

Executive summary

The aim of the Strategy

1. The aim of the Strategy is to ensure that significant improvements are made to dementia services across three key areas: improved awareness, earlier diagnosis and intervention, and a higher quality of care. The Strategy identifies 17 key objectives which, when implemented, largely at a local level, should result in significant improvements in the quality of services provided to people with dementia and should promote a greater understanding of the causes and consequences of dementia. This Strategy should be a catalyst for a change in the way that people with dementia are viewed and cared for in England.

The issue

2. Recent reports and research have highlighted the shortcomings in the current provision of dementia services in the UK. Dementia presents a huge challenge to society, both now and increasingly in the future. There are currently 700,000 people in the UK with dementia, of whom approximately 570,000 live in England. Dementia costs the UK economy £17 billion a year and, in the next 30 years, the number of people with dementia in the UK will double to 1.4 million, with the costs trebling to over £50 billion a year.



3. While the numbers and the costs are daunting, the impact on those with the illness and on their families is also profound. Dementia results in a progressive decline in multiple areas of function, including memory, reasoning, communication skills and the skills needed to carry out daily activities. Alongside this decline, individuals may develop behavioural and psychological symptoms such as depression, psychosis, aggression and wandering, which complicate care and can occur at any stage of the illness. Family carers of people with dementia are often old and frail themselves, with high levels of depression and physical illness, and a diminished quality of life. Dementia is a terminal condition but people can live with it for 7–12 years after diagnosis.

The context

4. The size of the population affected by dementia and the pervasiveness of the condition mean that the development of policy and services for people with dementia and their families is also affected by the wider policy context. This currently includes initiatives, guidance and policy statements such as Our NHS, Our Future, *Putting People First: A shared vision and commitment to the transformation of adult social care*, the current public debate on the future of the care and support system, the National Institute for Health and Clinical Excellence (NICE) commissioning guide on memory assessment services, the Carers' Strategy (Carers at the heart of 21st century families and communities) and the National End of Life Care Strategy. Getting services right for people with dementia will make a positive contribution to all of these.



The consultation

5. Over 50 stakeholder events were held throughout the country as part of the consultation exercise, attended by over 4,000 individuals, and approximately 600 responses to the consultation document were received. The draft strategy was very well received by the public and professionals alike, and the recommendations it set out were seen as being the right ones if dementia services are to fully meet the needs of people with dementia and their carers. Areas where changes have been made are: provision for people with learning disabilities; the need for better peer support networks; improved end of life care; housing for people with dementia; and the particular needs of people with early-onset dementia (people under 65 years of age). In general, however, the draft strategy recommendations were acknowledged as the right ones and welcomed. A detailed response to the consultation has been published separately.

The Strategy objectives

6. The key objectives of the Strategy, addressed in more detail in the full document, are as follows:
 - **Objective 1: Improving public and professional awareness and understanding of dementia.** Public and professional awareness and understanding of dementia to be improved and the stigma associated with it addressed. This should inform individuals of the benefits of timely diagnosis and care, promote the prevention of dementia, and reduce social exclusion and discrimination. It should encourage behaviour change in terms of appropriate help-seeking and help provision.
 - **Objective 2: Good-quality early diagnosis and intervention for all.** All people with dementia to have access to a pathway of care that delivers: a rapid and competent specialist assessment; an accurate diagnosis, sensitively communicated to the person with dementia and their carers; and treatment, care and support provided as needed following diagnosis. The system needs to have the capacity to see all new cases of dementia in the area.
 - **Objective 3: Good-quality information for those with diagnosed dementia and their carers.** Providing people with dementia and their carers with good-quality information on the illness and on the services available, both at diagnosis and throughout the course of their care.
 - **Objective 4: Enabling easy access to care, support and advice following diagnosis.** A dementia adviser to facilitate easy access to appropriate care, support and advice for those diagnosed with dementia and their carers.

- **Objective 5: Development of structured peer support and learning networks.** The establishment and maintenance of such networks will provide direct local peer support for people with dementia and their carers. It will also enable people with dementia and their carers to take an active role in the development and prioritisation of local services.
- **Objective 6: Improved community personal support services.** Provision of an appropriate range of services to support people with dementia living at home and their carers. Access to flexible and reliable services, ranging from early intervention to specialist home care services, which are responsive to the personal needs and preferences of each individual and take account of their broader family circumstances. Accessible to people living alone or with carers, and people who pay for their care privately, through personal budgets or through local authority-arranged services.
- **Objective 7: Implementing the Carers' Strategy.** Family carers are the most important resource available for people with dementia. Active work is needed to ensure that the provisions of the Carers' Strategy are available for carers of people with dementia. Carers have a right to an assessment of their needs and can be supported through an agreed plan to support the important role they play in the care of the person with dementia. This will include good-quality, personalised breaks. Action should also be taken to strengthen support for children who are in caring roles, ensuring that their particular needs as children are protected.
- **Objective 8: Improved quality of care for people with dementia in general hospitals.** Identifying leadership for dementia in general hospitals, defining the care pathway for dementia there and the commissioning of specialist liaison older people's mental health teams to work in general hospitals.
- **Objective 9: Improved intermediate care for people with dementia.** Intermediate care which is accessible to people with dementia and which meets their needs.
- **Objective 10: Considering the potential for housing support, housing-related services and telecare to support people with dementia and their carers.** The needs of people with dementia and their carers should be included in the development of housing options, assistive technology and telecare. As evidence emerges, commissioners should consider the provision of options to prolong independent living and delay reliance on more intensive services.
- **Objective 11: Living well with dementia in care homes.** Improved quality of care for people with dementia in care homes by the development of explicit leadership for dementia within care homes, defining the care pathway there, the commissioning of specialist in-reach services from community mental health teams, and through inspection regimes.

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ITEM 7 AGREED PROPOSED SELECT COMMITTEE WORK ACTIVITY

Srl (a)	Subject (b)	Source (c)	Objective or focus (d)	Remarks (e)
01	Local Area Agreement Targets (LAA)	HSP work programme	To consider the 6-monthly monitoring of progress of Health and Wellbeing Local Area Agreement (LAA) targets.	Meets criteria of monitoring of LAA activity.
02	Council's eligibility criteria for Social Care	HCOP PDC work programme	To reconsider the Council's eligibility criteria in light of the national review of social care funding.	Must not duplicate HCOP review of eligibility but instead focus on the impact of eligibility criteria and the needs of those who fall outside the eligibility threshold or are 'self-funders' of social care. E.g. developing 'information for all' and 'universal services'.
03	Adults with Autistic Spectrum Disorder (ASD)	HCOP PDC work programme	Progress update due on the how the Council is meeting the needs of adults with ASD within West Berkshire.	Still issue of concern. Actions being led by the Locality Manager (Learning Disabilities Services).
04	System Transformation	HCOP PDC work programme	To receive a regular update from the Head of System Transformation on social care reform. The future changes will include greater working with the voluntary sector and the development of "universal services".	Crucial Programme of Social Care reform and meets several of the selection criteria. Members requested update at every meeting.

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Srl (a)	Subject (b)	Source (c)	Objective or focus (d)	Remarks (e)
05	Dementia and Alzheimer's Disease	HCOP PDC work programme	To consider the key action points from the National Dementia Care Strategy for their application in West Berkshire and to improve support for those with dementia by working jointly with the voluntary sector.	Very significant issue both locally and nationally, therefore meets selection criteria. Work needed on the preventative agenda and finding solutions, working conjunction with the voluntary and community sectors.
06	Implementation of the recommendations arising from the Laming Report, following the 'Baby P' inquiry	OSC PDC work programme	To ensure that the authority is complying with the recommendations of the Laming Report.	High profile public interest.
07	Maternity at West Berkshire Community Hospital (WBCH)	HSP work programme	To consider the viability of providing a midwife-led maternity service from the WBCH.	Local concern issue of pressure of the maternity service at the RBH acute hospital. Members wish to see consideration of options at Community Hospital, although PCT unlikely to develop midwifery led service at the WBCH.
08	Palliative Care/ End of Life Care Review	HSP work programme	To consider the NHS Berkshire West's review of palliative care services including the future of the Charles Clore Unit.	Ongoing area of public concern/Member concern. Review proposals first outlined in April '08 requires follow-up activity.

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Srl (a)	Subject (b)	Source (c)	Objective or focus (d)	Remarks (e)
09	Alcohol Misuse Services in West Berkshire	HSP work programme	To monitor the existing gaps in alcohol misuse service provision including an update on the tendering process for Tier 3 services in West Berkshire.	Significant activity – important that Members scrutinise service providers to address gaps in the current service provision.
10	Increasing Public and Patient Involvement in Health	HSP work programme	To hold a facilitated meeting with the new Local Involvement Network (LINK) Steering Group members to agree a protocol for working together.	Important item to ensure co-ordination with forums which focus on patient and public involvement. Need protocol to work together as effectively as possible and prevent duplication.
11	Patient Advice and Liaison Service (PALS)	HSP work programme	To receive patients' reports of the levels of service and complaints received as compiled by the NHS Berkshire West PALS service.	Suggestion received from Area Director of the PCT as way to access significant evidence on services and standards of care.
12	Aiming High for Disabled Children	CYP PDC work programme	Review of progress in implementing the strategy.	The strategy is in its very early stages. Possible review in a year's time.
13	Accessing mental health services by Black and Ethnic Minority (BME) Groups	HSP work programme	To review feedback from the Community Development Workers involved in ensuring BME groups have equal access to mental health services.	Issue affecting relatively small numbers of the population. PCT response and outreach work through Community Development Workers considered appropriate.

Briefing for Members of the Healthier Select Committee on 30 June 2009**In Vitro Fertilisation (IVF) policy proposals and determining if these are 'substantial variation' to services****1. Background**

- 1.1 Within the South Central SHA area there are currently two separate sets of policies regarding access to In Vitro Fertilisation (IVF) and assisted conception services. This is due to the former policies being in existence in the Thames Valley SHA and Hampshire and Isle of White SHA before the two organisations merged.
- 1.2 Clearly there is a need to ensure some uniformity and ensure that all individuals in the South Central area are treated equitably.
- 1.3 A discussion document was prepared by the South Central Specialised Commissioning Group (SCG) to consult on the preferred options during a period of public engagement.
- 1.4 This took place between January – April 2009 and the former West Berkshire Health Scrutiny Panel was asked for their comment. The Panel's response can be found at Appendix A.

2. Next Steps

- 2.1 Following the feedback the SCG has since advised of their preferred options to implement a single policy on IVF (see Appendix B).
- 2.2 They have however, requested that each Health Overview and Scrutiny Committee (now the Healthier Select Committee in West Berkshire) comment on whether Members believe the change represents a 'substantial variation' to service and whether a further 3-month consultation period must take place.
- 2.3 We have recently been written to by the SCG Director has asked if Members will confirm if:
 - (a) The Healthier Select Committee is willing to support the SCG's preferred recommendations?**
 - (b) Members consider the IVF policy changes represent 'substantial variation' to services?**
- 2.4 In order to assist the Members in this decision, described at Appendix C are the policies that currently exist for West Berkshire residents and the proposed changes. Members will be asked to decide whether these changes are considered 'substantial variation' in relation to the Health Scrutiny legislation.

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- 2.5 An extract from the “Overview & Scrutiny of Health Guidance” (2003) which accompanies the regulations is reproduced at Appendix D. The most relevant parts are summarised below.
- 2.6 Substantial variation is not defined within the Health Scrutiny regulations; instead it needs to be agreed between the local NHS and their Health OSC.
- 2.7 In determining if a change is ‘substantial’ the impact of the change upon patients, carers and the public who use or have the potential to use a service needs to be considered.
- 2.8 Specifically what should be taken into account is:
 - (a) **Changes in the accessibility of services** e.g. reductions or increases on a particular site, changes to opening times, local accessibility, etc.
 - (b) **Impact of the proposal on the wider community** – e.g. economic impact, transport, regeneration.
 - (c) **Patients affected** – whether changes affect the whole population or a small group i.e. those accessing a specialised service. If a change affects a small group it may still be regarded as substantial, particularly if patients need to continue accessing that service for many years (e.g. renal services).
 - (d) **Methods of service delivery** – moving a service to a different setting e.g. from hospital to a community setting.

3. Conclusions

- 3.1 Members are asked to consider the evidence attached to this report and in particular the work done and views of the original Health Scrutiny Panel which met on 20th April 2009.
- 3.2 The summary of the change to policy at Appendix C should help Members determine how substantial a change is being proposed.
- 3.3 Members are asked to use the guidance at Appendix D (and summarised in Section 2.8 above) to determine if they feel the change to be a ‘substantial variation’ to service provision.
- 3.4 The SCG has advised that the authorities of Buckinghamshire, Hampshire and Oxfordshire do not consider the changes to be substantial variation to services.

4. Recommendations

- 4.1 Members are recommended to make a decision as to whether they consider the proposed IVF policy to be a 'substantial variation' to services and whether they wish to support the latest Specialised Commissioning Group proposal following the public feedback.

22 April 2009

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Dear Sheila,

Access to IVF Services

Our Health Scrutiny Panel debated the issue of access to IVF services on Monday night.

In relation to the questions posed in the discussion document our Members answered each in turn, please see the Panel's responses below:

- Q1. Within finite resources is 30-34 the most appropriate age range to focus on?**
No, Members disagreed and felt that the most appropriate age range was from 30 – 39 years. This was made after consideration of the fact that many couples choose to wait until later in life to begin a family. It was also felt that widening of the suggested eligible age range was appropriate in light of the NICE best practice guidance.
- Q2. Within finite resources is it appropriate for couples to have had three years infertility before they qualify for funding?**
Yes, Members felt that 3 years was appropriate but that in the case of evidence of a proven medical cause of infertility this should be treated differently and these individuals should receive *immediate treatment*.
- Q3. Is it appropriate that the NHS funds the storage of frozen embryos for up to three years or the woman's 40th birthday (whichever is sooner?)**
Yes, Members of the Panel agreed with this statement for up to three years storage of frozen embryos or at the woman's 40th birthday, depending on which is sooner.
- Q4. Within finite resources should the NHS fund treatment for those who have previously self funded up to two cycles?**
Yes, Panel Members felt everyone should be entitled to one-cycle of NHS funded treatment.
- Q5. Should the NHS fund IVF using donated eggs?**
Yes, Panel Members agreed with the process of using donated eggs even at the extra additional cost of £5,000 per cycle. However, they also raised the point that the discussion document did not provide evidence of the clinical effectiveness of using donated eggs to help support this decision.

