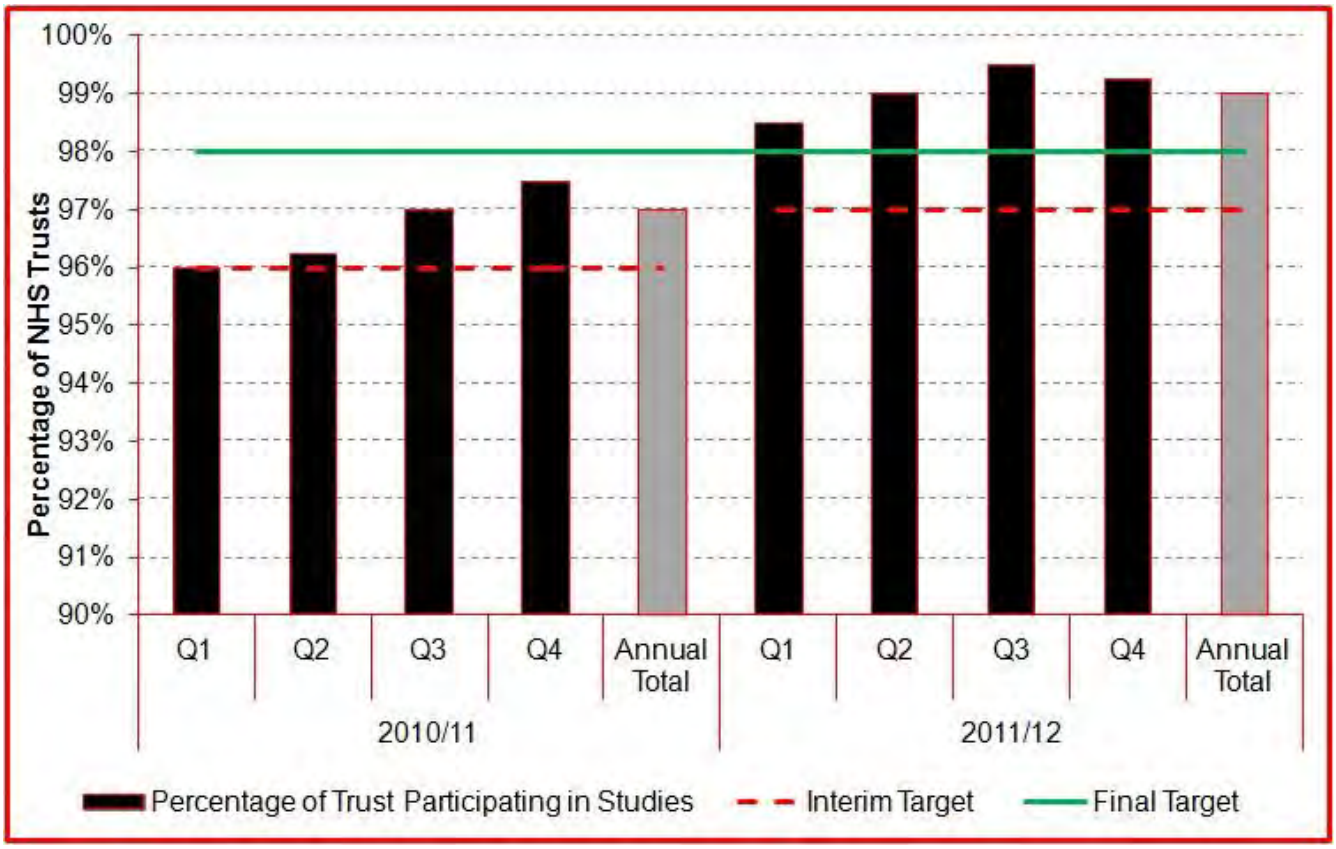
As performance on this objective is some way below target, it is a focus for improvement in the coming year.

In addition to the study management toolkit mentioned previously, we will also be applying any lessons learned from our planned root cause analysis work on HLO 5A to promote improvements to the performance of non-commercial studies.

High Level Objective 6

Increase the percentage of NHS Trusts participating in NIHR Clinical Research Network Portfolio studies

Fig 2.12: Percentage of NHS Trusts participating in NIHR Clinical Research Network Portfolio studies within the past 12 months



On average, 99% of NHS Trusts actively recruited to NIHR CRN Portfolio studies in 2011/12, exceeding the target.

For Quarters 2, 3 and 4 the figure has remained at 99%, showing that the CRN is consistently performing over and above the HLO requirement.

In that period it should be noted that the total number of possible NHS Trusts which could have reported recruitment has fluctuated only slightly, ranging from 395 to 398 organisations in total.

Over the year, we have been successful in encouraging and supporting the delivery of clinical research in some areas that are generally considered to be “hard to reach”. This is evidenced by significant improvements in the number of studies undertaken at some Ambulance Trusts, Mental Health Trusts and smaller hospitals.

The very small number of NHS Trusts which have not reported recruitment this year are all relatively newly established community health Trusts, which have had limited engagement with clinical research to date and many of their patients are in known “hard-to-reach” groups. The “top ten” improvers in this regard include:

- University Hospitals of Morecambe Bay NHS Foundation Trust (large acute)
- Warrington and Halton Hospitals NHS Foundation Trust (medium acute)

- Norfolk Community Health and Care NHS Trust (care)
- Walsall Healthcare NHS Trust (medium acute)
- Cambridgeshire Community Services NHS Trust (care)
- Solent NHS Trust (care)
- Hertfordshire Partnership NHS Foundation Trust (mental health)
- Dorset Healthcare University NHS Foundation Trust (mental health)
- Yorkshire Ambulance Service NHS Trust (ambulance)
- London Ambulance Service NHS Trust (ambulance)

These data reflect that we are delivering on our ambition to expand the reach of NIHR CRN to all sectors of the NHS, and engage all NHS organisations in England in research for patient benefit.

For the 2012/13 financial year, we shall be focusing on how to maintain this high level of engagement as Clinical Commissioning Groups take shape, and additional qualified providers of healthcare enter the market.

