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The plastic surgery postcode lottery in England

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ABSTRACT

Introduction and aim: The National Health Service (NHS) provides treatment free at the point of delivery to patients. Elective medical procedures in England are funded by 149 independent *Primary Care Trusts* (*PCTs*), which are each responsible for patients within a defined geographical area.

There is wide variation of availability for many treatments, leading to a "postcode lottery" for healthcare provision in England.

The aims were to review funding policies for cosmetic procedures, to evaluate the criteria used to decide eligibility against national guidelines, and to evaluate the extent of any postcode lottery for cosmetic surgery on the National Health Service. This study is the first comprehensive review of funding policies for cosmetic surgery in England.

Materials and methods: All PCTs in England were asked for their funding policies for cosmetic procedures including breast reduction & augmentation, removal of implants, mastopexy, abdominoplasty, facelift, blepharoplasty, rhinoplasty, pinnaplasty, body lifting, surgery for gynaecomastia and tattoo removal.

Results: Details of policies were received from 124/149 PCTs (83%). Guidelines varied widely; some refuse all procedures, whilst others allow a full range. Different and sometimes contradictory rules governing symptoms, body mass indices, breast sizes, weights, heights, and other criteria are used to assess patients for funding. Nationally produced guidelines were only followed by nine PCTs.

Discussion: A "postcode lottery" exists in the UK for plastic surgery procedures, despite national guidelines. Some of the more interesting findings are highlighted.

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1. Introduction

The British National Health Service (NHS) provides treatment free of cost at the point of delivery. Scottish, Northern Irish and Welsh healthcare funding have been devolved, but in England, spending is controlled by 149 Primary Care Trusts (PCTs). There are currently 149 PCTs in England, each serving patients within a defined geographical area. The number of PCTs has been dramatically decreased recently through merging in order to reduce administrative costs. In May 2006 there were 303 PCTs, and the reduction in numbers has been estimated to save £250 million per annum (494 million dollars; 316 euros).[1]

All elective medical procedures are funded by the PCTs, and these bodies account for approximately 80% of NHS spending; some £77 billion pounds each year (152 billion dollars; 97 billion euros).[2]

The total budget for each PCT is allocated according to its perceived needs by the Resource Allocation Working Party (RAWP) of the Department of Health and Social Security. Factors considered include population size and the socio-economic status of the geographical area. Some areas are identified as having populations with greater health needs, for example the inner city London borough of Islington, where the budget per capita is 40% higher than the national average.[3]

Each PCT decides independently how to allocates its total budget. Rationing of treatment occurs for different patients or services. Because the PCTs make rationing decisions independently of each other, treatments that are available from one trust may be less readily available from another, even those sharing geographical boundaries, and where the treatment is question may be provided by a hospital that treats patients from both PCTs. Commissioning bodies in the NHS are encouraged to established local stakeholder commissioning group that include appropriate doctors, patient representatives and commissioners to define their local inclusion policies, monitor their implementation and review them in the light of experience and emerging clinical evidence. It is unclear whether this occurs for all treatments in all trusts.

The variation of availability of treatments has been called a "postcode lottery" and is often reported in the national media. This can lead to political pressures on PCTs to make specific

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treatments available. Recent examples include Herceptin (trastuzumab), an antibody treatment for HER2 positive breast cancer patients. Although of proven benefit to appropriate patients, the £30,000 (59,000 dollars; 38,000 Euros) annual cost of treatment meant that many PCTs in England would not fund treatment.

A report by the independent *Kings Fund* indicated that there are "unanswered questions about why PCTs reach different decisions about spending priorities and whether the variations have adverse effects on the treatment of patients".[3]

Whilst the majority of work carried out in the NHS by plastic surgeons relates to the treatment of cancer or trauma, a significant proportion of our work includes procedures that could be regarded as cosmetic, including breast reduction and augmentation, mastopexy, pinnaplasty, abdominoplasty, blepharoplasty and rhinoplasty. Much of this work has been shown to significantly improve the quality of life for patients.[4,5,6,7,8] Nonetheless, procedures of this type are regarded by the PCTs as low priority, and funding is unavailable, or subject to a variety of different criteria by PCTs. A "postcode lottery" for breast reduction surgery was identified in England before the reduction in number of PCTs.[9] It is unclear whether the merging of trusts has led to increased consistency of funding guidelines. This study is the first comprehensive review of funding policies for cosmetic surgery in England.