- Q6. Should the NHS only fund fresh cycles of IVF?**
Yes, it was felt that fresh cycles should be the preferred option due to their increased chances of producing a live birth.
- Q7. Within finite resources and given the limited effectiveness of IUI is it appropriate for it not to be funded?**
Yes, Members agreed not to fund IUI due to its lack of clinical effectiveness.
- Q8. Given the lack of clinical evidence is it appropriate not to fund sperm washing?**
Yes, Members agreed not to fund sperm washing as part of the policy due to the lack of clinical effectiveness.
- Q9. Is it appropriate for surgical sperm retrieval not to be funded given the lack of clinical evidence?**
Yes, Members agreed not to fund surgical sperm retrieval due to lack of clinical evidence.

Many thanks for accommodating our scheduled Panel meeting dates and for accepting our comments after the official consultation closing date.

Yours sincerely,

Joanne Naylor
Principal Policy Officer (Health and Wellbeing)

South Central SCG**Access to Assisted Conception Services in South Central
Outcome of the Public Engagement Period****1. Introduction**

On 29th January 2009 a period of public engagement on the access criteria to assisted conception services was launched by the Specialised Services Commissioning Group (SCG) on behalf of the PCTs in South Central. The purpose being to agree a single set of criteria to access assisted conception services across South Central.

The engagement period ran until 17th April. The purpose of this paper is to review the comments received during the engagement period and agree the next steps

2. Background and Process to date

The original proposals were drawn together by the South Central Priorities Setting Unit and presented to the four Priority Committees in South Central. The proposals aimed to:

- maximise clinical and cost effectiveness
- promote alignment with national policy and guidance
- maintain affordability
- ensure equitable access across South Central

They took account of the evidence and also of concerns with the current policy that had been expressed by clinicians and members of the public.

The four Priorities Committees were agreed on all issues except for the appropriate age range for treatment. After consideration the SCG agreed it would seek public views on a preferred age range of 30-34.

3. Outcome of Engagement Period

The engagement period sought views in a number of ways. The document was widely circulated to local authorities, Health Overview and Scrutiny Committees (HOSCs), Local Involvement Networks (LINKs), local hospital providers, local PCT engagement groups and MPs.

An online survey was available for people to complete together with an email response address and a freepost service for comments. The discussion document was highlighted on two national infertility web sites (Fertility Friends and Infertility UK) with links to an online survey to be completed. The PCTs were asked to ensure the document was discussed at their local public engagement fora and it was presented to the HOSC network

3.1 Online survey - Appendix 1a and 1b gives the outcome of the online survey. The survey could be completed either on-line, by submitting comments in paper form or by emailing comments which were then added to the survey.

Many freepost letters and email responses making comments were also received and these have been entered into the on line survey to give a fuller picture of the comments received. Responses were also received from MPs.

The purpose of the survey was to give the opportunity for local people to comment on the proposed changes. It was not intended to be, nor is it, statistically representative of the local population.

The survey consisted of 10 questions on the proposals to which 509 people responded. The eleventh question concerned area of residence and showed that all but 44 of the responders were local residents.

Most people responded to the survey question on whether they agreed or disagreed with the proposal or did not know. There was also the opportunity to make comments on the proposals and depending on the question between 15% and 55% of respondents also made comments.

In addition, as part of their local engagement Buckinghamshire PCT received 20 completed surveys which are collated separately and attached as appendix 1c and Berkshire West discussed questions 1 to 3 with their health network and a report is attached at appendix 1d

3.2 PCT engagement – appendix 2 gives a summary of the engagement that each of the PCTs has undertaken with their local residents

3.3 Health and Overview Committee (HOSC) responses – The proposals was presented to the HOSC network in November 2008 and the network was update at its meeting in March 2009. The HOSCs responses are included at Appendix 3.

3.4 LINKs responses - All the LINKs were telephoned and advised that the discussion document would be sent to them. It is thought that most have circulated it locally and asked people to respond to the online survey.

3.5 Infertility UK has submitted a response attached in full as appendix 4a and 4b.

3.6 Providers of service – appendix 5a from Oxford Fertility Centre, appendices 5b and 5c from Salisbury NHS Trust are the responses from the current providers of service and appendix 5d from Wessex Fertility.

3.7 IUI – 11 copies of a ‘round robin’ letter on IUI services was received and is attached as appendix 6a together with a response from the Priorities Setting Unit at appendix 6b.

3.8 A petition was submitted to Oxfordshire PCT – ‘We, the undersigned, call on Oxfordshire Primary Care Trust to end the postcode lottery for Oxfordshire residents when it comes to IVF funding and ensure that current guidelines for IVF funding are adhered to by Oxfordshire PCT’. As at 17th April when the consultation period closed the petition was on-line and signed by 216 people of whom 61 were from Oxfordshire, 16 from elsewhere in South Central with the others signatories being from the UK and worldwide. By 1st May 348 people worldwide had signed the petition and 22 emails had been received saying:

‘I wish to express my disappointment in Oxfordshire Primary Care Trust's current policies in not following the complete set of guidelines set out by the National Institute for Clinical Excellence in regard to IVF treatment offered to Oxfordshire Residents.

It is my belief that your current policies regarding access to treatment make a mockery of current guidelines from NICE.

I call on you now to please change Oxfordshire PCT's policies with regards to funding IVF to bring them inline with NICE guidelines immediately. And will also call on my MP and the Government to make this mandatory not just for Oxfordshire PCT, but for all PCT's in the United Kingdom.

Your organisation's discriminative policies are utterly unfair'.

3.9 The original Priority Committee document is attached as appendix 7.

3.10 The discussion document and survey are attached as appendix 8.

4 Key issues

4.1 Q1 - Within finite resources is 30-34 years the most appropriate age range to focus on?

Of the survey responders 51.5% supported the proposal with 41.1% being against. Interestingly whether people did or did not support the proposals the comments made expressed similar concerns which were also shared by the other respondents.

Some respondents expressed the view that the NICE criteria should be adopted whilst others supported varying options that fell within the NICE age ranges.

Specific concern was expressed that whilst focussing on the 30-34 would be more effective it would make it difficult for some couples to access IVF services as couples were marrying later and putting off having a family until later in life. This combined with a 3 year infertility period before becoming eligible for IVF services would make it very difficult for some people to access the service.

Options would be:

- to move to the 30-39 age range (extra cost estimated to be about £1.5m) and/or
- allow those with diagnosed cause of infertility to access the service without waiting 3 years.

The estimated cost of the proposed policy for women age 30-34 yrs inclusive is £1.352m (plus a one year transition cost of £350k). The Priority Setting Unit estimate this would fund 448 cycles of care and produce 109 live births.

The estimated cost for women age 30 -39 would be £2.86m. The Priority Setting Unit estimate this would fund 754 cycles of care and produce 133 live births.

Full implementation of the NICE guidance would cost an estimated £16.128m.

Current funding is approximately £1.395m for 433 women which (using the same modelling criteria) is likely to be producing an estimated 80 live births.

Agreed

The SCG agreed that based on the evidence that IVF is most effective in women less than age 35 years, to reduce the upper and lower age limits for IVF to ages 30-34 years in one step with transitional arrangements for couples potentially disadvantaged by the change in policy.

4.2 Q2 - Within finite resources is it appropriate for couples to have three years infertility before they qualify for funding?

The survey showed 43.8% supporting this proposal with 47.2% against.

Key issues here were whether this criterion together with the proposed changes in eligible age range would reduce the number of people able to access IVF services since a proportion of couples would be outside the eligible age range to access the service by the time they had been infertile for three years.

A number of responders also argued that access to service should be available immediately on diagnosis of a cause of the infertility. The concern was that where there is a clear diagnosis that indicates natural conception would be extremely unlikely, the basis for a further delay of three years during which the chances of successful pregnancy would diminish as a result of increasing age was unacceptable.

The requirement for 3 years of unexplained infertility is in line with the NICE clinical guideline ('Couples in which the woman is aged 23–39 years at the time of treatment and who have an identified cause for their fertility problems (such as azoospermia or bilateral tubal occlusion) or who have infertility of at least 3 years' duration should be offered up to three stimulated cycles of in vitro fertilisation treatment.....

Where there is a known reason for infertility (such as prior treatment for cancer), early specialist referral should be offered')

Agreed

The SCG agreed a revised proposal that couples should have three years infertility before they qualify for access to IVF funding unless they had an identified cause of infertility when immediate access to assisted conception treatment should be offered if they meet the other eligibility criteria.

4.3 Q3 - Is it appropriate that the NHS funds the storage of frozen embryos for up to three years of the woman's 40th Birthday (whichever is sooner)?

There was strong support for this with 67% of survey responders in favour of the proposal and 14.3% against.

The majority of comments in favour were statements of general support whilst those against expressed the view that three years was too long or that it was reasonable for a couple to self fund frozen embryo storage.

Agreed

The SCG agreed that the PCTs will commission the storage of frozen embryos for up to three years or until the woman's 40th birthday (whichever is sooner).

4.4 Q4 - Within finite resources should the NHS fund treatment for those who have previously self funded up to two cycles

This proposal met with general support from responders with 81.3% in favour and 10.4% against.

Responders highlighted concern that it was wrong to penalise those who had self funded. Some of those against commented that the NHS should always fund one cycle regardless of how many cycles had been self funded.

Agreed

The SCG agreed that the PCTs will commission one fresh cycle of IVF for all eligible couples, provided they have not undergone previous NHS-funded IVF and have had no more than two previous cycles in total and, if they have had previous IVF, the last cycle yielded at least three embryos.

4.5 Q5 - In the light of the clinical evidence do you agree that we should fund sperm storage but not egg storage?

Of the survey respondents 19.3% supported this with 39.1% against.

Concerns focussed on this being inequitable between men and women with a strong view that women facing medical treatments particularly cancer that would lead to infertility should have egg storage as an option.

Taking account of the comments the SCG agreed that the policy in this area be revised to reflect the need to adjust the policy should the evidence change in the future.

Agreed

The SCG agreed that PCTs will fund sperm storage for post-pubertal males under the age of 55 years who are about to undergo treatment which is likely to result in long term sub fertility. Subsequent assisted conception procedures will not be funded using the sperm unless the man and his partner meet the other criteria

Egg storage is a low priority and should not be funded at the present time. However the evidence should be kept under review with the intention of developing a policy to fund this in the future for those facing treatment likely to cause infertility, should it be supported by the evidence research.

4.6 Q6 - Should the NHS fund IVF using donated eggs?

Of the survey respondents 69% supported this proposal and 13.6% were against

The majority of respondents submitted general comments in support. Those against either felt the couple should self fund or it was wrong to use genetic material from another.

Agreed

The SCG agreed that the PCTs will commission IVF using donated eggs from UK clinics licensed by the Human Fertilisation and Embryology Authority (HFEA).

4.7 Q7 - Should the NHS fund only fresh cycles of IVF?

Of the survey respondent 23.3% supported this and 53% were against.

There were a number of general comments disagreeing with this expressing the view that everyone should be helped and at least some frozen cycles should be funded with varying suggestions on the appropriate number.

Comments reflected that fresh cycles had a better chance of success but that frozen cycles are cheaper. There was support for couples being at least able to self fund any frozen embryos taken during a fresh cycle and a view that couples should be offered some NHS frozen embryos cycles.

There was also concern that not funding frozen embryos would make the introduction of the preferred policy of single embryo transfer more difficult and that implementation of this policy as a priority to improve the health of women and babies as well as having financial benefits with a reduction in neonatal costs. On this basis providing one full cycle of treatment was seen as important as the most equitable approach and also the one most likely to reduce the morbidity associated with twins.

(Cost of one follow up frozen cycle would be about £900 per cycle).

Agreed

The SCG agreed that the PCTs will commission one fresh cycle of IVF for all eligible couples.

4.8 Q8 - Within finite resources and given the limited effectiveness of IUI is it appropriate for it not to be funded?

The survey showed 31.6% supporting the proposals and 37.5% against whilst the remaining 30.9% either said did not know or did not specify their view. The comments reflected this wide variety of views.

A standard letter was circulated from a local clinician in Portsmouth. Copies of the letter were received from various parts of the country. Appendix 6a gives details of this. The Priorities Setting Unit was asked to do more work in this area and their response is included at appendix 6b.

Taking account of the comments the SCG agreed that the policy in this area be revised to reflect the need to review the evidence again with the intention of amending the policy to include funding IUI from 2010-11 depending on the outcome of the evidence review.

Agreed

The SCG agreed that the current policy of excluding IUI is followed until April 2010, with a review of the technique's clinical and cost effectiveness to be completed in time to inform a decision in the 2010-11 as to whether to amend the policy.

4.9 Q9 - Given the lack of clinical evidence is it appropriate not to fund sperm washing?

The majority of survey respondents 43.6% answered don't know to this question with those for and against being evenly balanced at about 27% each.

Comments from the survey respondents indicated that the majority were unsure on this with the majority feeling that further evidence was needed and this should be kept under review. Comments from the provider units and Infertility UK suggested either it should not be funded or should be on an exception basis.

Agreed

The SCG agreed that given the lack of clinical evidence sperm washing is a low priority and will not generally be funded but should be kept under review.

4.10 Q10 - Is it appropriate for surgical sperm retrieval not to be funded given the lack of clinical evidence?

The survey respondents gave mixed views. 37.5% felt sperm retrieval should be funded, 36.5% don't know and 24.6% agreed sperm retrieval should not be funded. Those who felt it should be funded either had experience of it being successful or felt more research was needed and it should be funded for research purposes.

The views about the success of surgical sperm retrieval are in common with many local clinicians who see the technique as effective in properly selected cases.

Comments from the provider units and Infertility UK suggested surgical sperm retrieval is effective and should be funded.

The Priorities Setting Unit has been asked to undertake further work on this. They advise that there is clear evidence that surgical sperm extraction often yields adequate quantities of apparently viable sperm; the issue is whether this leads to clinical pregnancies and live births. Local audit data indicate that it does, in which case there is no basis for excluding this treatment from commissioning.

This service is already included within the services commissioned so should have minimal cost impact.

Taking account of the comments received the SCG agreed the policy in this area be revised.

Agreed

The SCG agreed that surgical sperm retrieval will be commissioned by the PCTs in appropriately selected patients, provided that the azoospermia is not the result of a sterilisation procedure or the absence of sperm production.