3. CLINICAL RESEARCH NETWORK PORTFOLIO ACTIVITY

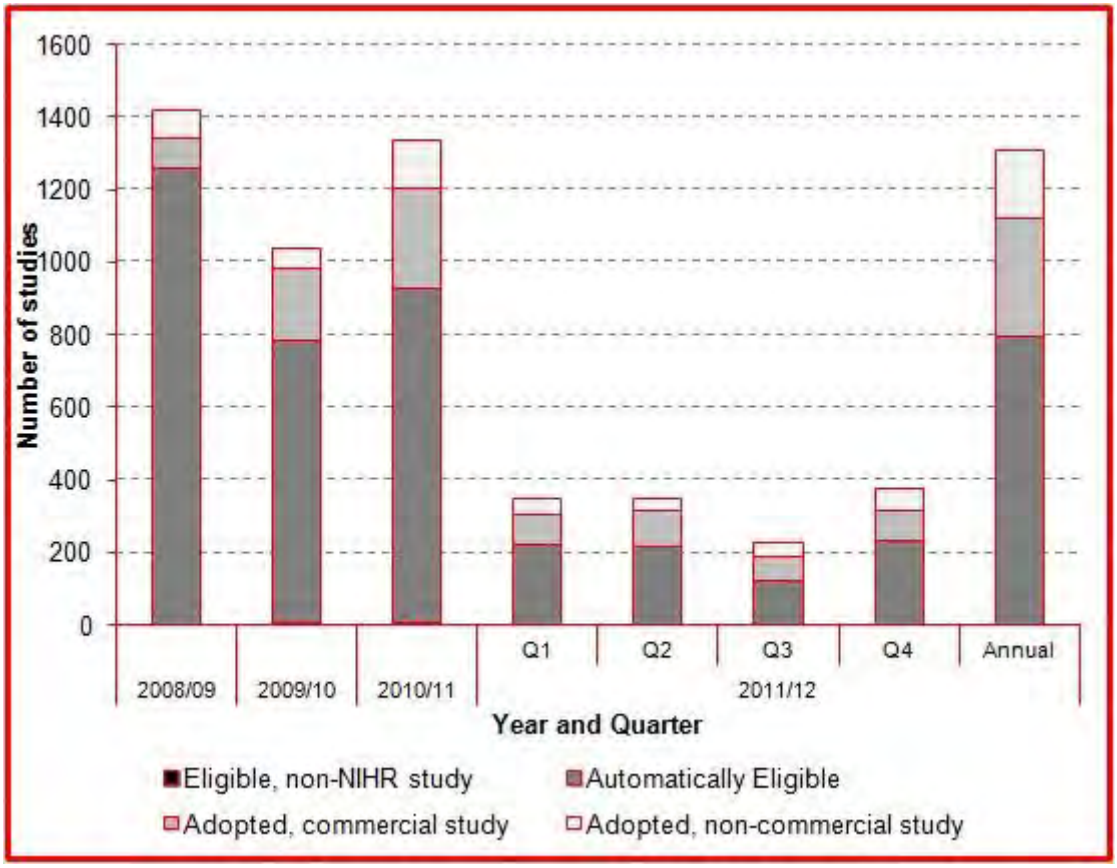
The NIHR Clinical Research Network Portfolio is a collection of high quality clinical research studies that are eligible for consideration for Clinical Research Network support. Some studies may receive support from more than one of the eight Clinical Research Networks. Where this is the case a “Main Network” is allocated and for the purposes of this report, the number of studies and recruitment data are shown only against this Network.

The number of studies eligible for consideration for NIHR Clinical Research Network support entered onto the Portfolio Database in each quarter is illustrated in figure 3.1. Non-commercial studies, including those that are automatically eligible and those that are required to go through the non-commercial adoption process, make up the greatest proportion of studies on the CRN Portfolio. This is a trend observed across all years since 2008/9 which is maintained in 2011/12.

A total of 1,307 studies were deemed eligible for consideration for NIHR Clinical Research Network support and entered on to the Portfolio Database in 2011/12 which is a small decline (n=27) when compared to the total in the previous year (n=1,334 in 2010/11).

Automatically eligible studies (studies funded by the NIHR, other areas of central Government and NIHR non-commercial partners) account for the majority of the variation across years. The number of automatically eligible studies entered onto the Portfolio Database is limited by issues such as levels of funding available to commission research, the number of high quality research proposals submitted for funding and the type of studies submitted and accepted for funding. For example, funders may be supporting fewer larger or more complex studies in 2011/12 compared to previous years.

Fig 3.1: Number of studies entered onto the Portfolio by eligibility type



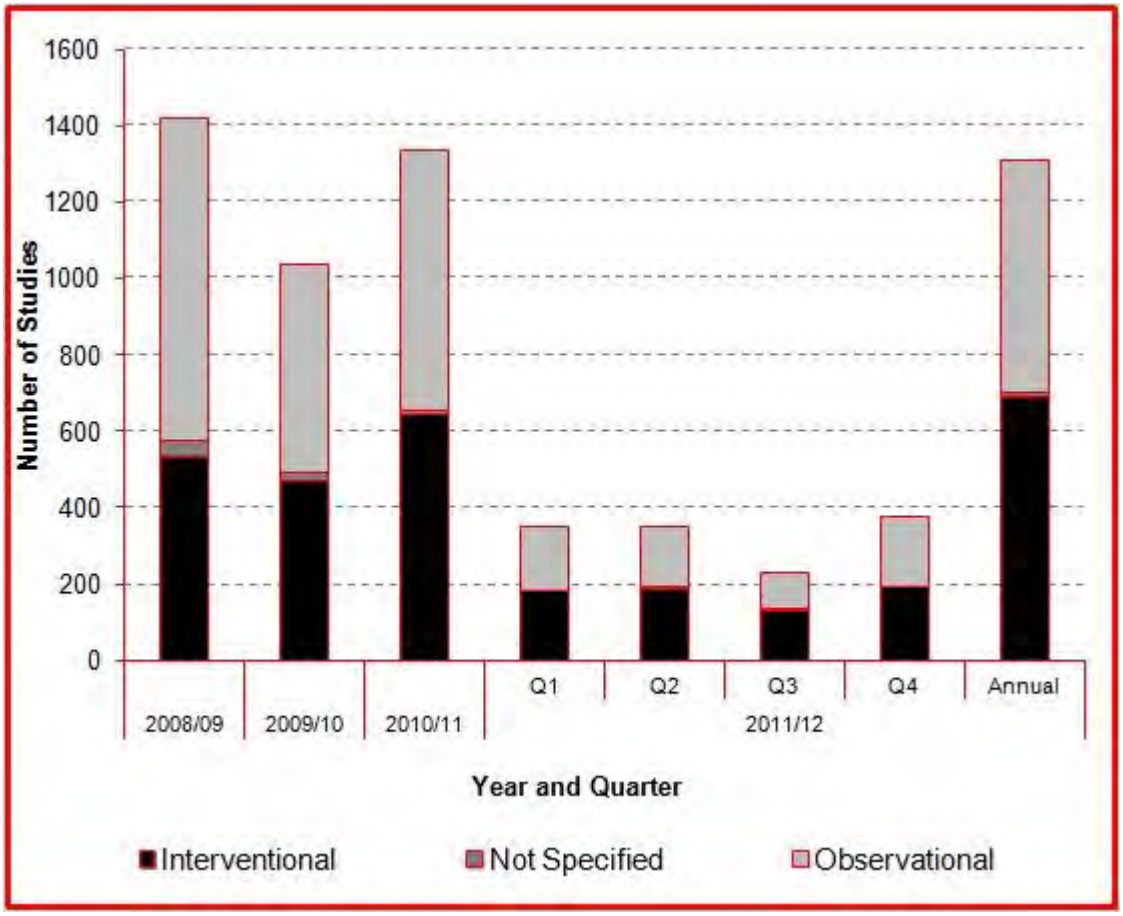
The number of adopted, non-commercial studies deemed eligible for consideration for Network support in 2011/12 has increased when compared to previous years (n=185 in 2011/12; n=131 in 2010/11; n= 53 in 2009/10). This category includes those studies funded by overseas governments or charities and investigator initiated studies (commercially funded, but not commercially sponsored). Given the small decline in the number of automatically eligible studies in 2011/12, this is a positive picture demonstrating other valuable sources of funding for high quality clinical research.