5. Conclusion

Having reviewed the comments made during the period of public engagement the SCG agreed the recommendations below as the basis for developing a revised policy for access to assisted conception services across all South Central PCTs.

1. Based on the evidence that IVF is most effective in women less than age 35 years, to reduce the upper and lower age limits for IVF to ages 30-34 years in one step with transitional arrangements for couples potentially disadvantaged by the change in policy.
2. That couples should have three years infertility before they qualify for access to IVF funding unless they had an identified cause of infertility when immediate access to immediate assisted conception treatment should be offered if they meet the other eligibility criteria.
3. The PCTs will commission the storage of frozen embryos for up to three years or until the woman's 40th birthday (whichever is sooner).
4. The PCTs will commission one fresh cycle of IVF for all eligible couples, provided they have not undergone previous NHS-funded IVF and have had no more than two previous cycles in total and, if they have had previous IVF, the last cycle yielded at least three embryos.
5. PCTs will fund sperm storage for post-pubertal males under the age of 55 years who are about to undergo treatment which is likely to result in long term sub fertility. Subsequent assisted conception procedures will not be funded using the sperm unless the man and his partner meet the other criteria

Egg storage is a low priority and should not be funded at the present time. However the evidence should be kept under review with the intention of developing a policy to fund this in the future for those facing treatment likely to cause infertility, should it be supported by the research evidence.

6. The PCTs will commission IVF using donated eggs from UK clinics licensed by the HFEA
7. The PCTs will commission one fresh cycle of IVF for all eligible couples.
8. That the current policy of excluding IUI is followed until April 2010, with a review of the technique's clinical and cost effectiveness to be completed in time to inform a decision in the 2010-11 as to whether to amend the policy.
9. Given the lack of clinical evidence sperm washing is a low priority and will not generally be funded but should be kept under review.
10. Surgical sperm retrieval will be commissioned by the PCTs in appropriately selected patients, provided that the azoospermia is not the result of a sterilisation procedure or the absence of sperm production.

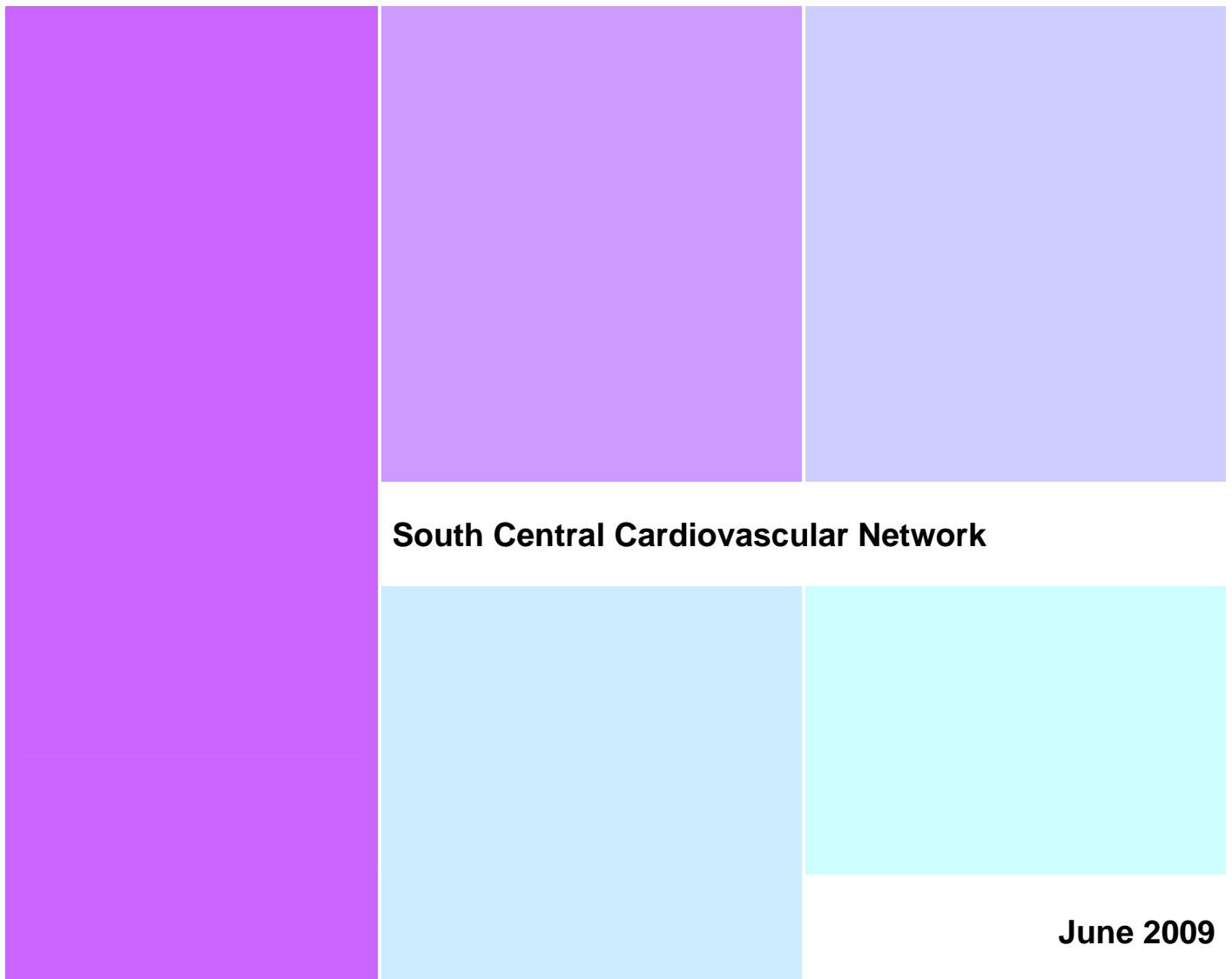
**Existing Policy in Berkshire and Proposed Changes to Access to IVF Services
June 2009 (Appendix C)**

Issue	Existing Policy	Proposed changes	Officer Comments
Age of woman at time of cycle start	<p>The time of the cycle of IVF or ICSI or IUI (including DI) starting for the first time is recommended to be progressively lowered in order to achieve the greatest likelihood of success.</p> <p>2007/8: 36yrs to 39 yrs inclusive (same as previous years)</p> <p>2008/9: 35yrs to 38yrs inclusive</p> <p>2009/10: 34yrs to 37yrs inclusive</p> <p>2010/11: 33yrs to 36yrs inclusive</p> <p>April 2011 onwards: 32yrs-35yrs inclusive</p>	<p>Based on the evidence that IVF is most effective in women less than age 35 years, to reduce the upper and lower age limits for IVF to ages 30-34 years in one step with transitional arrangements for couples potentially disadvantaged by the change in policy.</p>	<p>Changed/age limit reduced from current 2009/10 age band.</p>
Wait for treatment/specific Diagnosed causes of infertility	<p>Couples with a diagnosed cause of infertility required to have infertility of only 1 as opposed to 3 years duration.</p>	<p>That couples should have three years infertility before they qualify for access to IVF funding unless they had an identified cause of infertility when immediate access to immediate assisted conception treatment should be offered if they meet the other eligibility criteria.</p>	<p>Similar but improved access - those with diagnosed cause of infertility get immediate access to services.</p>
Storage of embryos	<p>Viable embryos from NHS funded IVF may be frozen and stored for up to 1 year or the female partner's 40th birthday (whichever is sooner) so that they may be transferred to the woman at a later stage.</p>	<p>The PCTs will commission the storage of frozen embryos for up to three years or until the woman's 40th birthday (whichever is sooner).</p>	<p>Changed – improved in that frozen embryos can be stored up to 3 years, instead of just 1, or until the woman's 40th birthday.</p>
Previous fertility treatment	<p>Any previous NHS or privately funded IVF/ICSI treatment will be an exclusion criterion.</p>	<p>The PCTs will commission one fresh cycle of IVF for all eligible couples, provided they have not undergone</p>	<p>Same - private funded treatment excludes couples from accessing NHS funded</p>

Issue	Existing Policy	Proposed changes	Officer Comments
		previous NHS-funded IVF and have had no more than two previous cycles in total and, if they have had previous IVF, the last cycle yielded at least three embryos.	IVF.
Sperm storage	No formal policy on sperm storage	PCTs will fund sperm storage for post-pubertal males under the age of 55 years who are about to undergo treatment which is likely to result in long term sub fertility. Subsequent assisted conception procedures will not be funded using the sperm unless the man and his partner meet the other criteria.	Change in that a creation of new policy and improved situation on sperm storage.
Egg storage	No formal policy on oocyte and ovarian tissue preservation.	Egg storage is a low priority and should not be funded at the present time. However the evidence should be kept under review with the intention of developing a policy to fund this in the future for those facing treatment likely to cause infertility, should it be supported by the research evidence.	Change in that a policy now exists – however considered low priority and therefore not funded.
Egg donation	No formal policy	The PCTs will commission IVF using donated eggs from UK clinics licensed by the HFEA	Change in that a policy now exists – improved situation in that donated eggs are now able to be used in NHS-funded IVF.

Issue	Existing Policy	Proposed changes	Officer Comments
Intra-uterine insemination (IUI)	Unstimulated IUI funded for patients who meet the Thames Valley eligibility criteria for IVF.	That the current policy of excluding IUI is followed until April 2010, with a review of the technique's clinical and cost effectiveness to be completed in time to inform a decision in the 2010-11 as to whether to amend the policy.	Policy change – IUI will not be funded.
Sperm washing	No formal policy	Given the lack of clinical evidence sperm washing is a low priority and will not generally be funded but should be kept under review.	Policy created but sperm washing will not be funded.
Surgical sperm retrieval	No formal policy	Surgical sperm retrieval will be commissioned by the PCTs in appropriately selected patients, provided that the azoospermia is not the result of a sterilisation procedure or the absence of sperm production.	Policy created and improved situation in that surgical sperm retrieval will be funded if eligibility criteria met.

Primary Percutaneous Coronary Intervention



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Item 9

1.0 Introduction

Coronary angioplasty is a technique used to reopen an artery supplying heart muscle which has occluded causing a heart attack. A small balloon at the tip of a catheter tube is inserted via an artery in the groin or arm and guided to the blocked heart artery. It is briefly inflated and then removed, leaving in place a 'stent' - a rigid support which holds the artery widely open, allows blood to flow more easily. Primary angioplasty (or PPCI) is the use of this technique as the initial treatment of patients suffering more severe forms of heart attack (STEMI).

The key to improving outcomes after heart attack is to re-establish coronary artery flow as quickly as possible and limit damage to the heart muscle.

There have been numerous studies addressing the relative benefits of primary angioplasty as against thrombolysis in the treatment of heart attack. Evidence for the longer-term benefits of primary angioplasty has been steadily growing and the main conclusions are:

- Primary angioplasty reduces mortality, and improves longer-term outcome compared to thrombolysis when both treatments can be undertaken within a similar time frame¹.
- The advantage of primary angioplasty over thrombolysis decreases with increasing delay in undertaking the procedure. Whilst much debate still surrounds this issue it is thought that the benefit of primary angioplasty may be lost, or considerably reduced, if it takes more than 90 minutes longer to undertake the procedure than it would to administer thrombolysis
- More patients are potentially suitable for primary angioplasty than thrombolysis, and primary angioplasty is associated with fewer strokes and recurrent heart attacks during the hospital admission².

The National Infarct Angioplasty project (NIAP³) report suggests PPCI improves patient outcomes provided the balloon is inflated within **120** minutes of call for help and at a cost which is considerably lower than the benefits delivered. (Cost per QALY £4,500)

The South Central Darzi Acute Care clinical pathway group review referred to the NIAP work as an example of the benefits which could be achieved for patients by organising services on the basis of more specialised centres of excellence.

Professor Boyle (December 2006) produced *Mending Hearts and Brains*, a report which made the clinical case for reconfiguration in terms of delivering better urgent case for myocardial infarction. This stressed the need for myocardial infarction services to be delivered by personnel with an appropriate level of experience and training in settings with sophisticated diagnostic and monitoring facilities on a 24 hours a day, seven days a week, immediate-access basis.

The following **Table 1: Process to Date** lists the process undertaken by the South Central Cardiovascular Network since the publication of the NIAP report in October 2008.

¹ Keeley EC Boura JA, Grines CL, Comparison of primary angioplasty and intravenous thrombolytic therapy for acute myocardial infarction: a quantitative review of 23 randomised trials. Lancet 2003; 361: 13-20

² http://www.dh.gov.uk/en/Healthcare/NationalServiceFrameworks/Coronaryheartdisease/DH_4097436

³ From: Treatment of Heart Attack National Guidance *Final Report of the National Infarct Angioplasty Project (NIAP)*: DoH. 20th October 2008.

Table 1: Process to Date

Date	Designation	Outcome
Oct 2008	Joint provider, commissioner conference at Newbury	Four options identified
Oct-Nov 2008	Options detailed and Criteria developed by Network	Appendix A:PPCI Criteria
Nov 2008	Option A recommended to Board of Commissioners (BoC) preferred option	Network asked to develop option C with the Directors of commissioning (DoC).
Dec 2008	Paper to DoC requesting implementation of formal procurement route for PPCI	Network asked to develop proposals within the parameters of world class commissioning.
Feb 2009	Next steps meeting	Panel meeting arranged for the 1 st April to allow providers to respond to network criteria in line with the 4 options (Appendix B: Panel Meeting).
April 2009	Panel meeting Newbury	The panel reviewed the provider presentations and submissions against the previously agreed criteria and agreed a further 3 criteria should be included (Appendix C: Additional PPCI Criteria) Panel recommends: <ul style="list-style-type: none"> • Option D is presented to BoC based on available information. • To work with patient groups to develop options • Meet with Health Overview and Scrutiny Committees representatives and panels to develop options
April 2009	The following providers did not meet the additional criteria Basingstoke and North Hampshire NHS Foundation Trust (BNHFT), Heatherwood and Wexham Park NHS Foundation Trust (HWPFT) and Buckinghamshire Hospital NHS Trust (BHT) Meetings were offered to discuss additional criteria added by the panel.	HWPFT – response to additional criteria <ul style="list-style-type: none"> • Currently undertake more than 50 PPCI per annum. • Shortly will have both a cath lab and a pacing lab at cath lab standards • Will provide 24/7 following public engagement and consultation if the commissioners would like them to.
		BNHFT – response to additional options <ul style="list-style-type: none"> • Currently undertake more than 50 PPCI per annum • They have 2 cath lab • Currently providing 24/7 PPCI services with 2 consultants are in the process of appointing a third and will have a visiting interventionist shortly.
		BHT did not respond
June 2009	Board of Commissioners	The Board supported the next stage of the project – Engagement.

May 2009 to March 2010

During this time a period of engagement will consider the following three options⁴;

A: 24/7 PPCI would be provided in 2 centre's; Oxford Radcliffe Hospitals NHS Trust (ORH) and Southampton University Hospitals NHS Trust (SUHT).

C: 24/7 PPCI would be provided in four centres: ORH, SUHT, Royal Berkshire NHS Foundation Trust (RBFT) and Portsmouth Hospital Trust (PHT).

In addition to these centres there will be a further three centres: Basingstoke and North Hampshire Hospitals NHS Foundation Trust (BNHFT), Buckinghamshire Hospitals NHS Trust (BHT) and Heatherwood and Wexham Park Hospitals NHS Foundation Trust (HWPFT) on a Monday to Friday 8am – 6pm basis (excluding weekends and bank holidays).

D: 24/7 PPCI would be provided in four centres: ORH, SUHT, RBFT and PHT.

The next section will describe the current PPCI services within the south central area.

⁴ Option A: Nov 2008 Network Recommendation; Option C: Nov 2008 BoC request for further information; Option D: April 2009 DoC recommendation.

2.0 Treatment of Heart Attack in South Central

2.1 Current Service Provision

There are four providers currently undertaking PPCI 24/7 for treatment of STEMI. There are three hospitals that receive patients with thrombolysis but transfer their patients to other providers for PCI and three who provide 8am - 6pm angiography/thrombolysis or PPCI with thrombolysis out of hours. **Table 1: PCT population** shows that there is a marked variation between the PCTs, the Isle of Wight being the smallest with a population of 138,500 and Hampshire the largest with 1,250,000⁵.

The total volume of PCI activity (unplanned and elective) in the UK was 1,269 per million populations (PMP) from Jan to Dec 2008. In 2003 the British Coronary Intervention Society (BCIS) target was 1,400 PMP with expectations that the level might in the future need to be 2-3,000 PMP⁶, these predictions are now under review. **Table 2: South Central Population** provides an estimated level of PCI within each PCT population for current UK populations and an estimated PMP up to 3,000.

Table 2: South Central Population

	Population	Estimated total PCI based on Per Million Population					
		1,269 PMP	1,400 PMP	1,600 PMP	1,800 PMP	2,000 PMP	3,000 PMP
Buckinghamshire PCT	500,000	635	700	800	900	1000	1,500
Milton Keynes PCT	230,300	292	322	368	415	461	691
Oxfordshire PCT	635,000	806	889	1,016	1,143	1,270	1,905
<i>Total Northern Cluster population</i>	<i>1,365,300</i>	<i>1,733</i>	<i>1,911</i>	<i>2,184</i>	<i>2,458</i>	<i>2,731</i>	<i>4,096</i>
Berkshire East PCT	376,000	477	526	602	677	752	1,128
Berkshire West PCT	450,000	571	630	720	810	900	1,350
<i>Total Central Cluster population</i>	<i>826,000</i>	<i>1,048</i>	<i>1,156</i>	<i>1,322</i>	<i>1,487</i>	<i>1,652</i>	<i>2,478</i>
Hampshire PCT	1,250,000	1,586	1,750	2,000	2,250	2,500	3,750
Isle of Wight PCT	138,500	176	194	222	249	277	416
Portsmouth City Teaching PCT	230,710	293	323	369	415	461	692
Southampton City PCT	257,000	326	360	411	463	514	771
<i>Total Southern Cluster population</i>	<i>1,876,210</i>	<i>2,381</i>	<i>2,627</i>	<i>3,002</i>	<i>3,377</i>	<i>3,752</i>	<i>5,629</i>
Total SHA Population	3,929,010	4,986	5,501	6,286	7,072	7,858	11,787

Actual PMP data is not available by PCT, not all patients admitted with suspected STEMI have a final diagnosis of STEMI.

Treatment of Heart attacks within South Central is dependant on the geographical location of the patient as demonstrated in section 2.2: patient flows.

The seven centres in South Central provide a mix of 8am - 6pm and 24/7 PPCI and thrombolysis services.

In addition Harefield Hospitals provide out of hours (OOH) thrombolysis services for Berkshire East PCT and Buckinghamshire PCT, **Table 3: Current Service Provision;**

⁵ Source individual PCT and SHA websites

⁶ National Coronary Angioplasty Audit Executive Summary *Key Findings from the Angioplasty and Stents to treat Coronary Artery Disease 2008 report of the National Audit of Percutaneous Coronary Intervention in the UK: The Information Centre. April 2009*

Table 3: Current Service Provision (by provider)

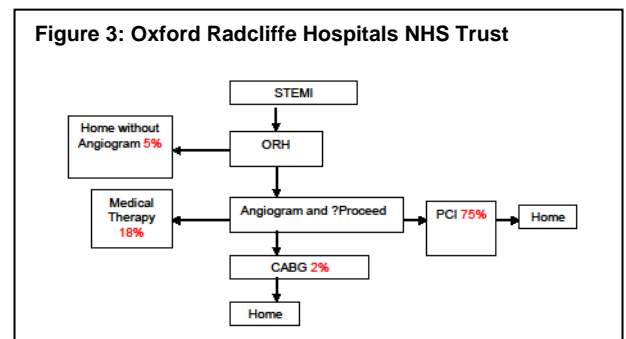
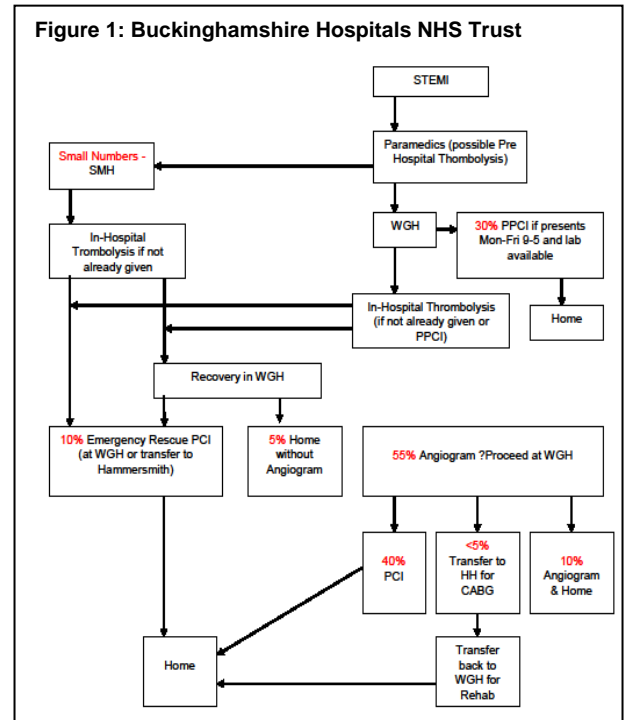
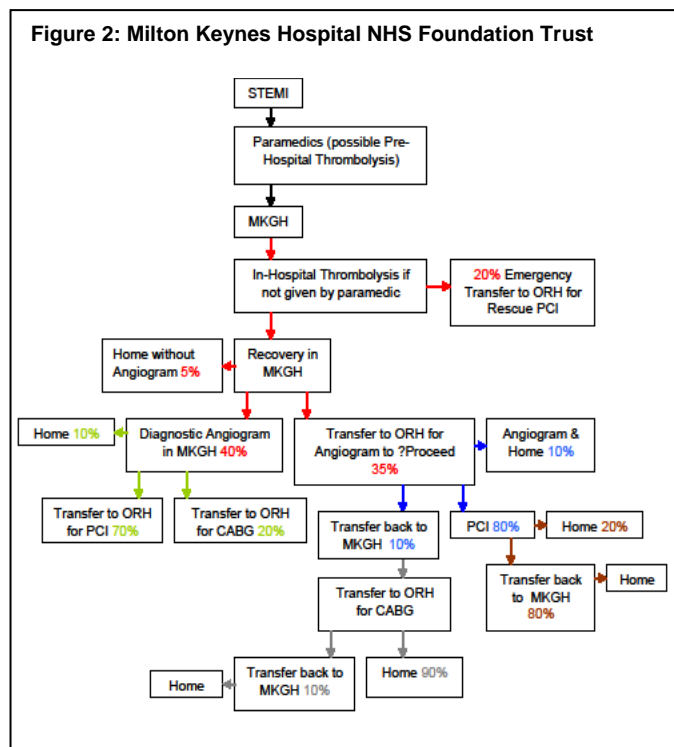
Provider		Current Service	Current activity			Operator numbers	No of labs
			Total PCI	Suspected STEMI			
			2008/09	2007/08			
				First Presentation	Final Destination		
Buckinghamshire Hospitals NHS Trust (High Wycombe) (BHT)		Daytime service	473	194	194	3	2
			OOH eligible PPCI patients transferred out of hours to Oxford or Harefield (all London activity is currently funded through specialist commissioning)				
Milton Keynes (MKGH)	111 patients of which eligible PPCI patients transferred from Milton Keynes General Hospital (MKGH) to ORH (101 pts)	No PPCI service		111	10		
Oxford Radcliffe Hospital NHS Trust (ORH)		24/7	1,670	149	250	7	3
<i>Northern Cluster provider totals</i>			2,082	454	454	10	5
Heatherwood and Wexham Park Hospitals NHS Foundation Trust (HWPFT)		Daytime service	447	95	95	3 appointing a 4 th	1 + 1
			OOH eligible PPCI patients transferred to Harefield or RBFT				
Royal Berkshire NHS Foundation Trust (RBFT)		24/7	582	174	174	4	2
<i>Central Cluster provider totals</i>			1,029	269	269	7 + 1	4
Basingstoke and North Hampshire Hospitals NHS Foundation Trust (BNHFT)		24/7	412	59	59	2 appointing a 3 rd	1
			When 24/7 not available all eligible PPCI patients transferred to RBFT- service not yet implemented				
Isle of Wight (StMH)	106 patients of which eligible PPCI patients transferred from St. Marys Hospital (StMH) to PHT (101 pts)	No PPCI service		106	6		
Portsmouth Hospitals NHS Trust (PHT)		Daytime service	706	239	322	3 appointing a 4 th	2
			5% PHT thrombolysed patients transfer to SUHT for rescue PPCI (-17)				
Southampton University Hospitals NHS Trust (SUHT)		24/7	1,144	284	401	5	4
Winchester (RHCH)	111 patients of which eligible PPCI patients transferred from The Royal Hampshire County Hospital (RHCH) to SUHT (100 pts)	No PPCI service		111	11		
<i>Southern Cluster provider totals</i>			2,262	799	799	10 + 3	8
Totals			5,434	1,535	1,535	27 (+4)	14 + 1
<p>The total numbers within table 2 have been adjusted to allow for inter-hospital transfers;</p> <ul style="list-style-type: none"> • Of the 111 patients presenting at RHCH, 100 are transferred to SUHT for PPCI/other treatments and are already included within SUHT figures (+11). • Of the 106 patients presenting at StMH 101 are transferred to PHT for PPCI/other treatments and are already included within PHT figures (+5) • 5% of total PPCI patients presenting at PHT transfer to SUHT for rescue PPCI, these are already included within SUHTs numbers (-17) • The 111 patients presenting at MKGH 101 are transferred to ORH for PPCI/other treatments and are already included within ORH figures (+10). • An additional 50 East Berkshire patients who present at Harefield hospital have been included within HWPFT numbers. • Patients transferring to Harefield Hospital OOH are already included within BHT. 							

2.2 Existing Patient Flows

The following figures (1-10) demonstrate current patient flows within South Central by provider figure 10 shows the current service with additional air ambulance support.

2.2.1 Northern Cluster
 Buckinghamshire Hospitals NHS Trust (BHT)
 Oxford Radcliffe Hospital NHS Trust (ORH)
 Milton Keynes General Hospital (MKGH)

 NSTEMI – 2,143
 STEMI – 365
 Clinicians – 10
 Catheter Laboratories - 5



2.2.2 Central Cluster

Royal Berkshire NHS Foundation Trust (RBFT)

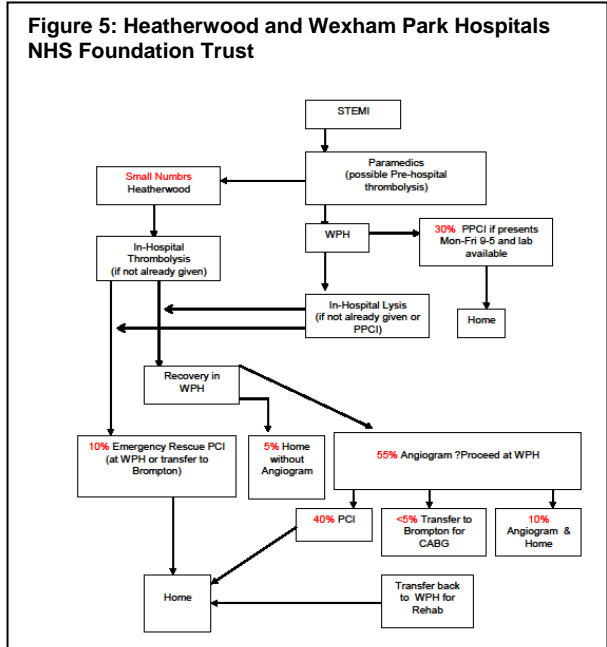
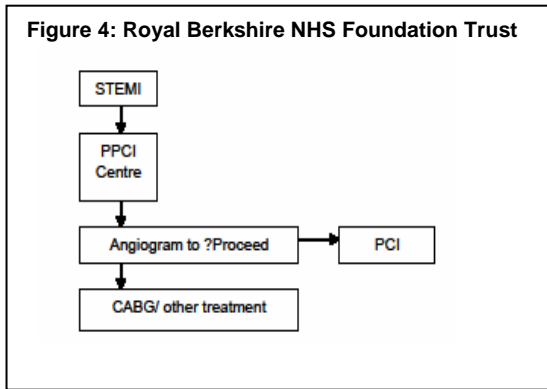
Heatherwood and Wexham Park Hospitals NHS Foundation Trust (HWPFT)

NSTEMI – 1,029

STEMI – 216

Clinicians – 7 + 1

Catheter Laboratories - 4



2.2.3 Southern Cluster

Basingstoke and North Hampshire Hospitals NHS Foundation Trust (BNHFT)