In total, 1,626 applications were received via CSP in 2011/12 (figure 4.4) compared to the 1,307 eligible studies added to the Portfolio Database. It is worthy of note that the number of applications accepted for processing through CSP is, as expected, higher than the number of eligible studies added to the Portfolio Database for two key reasons:

- The CSP and Portfolio eligibility processes run in parallel. Therefore some of the applications accepted for processing through CSP will subsequently be deemed not eligible for Network support. These studies will be required to gain their NHS Permission outside of CSP; however they will still have been captured in the number of applications received.

- Studies wholly funded and supported by NIHR Biomedical Research Centre and Unit awards or Collaboration for Leadership in Applied Health Research and Care awards, whilst not eligible for NIHR Clinical Research Network support, are eligible to use the CSP process

Fig 3.2: Number of studies entered onto the Portfolio by primary study design



The NIHR Clinical Research Network supports a broad range of studies. Figure 3.2 provides the total number of interventional and observational studies deemed eligible for consideration for Network support and added to the Portfolio Database. As figure 3.2 illustrates the CRN has continued to support a balanced portfolio of clinical research studies in 2011/12.

Interestingly, in 2011/12 the number of eligible interventional studies added to the Portfolio Database surpassed the number of observational studies. This is a trend not observed in previous years suggesting a subtle shift in the balance of the CRN Portfolio of studies. The proportion of interventional to observational studies ie the balance of the CRN Portfolio is a reflection of the type of research funding available and the type of applications submitted for funding. The overall increase in the proportion of the interventional studies in 2011/12 compared to previous years supports the hypothesis that funding organisations may be supporting fewer, more complex studies (see figure 3.1).

Table 3.3: Summary trend data

	2009/10	2010/11				2011/12					
	Annual	Q1	Q2	Q3	Q4	Annual	Q1	Q2	Q3	Q4	Annual
Number of Studies Entered onto the Portfolio	1,037	290	375	421	248	1,334	351	349	230	377	1,307
Number of Studies Open to Recruitment	2,716	2,417	2,476	2,577	2,679	3,218	2,825	2,883	2,972	3,029	3,785
Number of Studies Reporting Recruitment	2,544	2,186	2,229	2,257	2,264	2,994	2,596	2,627	2,677	2,643	3,526
Number of (NIHR CRN) Participants	454,138	174,820	125,410	124,668	139,800	564,698	149,196	159,963	152,583	133,798	595,540

Table 3.3 provides summary trend data which gives an indication for the demand for support from the NIHR Clinical Research Network. It is expected that the Clinical Research Network should have the capacity to meet this demand with a reasonable balance of ongoing studies closing and new studies opening. In 2011/12 the Clinical Research Network was supporting 3,785 unique open studies (table 3.5) an increase of 567 studies when compared to 2010/11 and an increase of 1069 studies when compared to 2009/10. The number of studies open to recruitment (tables 3.3 and 3.5) gives a broad indication of the scale of opportunities for participants to take part in clinical research in the NHS in England which has been increasing year on year since 2009/10. In addition, it indicates the current level of recruitment related work being carried out by the Clinical Research Network which has also been increasing year on year. In addition, but not evident in these data the Networks also provide support for pre- and post- recruitment activity ie participant identification and follow-up.

In terms of total recruitment 595,540 participants were recruited into NIHR CRN Portfolio studies in 2011/12. This is an increase of 30,842 participants when compared to 2010/11 and an increase of 141,402 participants when compared to 2009/10 (table 3.3). This demonstrates the scale of the impact the NIHR Clinical Research Network is having on supporting research in the NHS.

Table 3.4: Recruitment per million resident population in each NHS Strategic Health Authority area [1]

SHA	Total Recruitment 2011/12	Population (million)	Total Recruitment 2011/12 per million population
London	113,767	7.825	14,539
South Central	57,227	4.145	13,806
North West	93,188	6.970	13,370
South West	69,751	5.279	13,213
North East	30,000	2.607	11,507
West Midlands	60,082	5.455	11,014
Yorkshire and Humber	56,857	5.299	10,730
East Midlands	42,830	4.450	9,625
East of England	53,754	5.832	9,217
South East Coast	18,084	4.372	4,136
TOTAL	**595,540**	**52.234**	**11,401**

Table 3.4 demonstrates the geographical spread of recrutiment to NIHR Clinical Research Network studies across England. In 2011/12 participants were recruited to NIHR Clinical Research Network Portfolio studies from across the whole of England, demonstrating the breadth of opportunities for patients to get involved in clinical research. The London region had the highest rate of recruitment to NIHR Clinical Research Portfolio studies per million population; this is not unexpected given the concentration of NHS organisations in this area.

Table 3.5: Number of studies open to recruitment and number of studies reporting recruitment by Network

Network	Number of Studies Open to Recruitment during 2011/12	Number of Studies Reporting Recruitment in 2011/12	Total Recruitment 2011/12
Cancer	619	584	87,806
Comprehensive	1,959	1,803	263,123
Dementias and Neurodegenerative Diseases	154	142	13,137
Diabetes	221	189	33,954
Medicines for Children	148	145	7,081
Mental Health	335	329	49,747
Primary Care	232	218	128,713
Stroke	117	116	11,979
TOTAL	**3,785**	**3,526**	**595,540**

The number of studies attributed to each of the Networks is provided in table 3.5, illustrating a wide range in the number of studies being “led” by each Network.

Of the 3,785 unique studies open to recruitment in 2011/12, 3,526 (93%) were reporting recruitment data; this is equal to the percentage of studies reporting recruitment data in the previous year.

[1] SHA resident population based on Office of National Statistics mid-2010 Resident Population Estimates