Portsmouth Hospitals NHS Trust (PHT)

Southampton University Hospital NHS Trust (SUHT)

The Royal Hampshire County Hospital – Winchester

St Marys Hospital – Isle of Wight

NSTEMI – 1,262

STEMI – 710

Clinicians – 10 + 3

Catheter Laboratories - 8

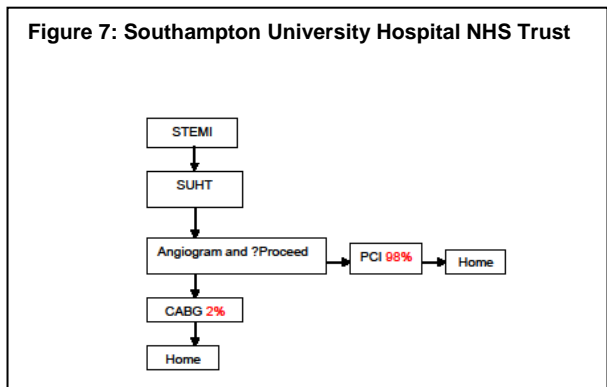
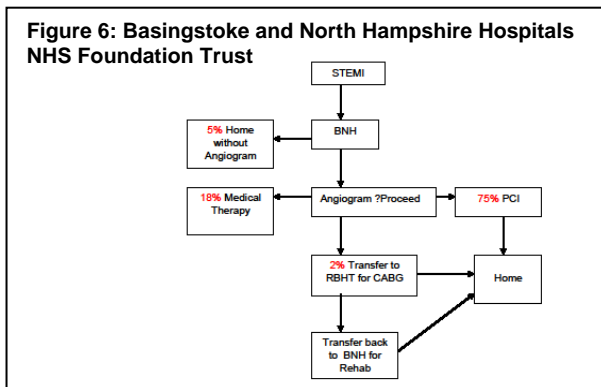


Figure 8: Queen Alexandra Hospital - Portsmouth

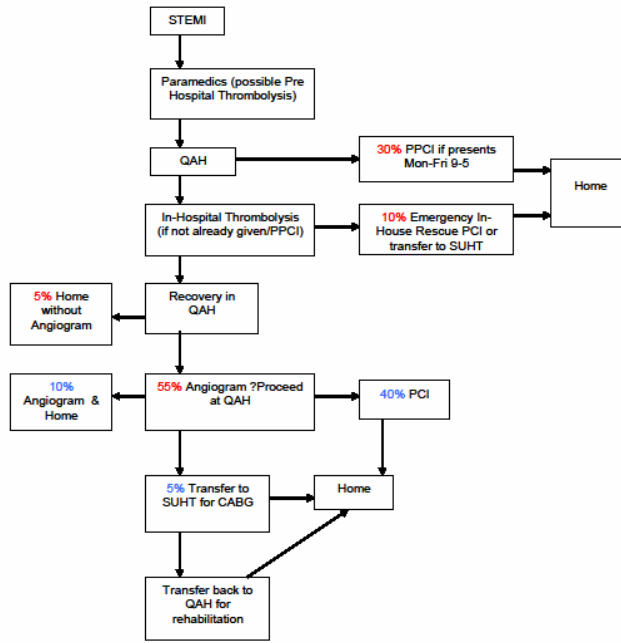


Figure 9: Royal Hampshire County Hospital - Winchester

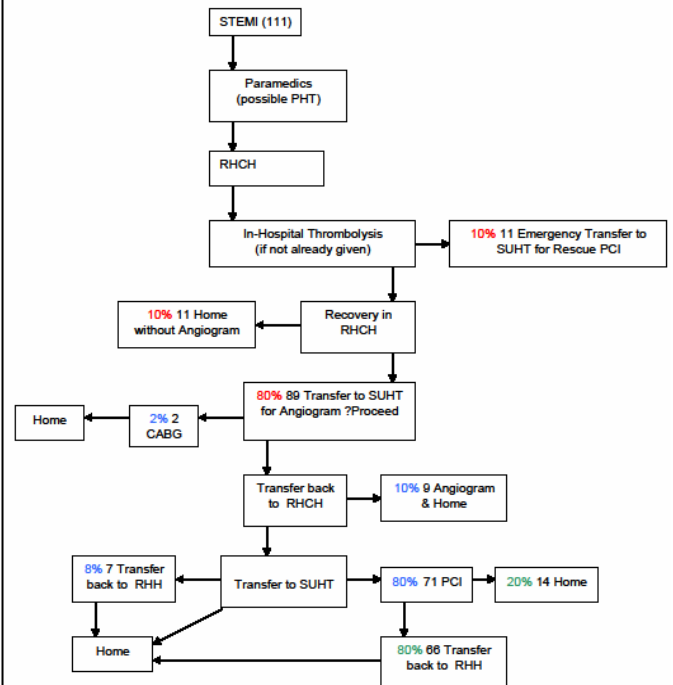
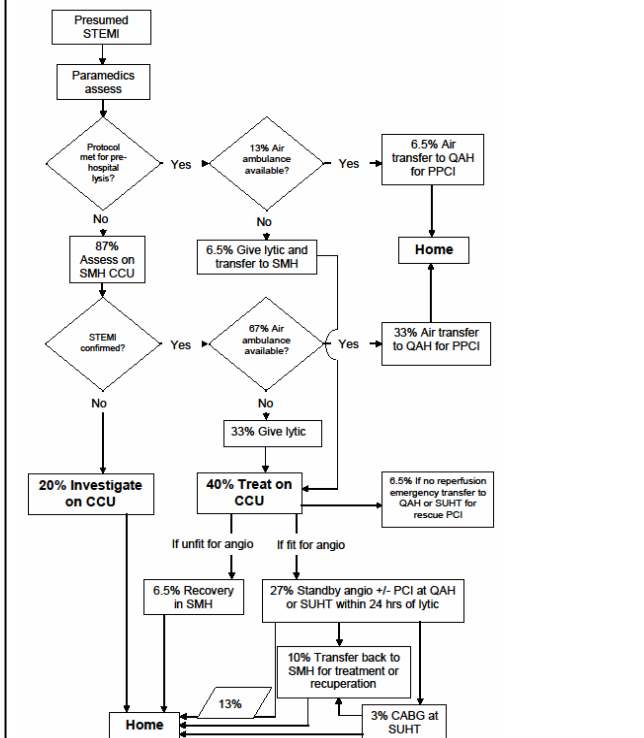


Figure 10: St Marys Hospital – Isle of Wight



The following section, section 3 will describe the recommended patient pathway and associated risks and benefits for options a, b, c and d (see page 10):

- 24/7 PPCI in 2 centres, John Radcliffe Hospital (JRH), Oxford and Southampton University Hospital Trust (SUHT).
- 24/7 PPCI in 2 centres, JRH and SUHT. Plus Monday to Friday 8am to 6pm services (excluding weekends and bank holidays) 5 centres, Buckinghamshire NHS Hospital Trust (BHT), Basingstoke and North Hampshire NHS Foundation Trust (BNHFT), Royal Berkshire NHS Foundation Trust (RBFT), Portsmouth Hospital Trust (PHT) & Heatherwood and Wexham Park Hospital NHS Foundation Trust (HWPFT).
- 24/7 PPCI in 4 centres, JRH, SUHT, PHT and RBFT & Monday to Friday 8am – 6pm services (excluding weekends and bank holidays) 3 centres, BHT, BNHFT & HWPFT
- 24/7 in 4 centres, JRH, SUHT, PHT and RBFT.

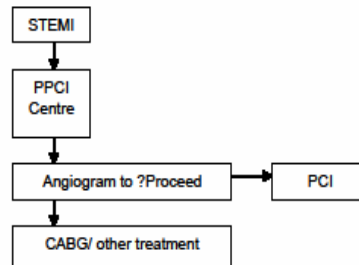
3 Recommended patient pathway

The treatment of heart attack national guidance *Final Report of the National Infarct Angioplasty Project* (NIAP) was published on the 20th October 2008. South Central Cardiovascular Network hosted a meeting in Newbury on the 22nd October 2008, providers and commissioners were in attendance as was national leads for PPCI. At this meeting the new PPCI patient pathway was endorsed by all clinicians present (**Figure 11: PPCI Patient Pathway**). Attendees at the meeting formulated four options as described within section 3.2: options.

3.1 New Patient Pathway

All patients experiencing STEMI within South Central should have access to 24/7 to PPCI centres^{7,8,9}. Currently 95% of these patient treatments involve a stent insertion³, the remaining 5% decline treatment, go on to have different treatments such as CABG or do not survive. **Figure 11: PPCI Patient pathway**¹⁰ represents patient pathway for STEMI patients with the exception of the Isle of Wight for all options.

Figure 11: PPCI Patient pathway



3.2 Options

World class commissioning is about delivering better health and wellbeing for the population, improving health outcomes and reducing health inequalities. To allow effective implementation of PPCI within South Central the commissioners will decide the optimum number of and locations of PPCI centre's and how patients will flow across the system.

3.2.1 Option A

24/7 PPCI would be provided in two centres: Oxford Radcliffe Hospitals NHS Trust (ORH) and Southampton University Hospitals NHS Trust (**Table 4: Option A**).

⁷ May 2008. Towards a healthier future - A ten year vision for healthcare across NHS South Central: Report of the Acute Care Pathway group. Can be accessed at:

http://www.southcentral.nhs.uk/document_store/12121453191_acute_care_report.pdf

⁸ National Institute for Health and Clinical Excellence *Ischaemic Heart Disease – Coronary Artery Stents*

⁹ DH Vascular Briefing pack for NHS South Central, 2009

¹⁰ Cardiovascular Network meeting October 2008.

Table 4: Option A

Northern Cluster:	<ul style="list-style-type: none"> ORH will receive all patients from the northern cluster.
Central Cluster:	<ul style="list-style-type: none"> PPCI services will be commissioned through Oxford and Southampton
Southern Cluster:	<ul style="list-style-type: none"> SUHT will receive all patients from the southern cluster and excluding 50% BNHFT which will attend RBFT as above.

3.2.2 Option B

24/7 PPCI would be provided in two centres: ORH, SUHT.

In addition to these centres there will be a further five centres: BNHFT, BHT, HWPFT, RBFT and PHT on a Monday to Friday 8am – 6pm basis (excluding weekends and bank holidays) (**Table 5: Option B**).

Table 5: Option B

Northern Cluster:	<ul style="list-style-type: none"> ORH will receive patients from its current catchment and Milton Keynes (MKFT) 24/7. OOH they will also receive 75% patients from BHT, 75% from HWPFT and 100% from RBFT. BHT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH 25% of patients will go to Harefield Hospital and the remaining 75% will go to ORH as above. In this model Milton Keynes Foundation Trust will not provide PPCI, all MK patients will go to ORH, however options for MK and neighbouring areas will be reviewed later this year (2009).
Central Cluster:	<ul style="list-style-type: none"> RBFT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH patients will go to Oxford HWPFT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH 25% patients will go to Harefield Hospitals and 75% to Oxford.
Southern Cluster:	<ul style="list-style-type: none"> SUHT will receive all patients from its current catchment and The Royal Hampshire County Hospital (RHCH) – Winchester 24/7. Thrombolysed patients from the IoW (unless air lifted the PPCI) . OOH all patients from BNHFT and PHT. PHT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH patients will go to SUHT BNHFT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH patients will go to SUHT. RHCH will not provide PPCI, all Winchester patients will go to SUHT. IoW will not provide PPCI all patients will have thrombolysis and be transferred to SUHT within 48hours unless airlifted than they will have PPCI at SUHT.
Harefield	<ul style="list-style-type: none"> OOH 25% each from BHT and HWPFT

3.2.3 Option C

24/7 PPCI would be provided in four centres: ORH, SUHT, Royal Berkshire NHS Foundation Trust (RBFT) and Portsmouth Hospital Trust (PHT).

In addition to these centres there will be a further three centres: Basingstoke and North Hampshire Hospitals NHS Foundation Trust (BNHFT), Buckinghamshire Hospitals NHS Trust (BHT) and Heatherwood and Wexham Park Hospitals NHS Foundation Trust (HWPFT) on a Monday to Friday 8am - 6pm basis (excluding weekends and bank holidays) (Table 6: Option C).

Table 6: Option C

Northern Cluster:	<ul style="list-style-type: none"> • ORH will receive patients from its current catchment and Milton Keynes (MKGH) 24/7. OOH they will also receive 75% patients from BHT. • BHT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH 25% of patients will go to Harefield Hospital and the remaining 75% will go to ORH as above. • In this model Milton Keynes General Hospital will not provide PPCI, all MK patients will go to ORH, however options for MK and neighbouring areas will be reviewed later this year (2009).
Central Cluster:	<ul style="list-style-type: none"> • RBFT will receive patients from its current catchment 24/7. OOH they will receive patients from BNHFT and 75% from HWPFT. • HWPFT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH 25% patients will go to Harefield Hospital and 75% to RBFT.
Southern Cluster:	<ul style="list-style-type: none"> • SUHT will receive all patients from its current catchment and The Royal Hampshire County Hospital (RHCH) – Winchester 24/7. • PHT will receive patients from its current catchment, the Isle of Wight and an anticipated 72 patients from the Chichester area 24/7. • BNHFT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH patients will go to RBFT. • RHCH will not provide PPCI, all Winchester patients will go to SUHT. • IoW will not provide PPCI during daylight hours patients where possible will be air lifted to PHT. At all other times patients will have thrombolysis therapy and be transferred to PHT within 24 hours.
Harefield	<ul style="list-style-type: none"> • OOH 25% of BHT and 25% HWPFT will go to Harefield

3.2.4 Option D

24/7 PPCI would be provided in four centres: ORH, SUHT, RBFT and PHT (**Table 7: Option D**).

Table 7: Option D

Northern Cluster:	<ul style="list-style-type: none"> • ORH will receive patients from its current catchment, MKGH 24/7 75% patients from BHT 24/7. • BHT 25% patients will go to Harefield Hospital and 75% to ORH. • In this model Milton Keynes General Hospital will not provide PPCI, all MK patients will go to ORH. However options for MK and neighbouring areas will be reviewed later this year (2009).
Central Cluster:	<ul style="list-style-type: none"> • RBFT will receive patients from its current catchment, all patients from BNHFT and 75% from HWPFT • HWPFT 25% patients will go to Harefield Hospital and 75% to RBFT.
Southern Cluster:	<ul style="list-style-type: none"> • SUHT will receive all patients from its current catchment and The Royal Hampshire County Hospital (RHCH) – Winchester and 25% from BNHFT 24/7. • PHT will receive patients from its current catchment, the Isle of Wight and an estimated 72 patients from the Chichester area 24/7. • BNHFT all patients will go to RBFT. • RHCH will not provide PPCI, all Winchester patients will go to SUHT. • IoW will not provide PPCI during daylight hours. Patients where possible will be air lifted to PHT. At all other times patients will have thrombolysis therapy and be transferred to PHT within 24 hours.
Harefield	<ul style="list-style-type: none"> • 25% BHT and 25% HWPHT will go to Harefield

The geographical proximity of both the Isle of Wight to the nearest 24/7 PPCI centre for all options, PPCI is not achievable within the designated timescale of 120 call-to-balloon time within any of the options. Parts of Milton Keynes and East Buckinghamshire also fall within the 120 minute timescale the network, commissioners and ambulance services are meeting in July to revisit possible options for Milton Keynes residents. Both the Isle of Wight and Milton Keynes will be dealt with separately in section 4.

3.2.5 Benefits and Risks

Benefits and Risks associated with the three options listed above can be found in **Table 8: Benefits and Risks**

Table 8: Benefits and Risks

Option	Benefits	Risks	Probability	Impact	Mitigation
A	Clearer pathways with fewer high volume centres, developing clinical expertise and potentially faster door to balloon times.	Potential impact on the services in the remaining four 8am - 6pm PCI centres with possible knock on effects to elective services for their local residents Patients who present at a local DGH who do not provide PPCI would have to be transferred to a PPCI centre introducing delay and potential for not achieving treatment within 120 minutes of call for help.	Medium	High	Further investment in SCAS, additional vehicles training and service improvement
	Decreased risk of ambulance crew aborted journeys and associated risk to patients	Longer travel journeys out of the traditional ambulance station locations could leave some geographical locations uncovered by paramedic crews.	High	High	
C	Care close to home Maintenance of existing service capacity	8am - 6pm PCI centres that sign up to this model may not adhere to the service specification identified by the network and as such the model may be unsustainable in the medium to long term. Specifically the need for all centres to meet with EU working time directives and the increasing national drive towards all centres having two cardiac catheter labs. Patients who present at a local DGH who do not provide PPCI would have to be transferred to a PPCI centre introducing delay and potential for not achieving treatment within 120 minutes of call for help.	Medium	Medium	6 monthly review by commissioners and network
		Risk of ambulance crew aborted journeys and associated risk to patients	High	High	
D	24/7 access for majority of residents with the exception of the Isle of Wight parts of Milton Keynes and East Buckinghamshire. Clear pathway that achieves the 120 minute call to balloon time Pairing of centres North and South provides potential for back up centres close by. Decreased risk of ambulance crew aborted journeys and associated risk to patients.	Impact on the cardiac services in remaining 3 8am - 6pm PCI centres with potential knock on effects to elective services for their local residents.	Medium	High	Communications campaign to encourage a 999 call for heart attack symptoms. Opportunity for cardiologists from other centres to join the rotas in the 24/7 centres to maintain their skills.
		Patients who present at a local DGH who do not provide PPCI would have to be transferred to a PPCI centre introducing delay and potential for not achieving treatment within 120 minutes of call for help. Patients will normally be discharged home within three days of their admission. There is a risk that capacity issues within larger units will cause patients to be discharged to district hospitals resulting in a poorer quality in service and increase financial costs.	High	High	

3.2.6 South Central Ambulance Service response to PPCI services.

South Central Ambulance Services (SCAS) were asked to respond to changes in treatment of STEMI patients with PPCI centres (see Appendix F: SCAS Response).

“SCAS are committed to support the provision of a 24/7 PPCI services working with the acute providers to achieve the standards set where the times allow a call to door time of 80 minutes. The Trust would aim to improve on the Call to depart scene time working with providers and the south central vascular network.....

SCAS would prefer that all PPCI centres where 24/7 as apposed to 8am - 6pm hours to alleviate the potential for patients to arrive at a day centre and not treated.” SCAS recognise the criteria governing restricted opening hours should reduce the likelihood of this occurring *“but it would create a governance issue should it arise”*

3.3 Criteria affecting option

To determine the best option is it important to understand the interdependencies to deliver PPCI. The network developed a list of criteria in accordance with national guidance, research evidence, BCIS recommendations and local requirements (Appendix A: PPCI Criteria), covering three areas; Quality; Location; Capacity.

3.3.1 Quality

Initial engagement with heart attack patients within the cardiac rehabilitation setting (**Table 9: Locations**) took place during April and May 2009 as follows;

Table 9: Locations)

Date	Location
20 th April 2009	Horton Hospital, Banbury
1 st May 2009	Basingstoke and Alton Cardiac Rehab Charity Group Alton
11 th May 2009	Milton Keynes General Hospital

Cardiac Rehabilitation groups were targeted because they comprised of patients who had recently had a heart attack.

In Banbury and Milton Keynes the Network representative was invited to talk to patients at the rehabilitation groups in a formal seating arrangement. Treatment of Heart Attacks by PPCI was discussed at both of these meetings. The group felt that the patient experiences could be improved by speediness of treatment and being treated at the hospital at which they first presented. A number of patients had been admitted to one hospital, transferred to another for either rescue PCI or PCI and then transferred back to the original hospital.

The patients felt increase anxiety during this period not only for themselves but also for their relatives and said their anxiety would have been greatly reduced if the proposed PPCI model had been in place for them.

One patient reported about being admitted to one unit having thrombolysis and then being transferred to a second provider where he sat for a week before having a angiogram and insertion of 2 stents.

The Network recommends;

- a) Patients without complications will be discharged direct from CCU or cardiac high care facility home.
- b) Arrangements for the provision of phase 1 cardiac rehabilitation prior to discharge and activation of phases 2 & 3 rehabilitation covered by cardiac rehabilitation specialists in nurse led clinics
- c) Final discharge information to primary care within 24 hours of discharge for 100% of all cases (yr 1).

A second patient asked who made the decision about which provider the patients are taken to.

The network recommends:

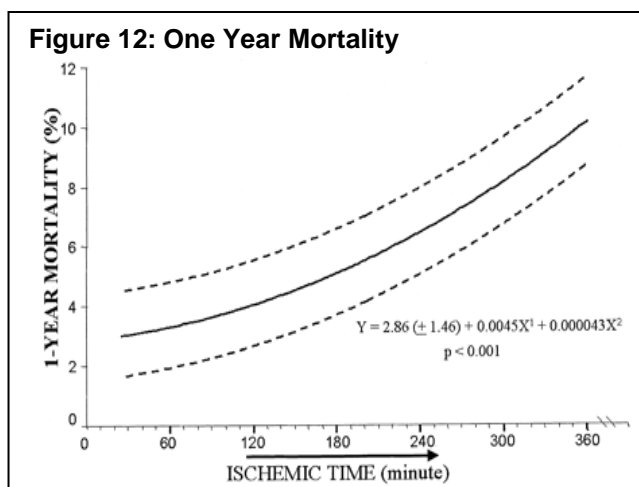
- Centres will agree that the ambulance service paramedic determines the diagnosis and destination of the patient, without recourse to telemetry as per network agreed critical care transfer policy
- Prior notice will be given by the SCAS as soon as a decision to transfer is made and preferably Clopidogrel should be administered to the patient in preparation for the PPCI procedure

The network meeting at Alton was with individual patients while they undertook their Gym activities. A description of PPCI was offered to all those spoken to and all agreed it would be a good thing to have, echoing the sentiments of the other groups.

All groups had differing views as to the location of the PPCI centres; most felt they would like to attend a large centre even if it meant passing their local hospital, where as other patients felt they should have a PPCI centre at their local hospital.

3.3.2 Location

In the treatment of STEMI speed is of the essence because delays increase the risk of patients not surviving the heart attack⁷.

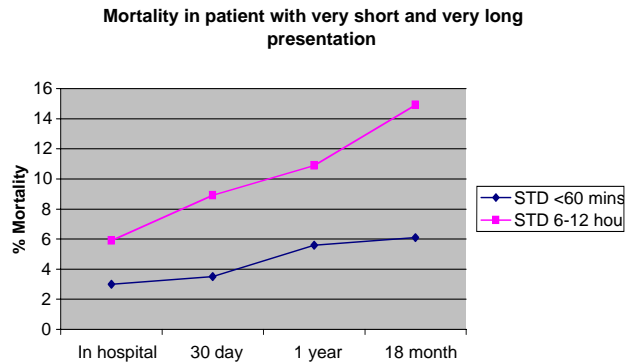


One of the key driving forces for successful PCI is initiating PPCI within 120 minutes of call to emergency services.

deLuca et al Circ 2004: 109;1223-25 graph (**Figure 12: One year mortality**) demonstrates increased one year mortality with treatment delay.

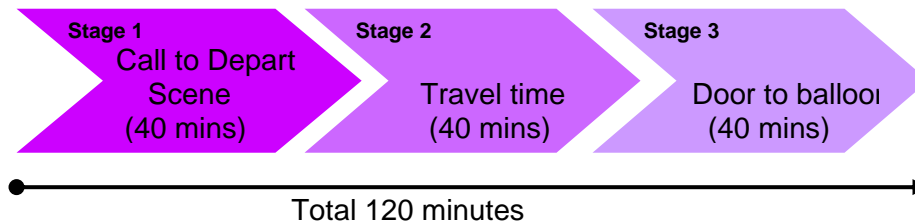
The October 2008 NIAP report call to door time (CTD) graph (**Figure 13: Call to door time mortality**) supports this showing the patients with a short CTD of less than 60 minutes experience better outcomes. The 60 minute CTD within NIAP allows a 90 minute door to balloon time total 150 minutes in accordance with NHS Improvements a guide to implementing primary angioplasty¹¹. The European Society of Cardiology continues to recommend a total call to balloon time of 120 minute.

Figure 13: Call to door mortality



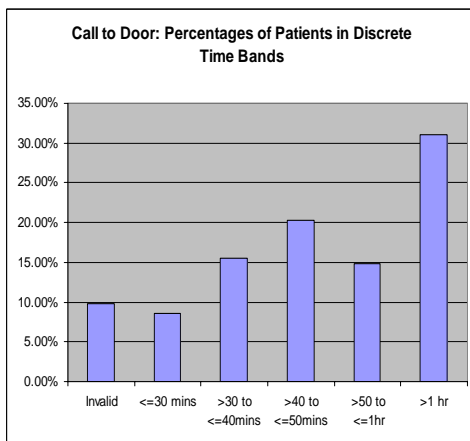
BoC wish to commission for excellence rather than average performance and asked the network to consider options which did not stray outside a 40 minute travel time (**Figure 14: PPCI call to balloon time in South Central**).

Figure 14: PPCI call to balloon time in South Central.



Timing of each stage must be flexible enough to adapt to the individual patient needs and meet the 120 minutes call to balloon time. The network acknowledges that, prior warning to centre by the ambulance service may facilitate savings in door to balloon time, because catheter laboratory staff will have longer to prepare.

Figure 15: Call to Door Times



Rathore et al 2009¹² found Door to balloon time is associated with mortality in patients undergoing PPCI. A review of call to door times for the south central ambulance service for the calendar year 2008 revealed the following performance (**Figure 15: Call to Door Times**):

Following public engagement, identification of and approval of a preferred option the Network will work with each centre and SCAS to ensure by autumn 2011 a robust PPCI service within South Central.

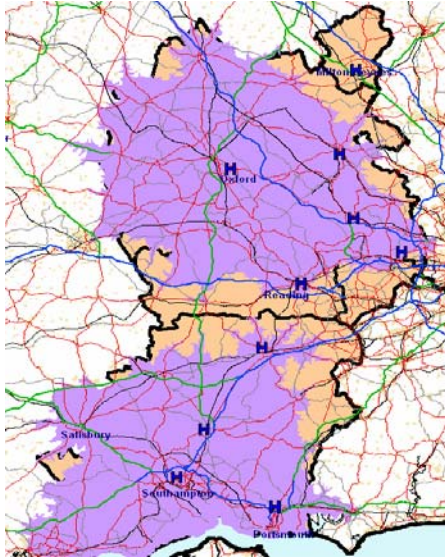
The Network is aiming for 75% (yr 1) and 90% (yr 3) of all cases to achieve a call to balloon time of 120 minutes or less.

¹¹ NHS Improvement *Heart Improvement A guide to Implementing Primary Angioplasty June 2009*

¹² Rathore, Curtis, Chen, Wang, Nallamotheu, Epstein and Krumholz, *BMJ* 2009;338:b1807 19th May 2009

Centres should aim for the following door to balloon time targets:

- Less than 60 minutes, 75% of the time (yr 1)
- Median of less than 40 minutes (yr 3) and
- Report quarterly performance to the commissioning cluster.



Analysis of the isochrones provided by South Central Ambulance Services suggests to commission options within a travel time of 40 minutes (as requested by BoC) for Option A, this leaves large area exposed namely Milton Keynes, East Buckinghamshire, the Isle of Wight and the area known as the M4 corridor.

Solutions for Milton Keynes and the Isle of Wight will be discussed in section 4.

Figure 16: SCAS Map: 40 Minute Isochrones of ORH and SUHT

3.3.3 Capacity

This section reviews each provider in relation to numbers of; patients, clinical teams and facilities.

Activity

Providers have found cardiac catheterisation laboratories are expensive to set up, incur substantial running costs and must be staffed 24 hour a day and seven days a week for a robust PPCI service to be viable. Approximately 20-30 patients experiencing STEMI present out of hours each week (MINAP, 2007). Magid 2002 suggest patient numbers within smaller units, will be insufficient to justify such an investment, especially as it is necessary for PCI centres to operate at high volume simply to provide the staff with the necessary experience to develop and maintain their expertise.^{13, 14}

The Network recommends each centre models their finances accordingly; section 5 finance demonstrates current costs and costs based on the same activity for each model by centre. The complication rate and the volume of procedures performed in an institution per annum are clearly related: morbidity and mortality in high volume centres are lower than in low volume centres¹⁵ it is also recognised that there are increased delays associated with PPCI performed at night compared with during the day¹⁶.