Fig 3.6: Recruitment by primary study design

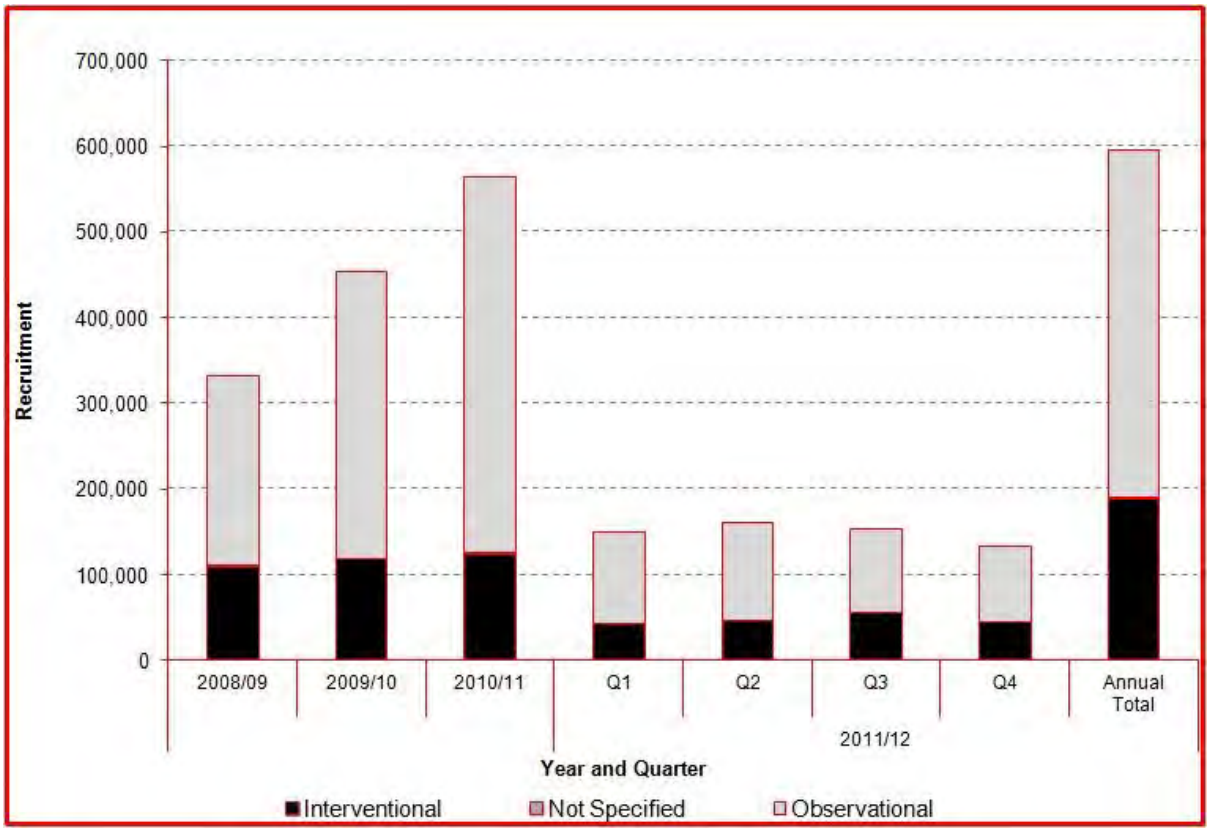


Figure 3.6 provides a breakdown of the total recruitment according to primary study design. This illustrates that in 2011/12 observational studies (n=405,743) accounted for a greater proportion of total recruitment in comparison to interventional studies (n=189,199). This is a trend observed across all previous years. The remaining 598 participants were recruited in 2011/12 to “Not Specified” for primary study design.

Recruitment into interventional studies is more consistent over time than that into observational studies (figure 3.6). In 2011/12 there were 189,199 participants recruited into interventional studies compared to 124,254 participants in 2010/11 and 117,947 participants in 2009/10 demonstrating an increase in the number of participants contributing to these studies. This is also likely to be a reflection of the increase in the number of these studies in the NIHR CRN Portfolio in 2011/12.

Fig 3.7: Recruitment by Network and study design in 2011/12

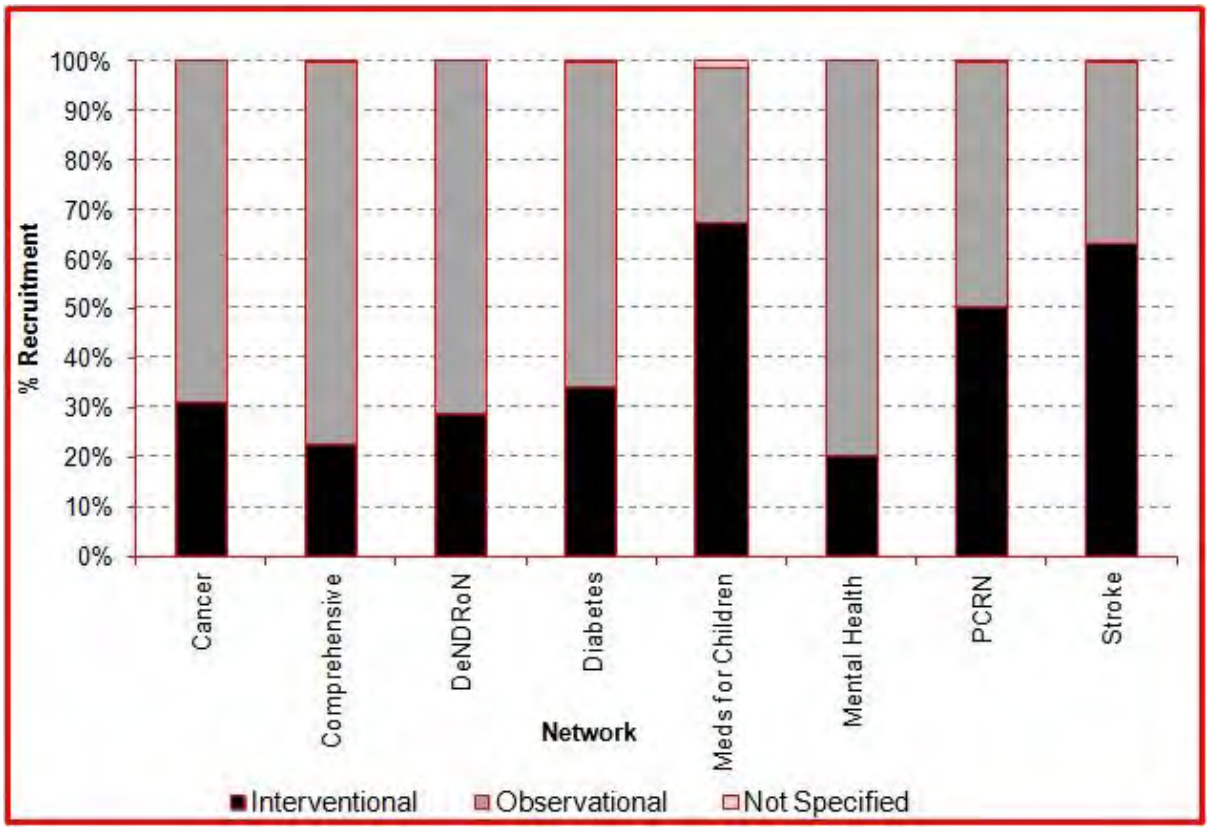


Figure 3.7 illustrates the breakdown of recruitment in each Network by primary study design. Whilst overall recruitment into observational studies surpassed that into interventional studies in 2011/12 (figure 3.6), two Networks (Medicines for Children and Stroke) bucked this trend throughout the year recruiting more participants to interventional than observational studies.

4. NHS RESEARCH MANAGEMENT AND GOVERNANCE ACTIVITY

The NIHR Coordinated System for gaining NHS Permission (CSP) supports researchers in gaining the necessary NHS Permissions to carry out an NIHR study quickly and efficiently, with the minimum of bureaucracy. CSP was introduced in the NHS in England in November 2008. CSP comprises specialist staff throughout the NHS, with a central coordination unit in the Clinical Research Network Coordinating Centre, national standard operating procedures that are proportionate and streamlined, and a web-based IT system; a new IT system, the "CSP Module", was introduced in July 2011, replacing the previous CSP ReDA IT system.

In the UK, different bodies have responsibility for scrutiny and approval of different aspects of the set-up of a clinical research study in the NHS - regulatory authorities, NHS research ethics, and NHS site / organisation Permission. The Clinical Research Network provides a framework for NHS Permission for NIHR studies, but is not in a position to control other parallel processes. The CSP system tracks the beginning of the study set-up process through to receipt of NHS Permission to commence the study (which is only given when all other necessary approvals are in place). CSP data therefore provide a picture of study approval times as a whole, as they are experienced by researchers. However, they are not a direct indicator of the Clinical Research Network's "performance" in relation to NHS Permission only.

Fig 4.1: Median average time to issue NHS Permission

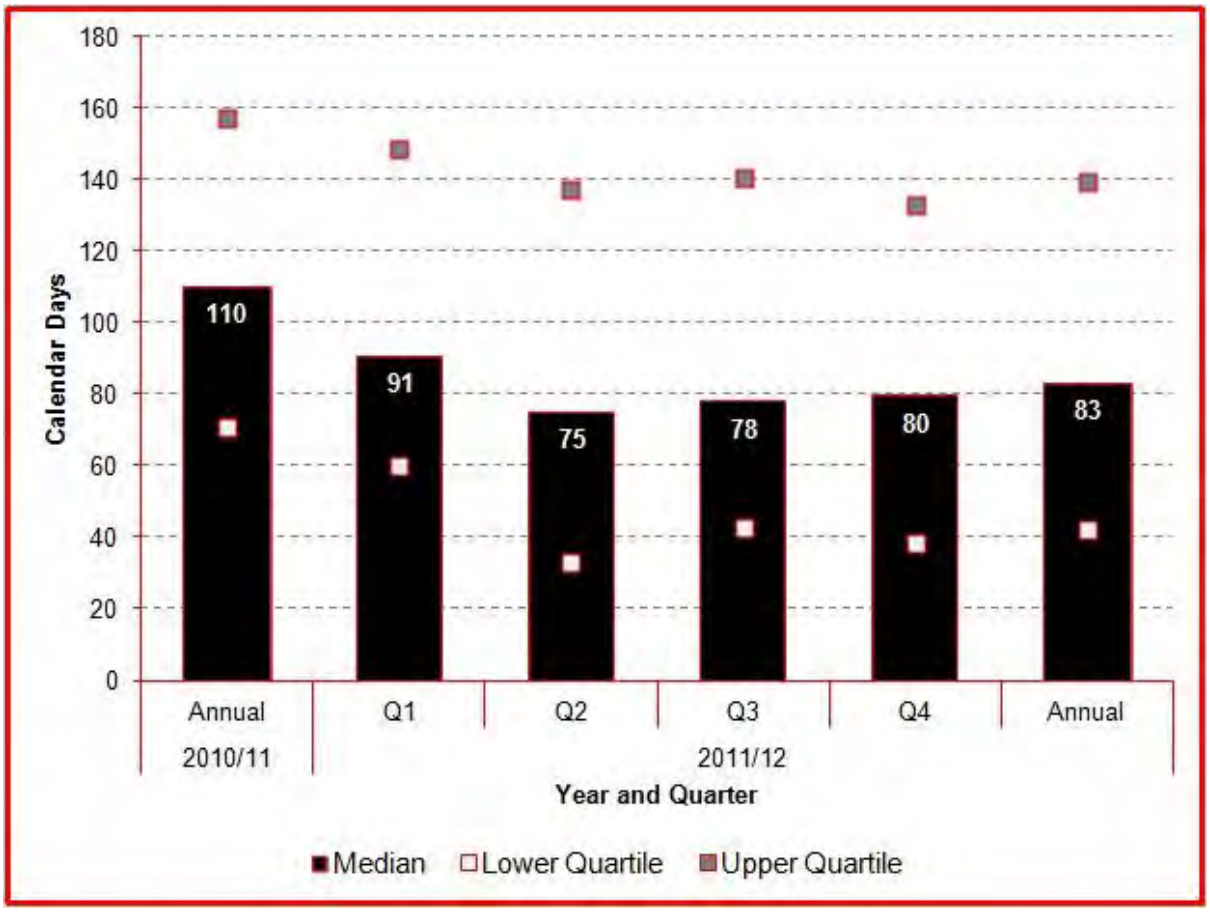


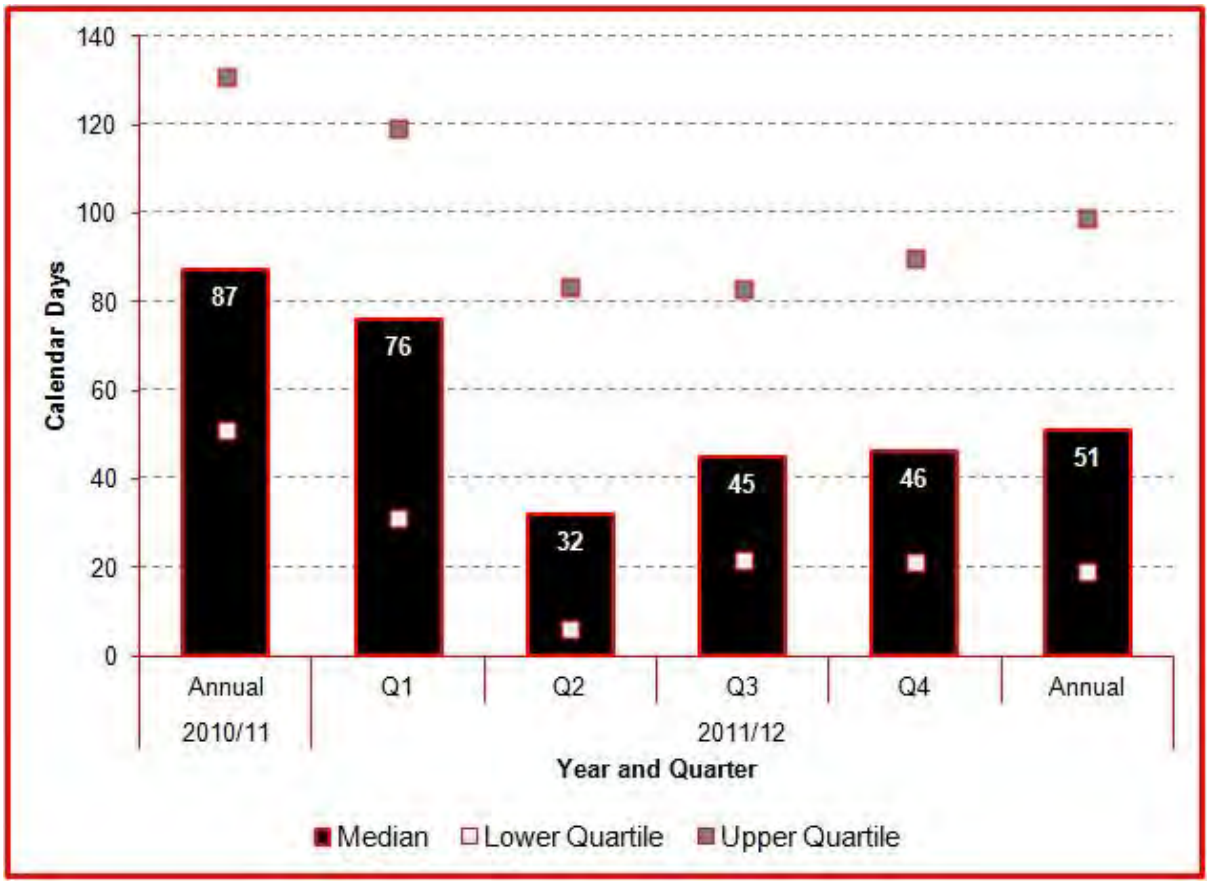
Figure 4.1 shows the median average time to issue NHS Permission through CSP for studies for 2010/11 and 2011/12 (and each quarter within 2011/12), ie the median time for the approvals process for those studies for which the final NHS Permission was issued in

that period. This shows an improvement in median time to NHS Permission from 110 days in 2010/11 to 83 days in 2011/12.