¹³ Magid D, Calonge B, Rumsfeld J, *et al.* Relation between hospital primary angioplasty volume and mortality for patients with acute MI treated with primary angioplasty vs thrombolytic therapy. *JAMA* 2000;**284**:3131–

¹⁴ *Emergency Medicine Journal* 2007;**24**:52-56; doi:10.1136/emj.2006.042952
© 2007 BMJ Publishing Group Ltd and the College of Emergency Medicine.

¹⁵ K D Dawkins, T Gershlick, M de Belder, A Chauhan, G Venn, P Schofield, D Smith, J Watkins, H H Gray, Joint Working Group on Percutaneous Coronary Intervention of the British Cardiovascular Intervention Society and the British Cardiac Society: *Heart* 2005;**91**(Suppl VI):vi1–vi27. doi: 10.1136/hrt.2005.061457

¹⁶ Magid D, Wang Y, Herrin J, *et al.* Relationship between time of day, day of week, timeliness of reperfusion, and in-hospital mortality for patients with acute ST-segment elevation myocardial infarction. *JAMA* 2005;**294**:803–12.

Primary PCI for STEMI is completely different from other forms of PCI. The patients are much sicker and demand high level clinical involvement. The British Cardiovascular Intervention Society (BCIS) national PCI audit from 2007 has just been published. (**Table 10: BCIS Mortality Audit**)

Table 10: BCIS Mortality Audit

Mortality from primary PCI	4.8%
Mortality for unstable angina PCI	0.61%
Mortality for elective PCI	0.14%

PPCI mortality is eight times that of unstable angina PCI mortality and more than thirty times that of elective PCI mortality.

BCIS published guidelines in 2000 in accord with the American College of Cardiology and American Heart Association guidelines 2001 for institutions suggest 200 PCI procedures per annum while encouraging PPCI centre to increase to a minimum of 400 procedures per annum¹⁷ (**Table 11: BCIS Guidelines**).

Table 11: BCIS guidelines

British Cardiovascular Intervention Society	
Service	Minimum total PCI per centre
PCI centers	200 - 400
Tertiary centers	500 - 800

NIAP and the Department of Health recommend procedures should be carried out in a centre with a sufficiently high volume of cases to maintain and develop skills.

The network recommend centres must undertake a minimum of 325¹⁸ ideally aiming for 400 total angioplasty procedures per annum and each operator must perform in excess of 75 angioplasties per year¹⁹

The Network invited all providers within South Central to respond to the south central criteria with the option to support their response by presenting to a panel at meeting on the 1st April 2009. The panel discussed data which show better outcomes in acute / emergency patients (but not in elective patients) that undergo PCI in larger centres. One recent publication deals specifically with the volume of PCI activity as a function of outcome following PPCI for STEMI²⁰. The odds ratio for death was 42% reduction in high volume vs low volume PCI centres, recommending a minimum of 50 procedures per annum.

Table 12: Provider total PCI shows the numbers of PCIs undertaken in each centre during the year 2008/9 except SUHT whose data is from calendar year 2008. The

¹⁷Dawkins et al (2005). Percutaneous coronary intervention: recommendations for good practice and training. Heart 2005; 91 (Suppl VI):vi1-vi27. doi: 10.1136/hrt.2005.061457. London, Joint Working Group of the British Coronary Intervention Society. Can be accessed at: http://www.bcis.org.uk/resources/documents/pci_recommendations_2005.pdf

¹⁸Zahn Heart 2008;94:329-335

¹⁹BCIS data 07/08

²⁰Effect of Physician Volume on the Relationship Between Hospital Volume and Mortality During Primary Angioplasty V. S. Srinivas, MBBS et al *Bronx, New York*

network has calculated that each provider meets BCIS recommendation a total of 400 PCI per annum based on BCIS recommendations and that, should the commissioners decide to remove PPCI services from any centre the individual provider elective PCI activity would not be compromised.

The network’s sensitivity analysis suggests a possible increase in incidence of 1% per year due to population growth in the 40 -74 age category, or a possible decrease in incidence of 6% per year, if vascular checks are fully implemented and effective. It is likely therefore that commissioners would need to revisit the issue of contracting for elective PCI at a later date.

Table 12: Provider total PCI

Provider	Current Service	Total PCI
		2008/09
Basingstoke and North Hampshire Hospitals NHS Foundation Trust	24/7	412
Buckinghamshire Hospitals NHS Trust	8am - 6pm service	473
Heatherwood and Wexham Park Hospitals NHS Foundation Trust	8am - 6pm service	447
Oxford Radcliffe Hospital NHS Trust	24/7	1,670
Portsmouth Hospitals NHS Trust	8am - 6pm service	706
Royal Berkshire NHS Foundation Trust	24/7	582
Southampton University Hospitals NHS Trust	24/7	1,144
Total		5,434

Clinical Teams

The network has not been prescriptive about the composition of the clinical teams providing PPCI services. However; BCIS recommends a minimum number of experienced interventional cardiologists per centre of 4 and ideally 6²¹ to maintain continuous cardiology cover. **Table 13: Provider Operator Numbers** demonstrates the number of actual and immediate operator numbers by provider.

Table 13: Provider Operator Numbers

Provider	Current Service	Operator numbers
Basingstoke and North Hampshire NHS Foundation Trust	24/7	2 (soon to appoint a 3 rd)
Buckinghamshire Hospital NHS Trust	8am - 6pm	3
Heatherwood & Wexham Park NHS Foundation Trust	8am - 6pm	3 (soon to appoint a 4 th)
Oxford Radcliffe Hospital NHS Trust	24/7	7
Portsmouth Hospital NHS Trust	8am - 6pm	3 (soon to appoint a 4 th)
Royal Berkshire NHS Foundation Trust	24/7	4
Southampton University Hospital NHS Trust	24/7	5
Totals		27 + 3

All providers except BHT and BNHFT will meet BCIS recommendation within the next 6 months.

²¹ Reperfusion in the South Central Cardiovascular Network Part 1: Current Data; October 2008

NIAP emphasises the need to learn for other peoples experiences, the benefits of PCI for STEMI have been demonstrated in London, Leeds and Middlesbrough, where the package of care includes consultant cardiology involvement in ward rounds (at least once per day, preferably twice), access to Intensive Care and a consultant cardiology rota. Although not identified within the current criteria the panel supports the national direction of travel and would expect a cardiology rota to be maintained. BHT do not currently have nor plan to provide 24/7 cardiology rota. HWPFT do not currently provide 24/7 cardiology rota but have agreed that following engagement and consultation should the commissioners require this they would be happy to do so.

Facilities

Patients having a PPCI who were admitted directly to a catheter laboratory, bypassing accident and emergency departments/wards, had the lower time to treat and lowest mortality rates of all the routes of admission (NIAP 2008). (**Table 14: Hospital Mortality**). Avoiding admission through A&E would also benefit the A&E 4 hour wait target.

Table 14: Hospital Mortality

	In hospital mortality	18 month mortality
Direct Access to Catheter Lab	3.5%	7.0%
Admission Via Emergency Departments	6.0%	11.8%

A centre performing PCI requires at least one cardiac catheterisation laboratory along with full resuscitation facilities (BCIS 2005). The BCIS conference June 2009 debated the need for a second laboratory and concluded two labs would allow downtime for maintenance and would improve patient access; BCIS felt this was a matter for local agreement. The Panel meeting on the 1st April 2009 discussed the need to mandate a minimum of 2 laboratories as per West and East Midlands cardiac network proposals. All units meet with current BCIS requirements of one laboratory and HWPFT will shortly have an additional pacing laboratory which would be able to be used for cardiac catheterisation, BNHFT and BHT do not have currently have a second laboratory. (**Table 3: Current Service Provision (by provider)**).

3.3.4 Access to services should be equal for everyone with a need.

The *NHS Plan* placed a general obligation on the Department to consider equality issues when shaping policy, but there are also legal obligations on the Department, for example to promote race equality. In addition, the Disability Discrimination Act 1995 makes it unlawful to discriminate against disabled people in connection with (among other things) the provision of services. It places a duty on local and other public authorities to change a policy in order to remove anything that would make it impossible for a disabled person to use a service.

The Act also puts a duty on those authorities to promote disability equality. It requires new policies to be assessed to ensure that they do not disadvantage disabled people and for the methods of assessing a policy's impact to be set out. In addition, the Sex Discrimination Act 1975 (Public Authorities) (Statutory Duties) Order 2006 imposes

specific duties on certain public authorities to ensure better performance in their duty to have due regard to the need to eliminate unlawful discrimination and to promote equality of opportunity between men and women²².

The DoH undertook an Equality Impact Assessment (EIA) for the final report of the NIAP study. South Central has considered this EIA in relation to the possible impact of the new service on their population according to age, disability, race, religion and beliefs, gender and sexual orientation. **Appendix G: Equality Impact Assessment** identifies local factors affecting equality of access to services are as follows:

- Portsmouth, Milton Keynes and the Isle of Wight will have the largest growth in population between 2006 and 2031.
- Milton Keynes, Southampton City and the Isle of Wight will have the largest growth in males aged 40-74.
- Milton Keynes, Portsmouth and Southampton will have the largest growth in females aged 40-74.
- Berkshire East will have the third lowest overall population growth during the same period but will have a significantly higher percentage and population growth of Asian or British Asian residents.
- All areas within South Central have lower than national mortality rates with the exception of Berkshire West PCT who has a mortality rate higher than the national average.

Please note at publication of this report the network and commissioners are in the process of rewriting the EIA to ensure the changes in PPCI services are reflective of each option.

²² Equality Impact Assessment *Treatment of Heart Attack National Guidance* Department of Health October 2008.

3.3.5 Preferred Options

In South Central seven providers wish to provide PPCI: one wishes to continue providing 8am - 6pm service Monday to Friday excluding weekends and bank holidays; a second currently provides 8am - 6pm services but is willing to move to 24/7 should the commissioners wish them to and the remaining five wish to provide 24/7 PPCI services.

Board of Commissioners November 2008

In November 2008 the Network provided the Board of Commissioners (BoC) with a ranking of options, highest ranking was **option A** the 2 centers the JRH, Oxford and SUHT, Southampton.

At the Board after some considerable discussion with members present, option A was rejected by as it did not provide an acceptable level of service across the whole region. It was agreed that on balance option C offered the basis of a way forward but some reworking to reflect the views expressed in the meeting would be needed prior to final approval.

Board of Commissioners June 2009

The Network presented the revised PPCI business case to BoC at their June meeting in Newbury. The following recommendations were supported:

- Commencement of the Engagement period
- Approval of the engagement plan
- Return to BoC following the engagement period late autumn.

Directors of Commissioning

Part of this information gathering exercise included an interview panel on the 1st April 2009, comprising representation for the Directors of Commissioning (Appendix A: Panel Meeting), the panel developed three further criteria (Appendix C: Additional Criteria). Following the commissioner panel on the 1st April and in advance of further consultation with providers, patients and the public, the network with the directors of commissioning, recommend **option D** the four 24/7 centre option.

Patient view

The Network are recommending to BoC a period of engagement and consultation. However discussions with patients (section 3.3.1) suggest:

- Patient experiences could be improved by speediness of treatment and being treated at the hospital at which they first presented.
- The patients felt direct admission to a PPCI centre would reduce greatly reduced their anxiety.
- Patients were confident about paramedics deciding where they should be admitted.
- Most patients felt they would like to attend a large centre even if it meant passing their local hospital
- The remaining patients felt they should have a PPCI centre at their local hospital.

4 Areas which do not fall within the 40 minutes isochrones.

4.1 M4 corridor

PPCI services will not be available locally for residents within the area known as the M4 corridor within option A.

4.2 Milton Keynes

The Milton Keynes PCT is responsible for commissioning all the health services for a population of 230,300 (2006). It is responsible for spending more than £300 million each year, including £45 million on the services it directly provides. There were 111 people in Milton Keynes (MINAP 2007) who had a heart attacks benefitting from reperfusion therapy. Nationally, in-hospital mortality for patients treated by PPCI was 5.2% and 7.1% for patients treated with thrombolysis therapy (NIAP 2008). Although not directly comparable the office for national statistics suggests mortality at 18 months for PPCI patients is significantly less than patients treated with thrombolysis (**Table 15: Mortality %**)²³.

Table15: Mortality%

Method of treatment	30 days	1 year	18 months
PPCI	5.6	8.7	9.9
Thrombolysis	7.9	12.4	14.8

Source: NIAP 2008

Unfortunately the geographical location of Milton Keynes and its relationship to proposed PPCI centres described within the option appraisal document presented at the Board of Commissioners in November 2008, means that treatment of heart attack patients with PPCI is not achievable for some Milton Keynes residents within the 120 minute timeframe. The network therefore recommends that every effort should be made to make PPCI available to Milton Keynes residents.

Population Projections

Population projects for Milton Keynes for the years 2006 to 2031 suggest an increase of 32.1%. 84.3% of these are within the age group of 40-74 being the age range most likely to have reperfusion treatment. **Table 16: Milton Keynes Population** shows the population projections for Milton Keynes for the years 2011 to 2031 including projections for males and females aged 40-74 between 2011 and 2031. This age group has been selected as being of particular interest as the age range most likely to have reperfusion treatment. This data are taken from the 2006-based sub-national population projections produced by the Office for National Statistics.

Table 16: Population projections for Milton Keynes 2011-2031

Milton Keynes	2011	2016	2021	2026	2031	Change %
Total Population	246,800	263,200	278,600	292,300	304,300	32.1
Males aged 40-74	51,200	55,500	58,100	60,600	63,700	40.9
Females aged 40-74	50,200	54,800	58,200	60,600	63,400	43.4

Source: ONS 2006-based sub-national population projections

²³ Treatment of Heart Attack National Guidance *final report of the national infarct angioplasty project (NIAP) 2008.*

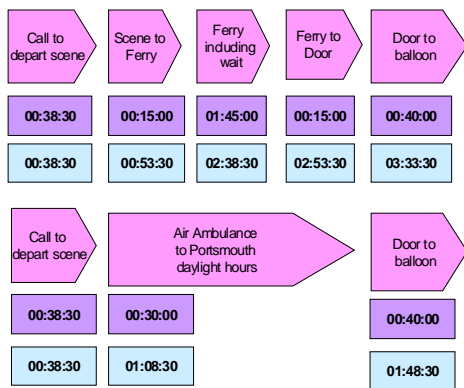
Conclusion

From population projections and an analysis of nearby populations, Milton Keynes may warrant a local centre in the future. However it is recognised that in the short term the John Radcliffe Hospital, Oxford will provide cover for Milton Keynes as long as the overall call to balloon time remains within a maximum of 120 minutes. In the longer term the network is working with three relevant PCTs, ambulance services and clinical networks from Bedfordshire, Northamptonshire and Milton Keynes to develop a medium to long term solution. A meeting has been arranged for the **21st July 2009**.