A downward trend is visible from 2010/11 to mid 2011/12, and then a levelling off of performance from Quarter 3 2011/12 onwards. As noted in the narrative for High Level Objective 4, this is attributed to technical problems in Quarters 3 and 4 with CSP Module IT system.

Throughout 2011/12, a wide range of activities have taken place to improve CSP processes and systems. A training programme using local trainers and e-learning has been rolled out to staff involved in delivering CSP, with further e-learning modules planned for release in 2012/13. The training focuses on achieving a consistent and clear understanding of the legislation relating to research, to enable consistent, proportionate and pragmatic decision-making during study-wide and local review. Performance management of local research networks is ensuring that issues are escalated and appropriate support and expertise are made available to deliver improvements to local systems, including implementation by NHS organisations of the NIHR Research Support Services Framework. Local networks have been encouraged to use service improvement approaches to review and revise local processes and communication. Alongside these actions directly addressing CSP, the NIHR CRN has begun to work closely with the Health Research Authority, which was established in December 2011, with initial work looking at further streamlining approval processes.

Fig 4.2: Median average time to complete study-wide review



Figures 4.2 and 4.3 show a breakdown of the two components of CSP NHS Permissions, the study-wide review and the local review.

Figure 4.2 shows the time to complete the study-wide review. This is the time from Research and Development (R&D) validation to study-wide review completed. Prior to April 2011, the

starting point was validation of the R&D form, whereas for studies starting after April 2011 the starting point is the validation of the R&D application package. The graph shows data by the period in which the study-wide checks were completed. The pattern of improvement is similar to that in figure 4.1. A significant drop in study-wide review times was noted from 2010/11 to Quarter 2 2011/12, with the median study-wide review time for Quarter 2 being close to the target time of 30 days. This reflects process improvement work carried out across the CRN to address lengthy study-wide review timelines.

Again, the data for the latter half of the year reflect functional difficulties following the implementation of the CSP Module. Despite this, the average study-wide review time for Quarter 4 is about half the time achieved on average in 2010/11, and overall there was significant improvement in 2011/12 compared to 2010/11.

Fig 4.3: Median average time to complete local review

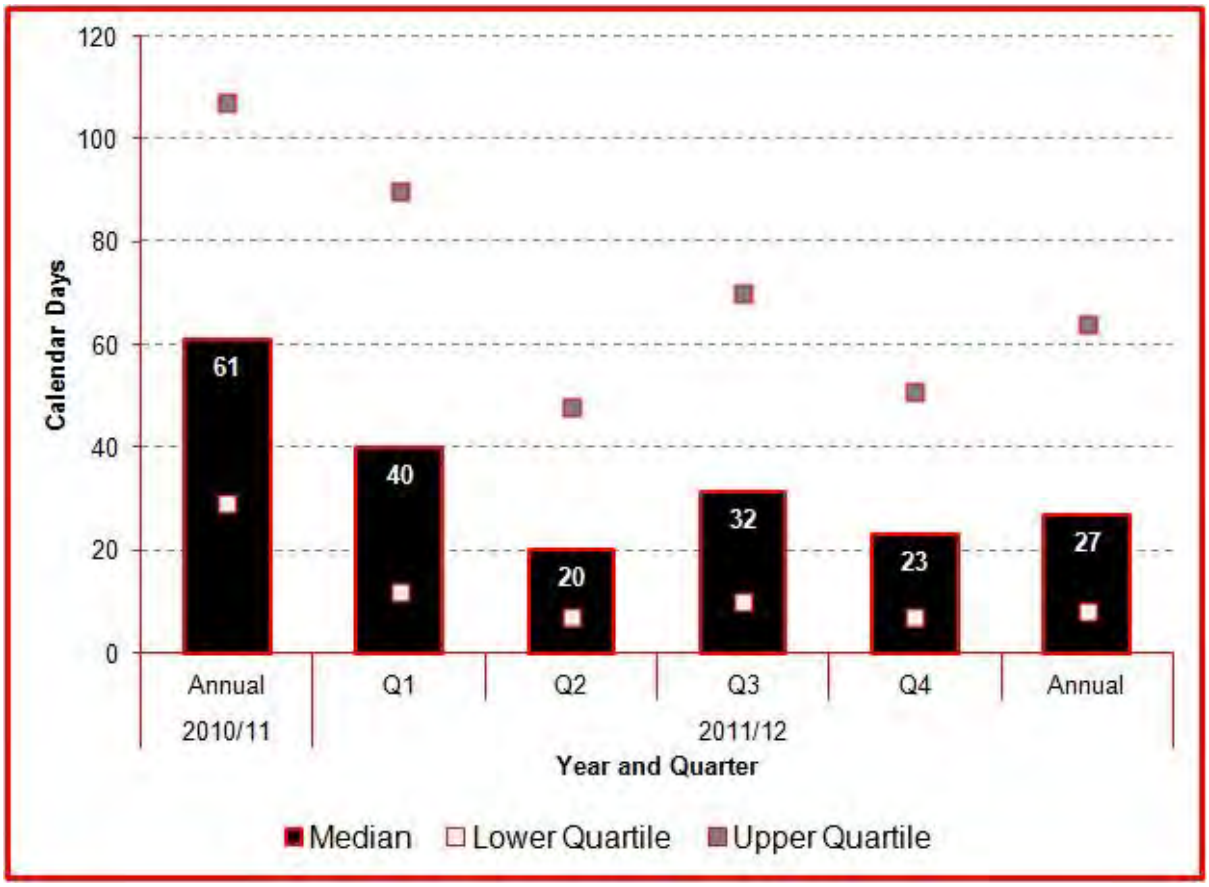


Figure 4.3 shows the time to complete the local review by the period in which the local reviews were completed. This is the time from validation of the Site Specific Information (SSI) form to issuing of NHS Permission for reviews started prior to April 2011, and from validation of the SSI application package for reviews started after April 2011. It should be noted that studies may be included more than once as each study will have a local review for each site.

These figures showed a significant downward trend up to Quarter 2 2011/12, which suggests that the work being undertaken across the CRN to address lengthy timelines for study set-up is having a significant impact. The median local review time for 2011/12 is below the target time of 30 days, and the time taken for this activity has more than halved from 2010/11.

Note that this improvement in the local review time would not be expected to be reflected in the overall permissions times within the same period, since studies are included in the

overall permission data only when permission has been issued at the last site in a multi-centre study.