4.3 Isle of Wight

The Isle of Wight NHS Primary Care Trust (PCT) is a unique NHS organisation, being the only one in the country which both commissions and provides such a broad and diverse range of health services for its local population. The Island has some particular health challenges. These include a high proportion of older people, unacceptable variation in life expectancy in different parts of the Island, thousands of residents on low incomes, 26,000 Islanders with life-limiting problems including a very significant prison population. New drugs and technologies, caring for an ageing population and rising patient and public expectations lead to additional challenges.

Figure 17: Isle of Wight – call to balloon



The Isle of Wight currently provides thrombolysis only, both in and out of hours. Improvements to the care pathway for patients experiencing a heart attack may be limited by the island location (see **Figure 17: Isle of Wight – call to balloon**)... During severe weather or early hours the ferry is not always available resulting in a further delay transfer to the mainland of up to three hours or more.

NIAP states 'If an acceptable service cannot be established.....pre-hospital thrombolysis as the alternative reperfusion strategy is preferable to in-hospital thrombolysis'.

Thrombolysis therapy supported by angiography within 24 hours at Portsmouth hospital has been put forward as the model for the residents of the IoW.

Discussions between the IoW air ambulance Trust, SCAS, the IOW and Portsmouth NHS Trusts, the Air Ambulance Trust have agreed in principle to the helicopter transfer of STEMI patients from the IOW to Queen Alexandra Hospital Portsmouth during daylight hours, weather permitting. The planned new helicopter will have 24/7 capability from 2010 and will be less weather dependent.

4.4 Buckinghamshire

Buckinghamshire PCT serves a population of approximately 515,000 and supports 60 GP practices, 84 pharmacies, 85 optometrists and 82 dental practices. The PCT covers the whole of Buckinghamshire (with the exception of Milton Keynes and wards of Great Brickhill and Newton Longville) as well as the Oxfordshire wards of Aston Rowant, Chinnor, Thame North and Thame South. Patients referred to hospital are being seen faster than ever before. No patient has to wait longer than 18 weeks for routine treatment and waiting times for most people are set to fall to just 12 weeks by 2010.

Seventy-nine people attended Stoke Mandeville and a hundred-fifteen High Wycombe Hospital (MINAP 2007) who had a heart attack benefit from reperfusion therapy Stoke Mandeville Hospital does not provide angiogram (PCI) services. All eligible patients are transferred to High Wycombe for treatments. In addition to this a small number of patients attended Hammersmith Hospitals during weekends, bank holidays and out of hours (OOH).

Proposals for these areas are as follows:

- Option A: All patients will attend John Radcliffe Hospitals in Oxford.
- Option C: BHT will receive patients from its current catchment during 8am - 6pm hours excluding weekends and bank holidays. OOH approximately 25% of patients will go to Harefield Hospitals and the remaining 75% will go to the John Radcliffe Hospital.
- Option D: Approximately 25% patients will go to Harefield Hospitals and 75% to John Radcliffe Hospital.

Within each of these options a call to balloon time of 120 minutes is achievable. Patient flows within each option depend on the geographical location of the patient. The paramedic will diagnose and transfer patients to the nearest centre which may result in patients from the East of Buckinghamshire attending Hammersmith Hospital.

5 Finance

The finance model consists of two distinct parts: first, the step change from the hybrid model of care of thrombolysis/PPCI to full PPCI implementation and secondly financial impact on the ambulance services. The current model has been costed using the patient flow maps for each provider within the previous section, and the new model has been costed assuming that all eligible patients will have a PPCI regardless of geographical location. The data source for patients who are symptomatic of STEMI is MINAP 2007/08 (**Table 18: MINAP 2007/08**); figures for 2008/09 will not be available until the beginning of June 2009.

Table 18: MINAP 2007/08

Cluster	Provider	Unit	STEMI	nSTEMI	Total MI
Northern	ORH	JRH	203	328	531
		Horton	51	109	160
	BHT	WGH	115	161	276
		SMH	79	104	183
	MKGH		111	124	235
Central	HWHFT	Heatherwood	20	21	41
		Wexham	75	76	151
	RBFT		174	214	388
Southern	BNHFT		59	12	71
	PHT	Queen Alexandra	339	480	819
	IoW	St Marys Hospital	106	147	253
	SUHT		401	331	732
	RHCH		111	238	349

Treatments for patients experiencing a STEMI are within Non-elective HRG 3.5 2007/08 Tariff costs (**Table 19: HRG 2007/08**). The following costs have not been considered within this financial model:

- Costs for patients admitted with a suspected STEMI but a different diagnosis/ treatment determined on admission (eg Coronary Artery Bypass Graph).
- Repatriation following procedure.
- Readmission within 6 months of initial procedure.

Table 19: HRG 2007/08

HRG code	HRG name	Non-elective spell tariff (£)
E11	Acute Myocardial Infarction with complications (wcc)*	4,787
E12	Acute Myocardial Infarction with out complications (w/o cc)*	3,017
E13	Cardiac Catheter & Angiography w cc*	4,716
E14	Cardiac Catheter & Angiography w/o cc*	3,744
E15	Percutaneous Coronary Intervention	5,010

In addition to this, to indicate shifts in overall costs, taking into account repeat admissions, the network and directors of commissioning group engaged the Public Health Resource Unit (PHRU) to provide a report. This is a case study of the transition in Oxfordshire from a total thrombolysis service, through a hybrid thrombolysis/PPCI service to a full PPCI service. (Appendix B: Finance).

5.1 PPCI costs based on actual numbers of patients during 2008/09 (MINAP)

Table 20: Financial Summary				
	Current	Option A	Option C	Option D
Northern Cluster				
BHT	£ 894,290	£ 883,860	£ 883,860	£ 883,860
MKFT	£564,441	£ 509,538	£ 509,538	£ 509,538
OHT	£1,015,200	£1,015,200	£1,015,200	£1,015,200
Subtotal	£2,473,931	£2,408,598	£2,408,598	£2,408,598
Central Cluster				
HWPFT	£ 440,319	£ 433,176	£ 433,176	£ 433,176
RBFT	£ 794,736	£ 794,736	£ 794,736	£ 794,736
Subtotal	£1,235,055	£1,227,912	£1,227,912	£1,227,912
Southern Cluster				
BNHFT	£ 235,814	£ 224,076	£ 224,076	£ 224,076
RHCH	£ 783,612	£ 525,780	£ 525,780	£ 525,780
PHT	£1,478,484	£1,385,368	£1,385,368	£1,385,368
SUHT	£1,968,830	£1,968,830	£1,968,830	£1,968,830
loW	£ 645,131	£ 645,131	£ 642,036	£ 642,036
Subtotal	£5,111,871	£4,749,185	£4,746,090	£4,746,090
Sub-Total	£8,820,857	£8,385,695	£8,382,600	£8,382,600
Prescribing Clopidogrel		£ 11,964	£ 11,964	£ 11,964
SCAS additional Costs		£ 20,564	£ 13,430	£ 14,236
Total	£8,820,857	£8,418,223	£8,407,994	£8,408,800

5.2 HRG Version 4

The potential impact of HRG version 4 (**Table 21: HRG 2008/09**) codes on costs used within this paper are;

- V4.0 non elective tariffs differentiate between the approximately 90% of straightforward cases requiring up to 2 stents and those which are more complex
- In nearly all cases in South Central the tariff to apply includes insertion of the stent and catheterisation, which the Payment by Results team advises covers angiogram with possible proceed to PCI. Other codes cover supplementary work (Eileen Robertson, DH PBR, personal communication, 28.4.09)
- It is safe to assume that the median tariff for a non elective spell including PPCI would be £5441.00 (mean average £5542.00)
- This would inflate current assumptions by £431.00 per patient for PPCI if HRGs are applied consistently. Commissioners should investigate if the tariff uplift has taken account of this
- This may be balanced against the removal of the specialist top up for cardiac services. At 18% this would raise the price for HRG version 3.5 E15 to £5912.00
- The trim points are generous given an average length of stay for PPCI in NIAP of 3 days

Table 21: HRG 2008/09

HRG code	V4.0 HRG name	Non-elective spell tariff (£)	Long stay tripoint (days)
EA31Z	PCI (0-2 stents)	4706	10
EA32Z	PCI (0-2 stents) & catheterisation	5441	16
EA33Z	PCI (3 or more stents)	5281	11
EA34Z	PCI (3 or more stents) & catheterisation	6453	17
EA35Z	Other Transluminal Interventions	3643	17
EA36Z	Catheter 19 yrs & over	3303	21
EB10Z	Actual or suspected MI	3662	18

5.3 Conclusion

The financial model assumed tariff costs HRG 3.5, modelled activity supplied by MINAP 2007/8 and used current service models and those proposed within each option as follows;

Option	PCT	Additional SCAS	Prescribing	Total
D	£8,382,600	£ 14,236	£ 11,964	£8,408,800
C	£8,382,600	£ 13,430	£ 11,964	£8,407,994
A	£8,385,695	£ 20,564	£ 11,964	£8,418,223
Current	£8,820,857			£8,820,857

Currently only a small number of patients from Berkshire East and Buckinghamshire attend London hospitals as most OOH patients are treated either at HWWP or BHT with thrombolysis therapy and PCI/angiogram within normal working hours. Patients will in the new options go directly to the nearest 24/7 heart attack centre for PPCI. For Buckinghamshire and Berkshire East this means all OOH patients will attend Harefield Hospital. The change in provider will mean a transfer of costs from PCTs to SCSCG.

The model is inclusive of readmission for same HRG procedures (nationally 12%²⁴). Direct discharge from the heart attack centres is assumed within all of the options. No costs have been included for transfer to local hospitals post procedure.

²⁴ Emergency readmission rates *further analysis* NHS Medical Directorate DoH 31st October 2008

6 PPCI Implementation

It is anticipated that the proposal subject to formal consultation to implement PPCI across South Central will be made at the June 2009 BoC meeting. To allow effective implementation of services a number of key tasks will be required;

- Notification of decision to Providers
- Engagement and Public Consultation
- Implementation timescales
- Formation of task and finish groups
- Post implementation review

6.1 Engagement and Consultation

In October 2008 the network hosted a meeting at Newbury racecourse with providers (clinicians and managers), commissioners and associated networks to discuss the provision of PPCI within South Central. The results of which were circulated to all parties. This prompted further dialogue with providers on the 1st April 2009 from which this paper was formulated.

The network undertook three informal engagement meetings with cardiac rehabilitation patients as reported previously in section 3; they support the concept of PPCI. Patients gave a mixed response to the locations of the PPCI centres. Some patients preferred services at their local DGH and others within tertiary centres.

In total approximately 40 patients were interviewed. In view of this response and the requirement under section 242 (1B) of the NHS act 2006 - Public involvement and consultation which states

"Each relevant English body must make arrangements, as respects health services for which it is responsible, which secure that users of those services, whether directly or through representatives, are involved in-

- a) *the planning of the provision of those services,*
- b) *the development and consideration of proposals for changes in the way those services are provided, and*
- c) *decisions to be made by that body affecting the operation of those services"*

The Network has appointed a consultancy firm: "Communications Management: Building Reputations" to undertake a period of engagement and consultation with all stakeholders including commissioners, providers, patients and the public. The network is seeking approval from the Board of Commissioners to commence an Engagement and Consultation program for a period completing March 2010

6.2 Timescales

Table 22: Timescales

Date	Key Milestone
June 09	<ul style="list-style-type: none"> • BoC approval <ul style="list-style-type: none"> ✓ Commence engagement phase for options A, C and D ✓ Engagement Strategy and Plan (Appendix E [currently being rewritten in accordance with BoC criteria]) ✓ Return to BoC with a engagement Report and recommendations for the consultation phase
July to Oct 09	<ul style="list-style-type: none"> • Engagement phase of engagement and consultation
Nov 09	<ul style="list-style-type: none"> • Engagement review and report to BoC
Dec 09 to Feb 10	<ul style="list-style-type: none"> • Consultation <p data-bbox="508 751 992 783"><i>Preparation for PPCI implementation</i></p> <ul style="list-style-type: none"> • To develop service specifications to guide the SHA, commissioners and other stakeholders, based on clinical consensus and high quality data. • To develop and implement evidence based, uniform clinical standards, guidelines and protocols across the network where these do not exist. • Maintain strong clinical engagement to enable improvements in practice and co-operation along patient pathways. • To act as a consultancy and educational resource for clinical and service quality improvement work in PCI • Working with the SHA, to understand and support commissioning clusters for quality by contributing to network wide comparative benchmarking, audit and clinical quality indicators and outcomes. • Provide clinically based advice to inform workforce planning, inputting to the education and training strategy for relevant professional groups. • Provide a detailed implementation plan
March 2010	<ul style="list-style-type: none"> • Final report to BoC for decision
April 2010	<ul style="list-style-type: none"> • Commence implementation process
Nov 11	<ul style="list-style-type: none"> • PPCI implementation complete

7 Conclusion

The options for the implementation of PPCI are;

- 24/7 PPCI in 2 centres, the John Radcliffe Hospital (JRH), Oxford and Southampton University Hospital NHS Trust (SUHT).
- 24/7 PPCI in 4 centres, the JRH, SUHT, PHT and RBFT. Plus Monday to Friday 8am – 6pm services (excluding weekends and bank holidays) in 3 centres, BHT, BNHFT & HWPFT
- 24/7 in 4 centres, the JRH, SUHT, PHT and RBFT.

Option D has been identified as a potential solution for the following reasons;

- It is recognised that these four centres meet or are willing to meet the National and Local criteria for the provision of a safe, sustainable and accessible service.
- SCAS preference supports this model as it delivers clear patient flows and retains the ambulance crews and vehicles near to their base thus reducing the amount of downtime caused by excessive journeys within option A.
- Financial modelling based on data provided by MINAP 2007/08, current and planned service models, HRG 2008 version 3.5, excluding readmission and inter-hospital transfers, suggests option C will offer best value for money.

The Network recommends a period of engagement for options A, C and D to bring to light any valuable information which the commissioners can make informed decisions to improve the delivery of PPCI within South Central.