Fig 4.4: Number of applications via CSP

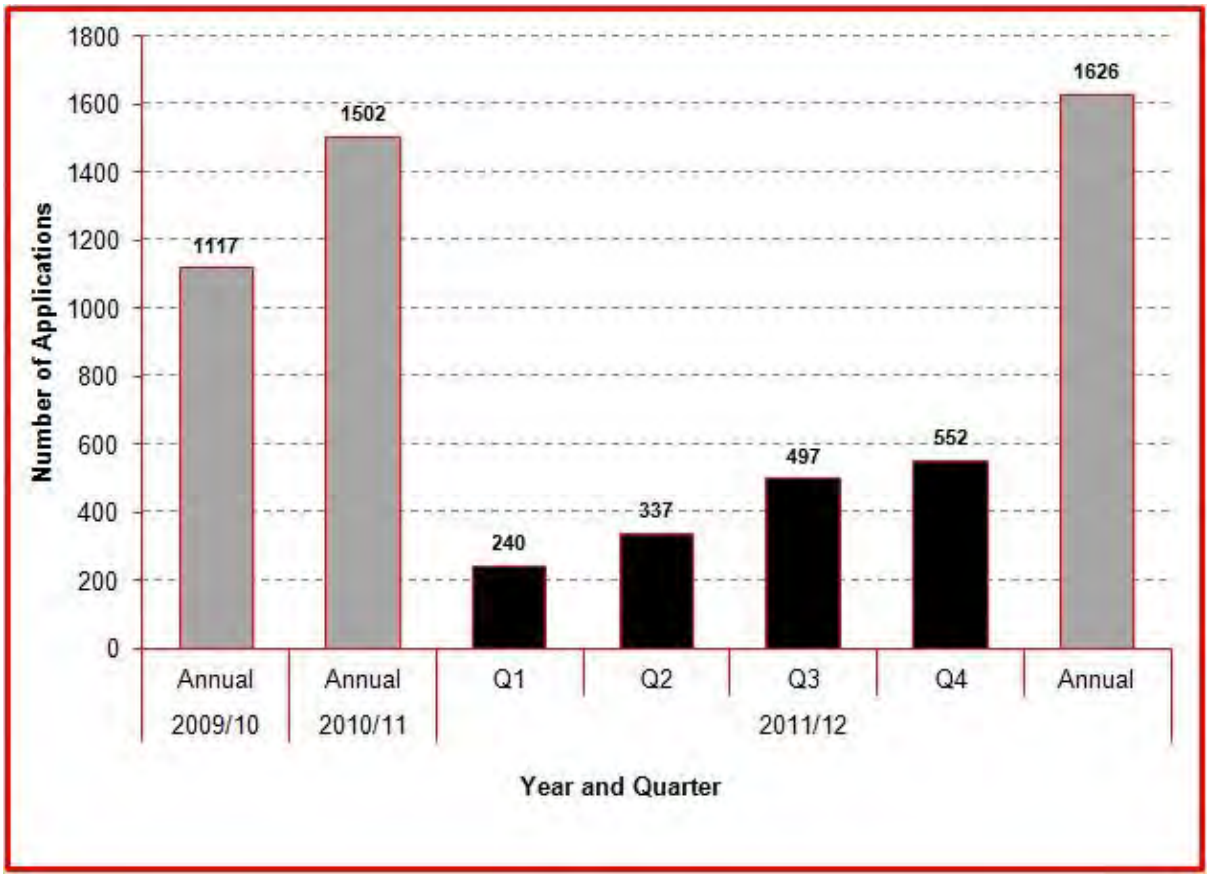


Figure 4.4 shows the number of studies accepted for processing through CSP over the past three years.

Some fluctuation is expected, particularly in response to funding rounds and seasonal variations in academic activity.

There is a particularly noticeable drop in applications in Quarters 1 and 2 2011/12, followed by a dramatic increase in applications through Quarters 3 and 4. This dip, followed by an increase, is reflected in the data relating to entry of studies onto the Portfolio shown in figures 3.1 and 3.2. A time lag between receipt of applications into CSP and entry onto the CRN Portfolio would be expected, as studies are assessed for eligibility and may undergo an adoption assessment and are then entered onto the Portfolio once the first site has issued permission. It should be noted that the numbers of applications through CSP would not be expected to match the numbers or pattern of studies entered on the Portfolio as CSP is also used for processing studies that are supported through NIHR infrastructure such as Biomedical Research Units.

5. LIFE-SCIENCES INDUSTRY STUDIES

The CRN Activity Report provides key activity data from the NIHR Clinical Research Network and provides information about the progress being made against the Clinical Research Network High Level Objectives described in Section 2. To complement the CRN Activity Report an additional "Industry Metrics" report is currently produced on a quarterly basis. The "Industry Metrics" report includes two main sections, one detailing study performance for all commercial contract studies closing in a particular quarter and one reviewing overall study characteristics, recruitment and Industry engagement. Studies included in this "Industry Metrics" report may not fulfil the criteria for inclusion in our High Level Objectives. For example, a study that opened to recruitment prior to April 2010 will not be included in our High Level Objectives. However, it would be included in the "Industry Metrics" report. Therefore when reviewed together the two reports reflect our past and present performance.

Table 5.1: Number of Industry studies by Network in 2011/12

Network	Number of adopted Industry studies by main Network	Number of adopted Industry studies by jointly supported Network	Number of adopted Industry studies by Network, including jointly supported studies	Number of medical device studies included in total
Cancer	78	0	78	0
Comprehensive	211	39	250	16
Dementias and Neurodegenerative Diseases	13	0	13	0
Diabetes	13	5	18	3
Medicines for Children	45	9	54	0
Mental Health	9	1	10	0
Primary Care	14	21	35	4
Stroke	5	0	5	1
TOTAL	**388**[2]	**75**		**24**

The NIHR Clinical Research Network Portfolio includes a collection of commercial contract studies that has been deemed eligible for Clinical Research Network support following a commercial adoption process. Table 5.1 describes the number and type of commercial contract studies supported by the eight Clinical Research Networks within 2011/12. The increasing number of jointly adopted studies in specific therapeutic areas highlights the mechanisms being put in place by Networks to support participant access to research across geographical and NHS boundaries. This is working especially well at the primary care and secondary care interface.

The number of studies attributed to each Network demonstrates a wide range in both the number of studies being "led" or "supported" by each one. The size of each Network's portfolio of studies is influenced by several factors, including therapeutic area, current focus for drug and product development and availability of suitable patient populations.

[2] This is the total number of unique studies

In total 1,229 studies have been assessed to date, of which 1,124 have been deemed eligible for NIHR CRN support. Just under 9% (n=105) of studies were found not to be eligible.

The number of medical device studies being supported by the NIHR CRN continues to steadily increase and represent a small yet important proportion of the overall number of commercial contract studies in 2011/12 (6%). Many medical technology companies are small in size and have limited experience of conducting clinical research. With recent regulatory changes placing a greater emphasis upon the need for clinical research to support product development and continued effort by the NIHR CRN to engage with this key stakeholder group, it is envisioned that this trend continues.

Fig 5.2: Recruitment into Industry studies for each operating year

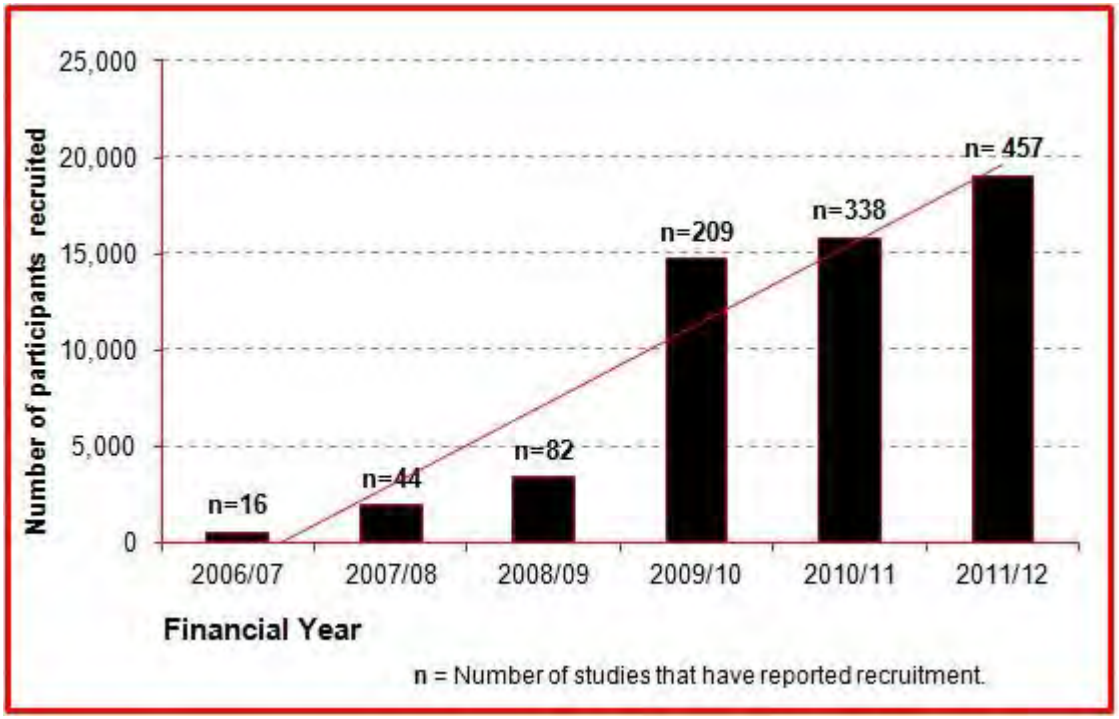


Figure 5.2 represents the total number of participants recruited to commercial contract studies in each financial year. The data represents a continued increase in the number of studies reporting recruitment (n = 457) in 2011/12 in comparison to 2010/11 (n=338) and increasing participant numbers continues in 2011/12 (19,058) which significantly exceeds the 2010/11 total of 15,827.

This further supports the increased engagement of the life-sciences industry with the NIHR CRN, demonstrating both an increasing number of studies being placed with the Networks annually and the associated increase in the number of participants. In addition this gives an indication of opportunities for participants to take part in commercial contract research in the NHS in England.

Fig 5.3: Number of adopted Industry studies over time

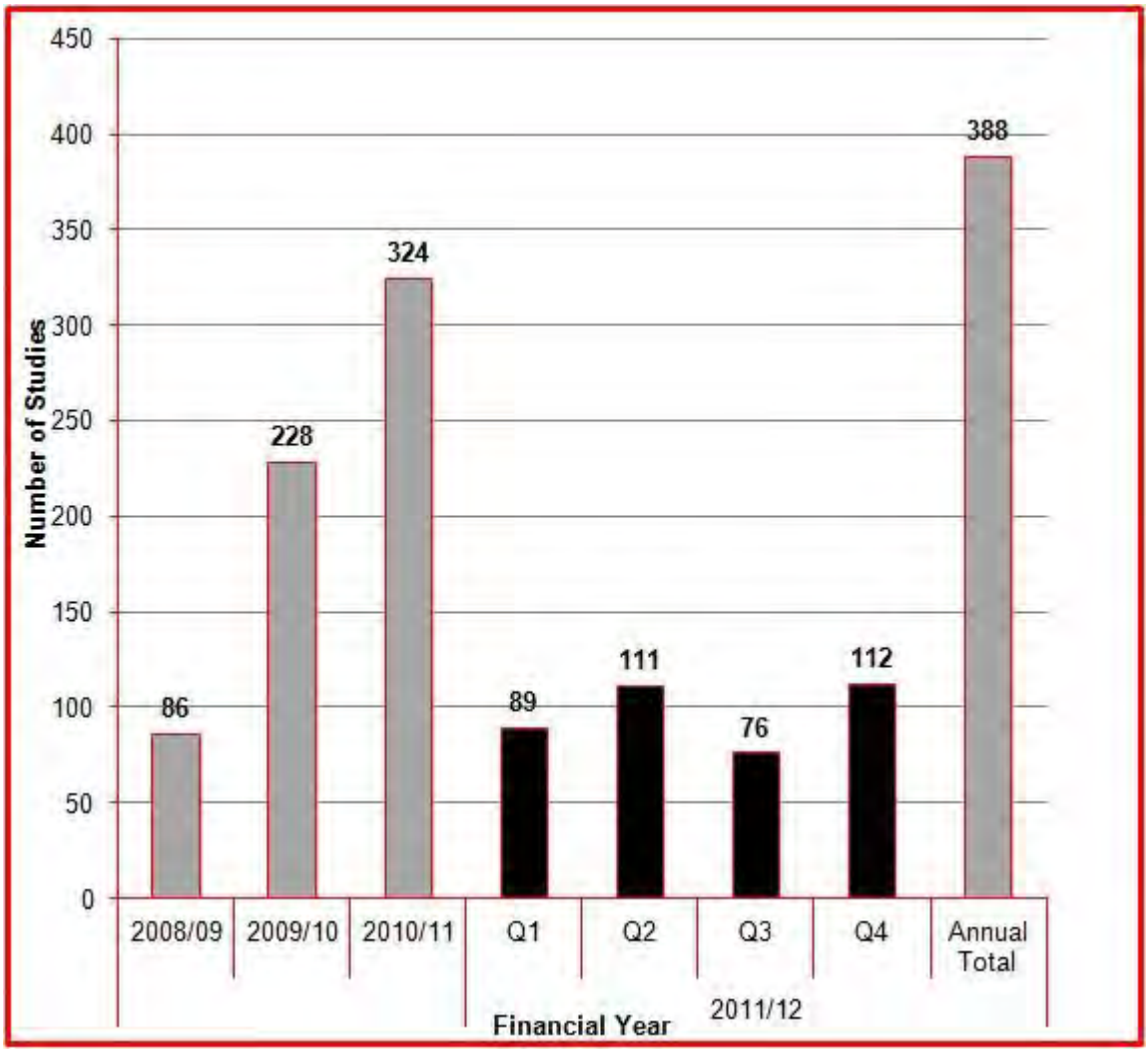


Figure 5.3 describes the number of commercial contract studies deemed eligible for NIHR CRN support ("adopted") each quarter and as an annual total since 2008.

In 2011/12 the trend of a steadily increasing commercial contract study deemed eligible for support continues. In total 388 studies were adopted in 2011/12 in comparison to 324 2010/11. This represents a significant increase since 2010/11. The NIHR CRN continues to grow the number of commercial contract studies it supports and this is also reflected in figure 2.7.

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