It is recognised that the complication rates for procedures such as abdominoplasty and breast reduction increase with body mass index (BMI), although several studies have concluded that the risks are not significant.[10,11,12]

In 2005, the NHS Modernisation Agency produced a document "Action on Plastic Surgery" (AOPS)[13] in association with the British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS) (formerly the British Association of Plastic Surgeons, BAPS). The purpose of this document was to review appropriate indications for low priority procedures performed by plastic surgeons. Recommendations were made regarding which procedures should be available, and target criteria for BMI, where appropriate, along with rationales for each guideline.

2. Aims

The aims of this study were 1) To review the funding policies of England's PCTs for Plastic Surgery procedures viewed as cosmetic or of low priority. 2) To evaluate the degree to which the "Action on Plastic Surgery" guidelines are followed and 3) to determine the extent of any postcode lottery for these procedures in England.

3. Methods

All PCTs in England were contacted by email, through their websites, or by telephone initially and asked to provide details of their current criteria for funding on Cosmetic or low priority Plastic Surgery procedures. A comprehensive list of procedures for which information was sought was included in the request including *breast reduction & augmentation, removal of implants, mastopexy, abdominoplasty, faceclift, blepharoplasty, rhinoplasty, pinnaplasty, body lifting, surgery for gynaecomastia and tattoo removal*. Trusts were asked to provide their complete criteria, for funding on low priority procedures.

The freedom of information act (2000) (FOI) was used in one case where the information was otherwise withheld. PCTs have dedicated staff responding to FOI requests, but less resources for other requests, even for information in the public domain. Ethical approval was not required for this study. Trusts that did not respond were contacted on a further two occasions by email, and also by telephone where possible.

4. Results

One hundred and forty nine primary care trusts were identified. Responses were received from 124/149 PCTs (83%), of which 111 provided detailed criteria on funding policies for low priority plastic surgery procedures.

Response times and complexities of response provided varied enormously between trusts; some replied by return email, whilst some PCTs took several months to provide the information, often sending several messages of acknowledgement, and indicating their obligations under the freedom of information act even if the request had not been made using the act. The briefest response was 51 words (Gloucestershire), and the longest was a 124 page 27500-word document (Heywood, Middleton and Rochdale). Data was collected over a nine-month period from January-September 2008.

All PCTs indicated that patients could apply for exceptional funding if otherwise excluded from a particular treatment. Response times and complexities of response provided varied enormously between trusts; some replied by return email, whilst some PCTs took several months to provide the information, often sending several messages of acknowledgement, and indicating their obligations under the freedom of information act even if the request had not been made using the act. The briefest response was 51 words (Gloucestershire), and the longest was a 124 page 27500-word document (Heywood, Middleton and Rochdale).

Forty-two PCTs shared their policy with another PCT. There were 13 shared policies. One policy was shared by eight PCTs, but the majority of shared policies were used by only two trusts.

All PCTs included a disclaimer to indicate that individual patients could apply for exceptional funding and be considered for treatment even if their guidelines excluded that patient for a given procedure. All PCTs fund breast augmentation, reduction and mastopexy as part of the treatment of breast cancer, including symmetrising procedures.

Notwithstanding the above disclaimer, 15 PCTs (12%) excluded all "cosmetic" procedures. except for specific individual cases that have been to panel review. Nine PCTs (7%) followed the "Action On Plastic Surgery"(AOPS) guidelines exactly. Four PCTs (3%) were in the process of developing new guidelines and would not provide details of existing or previous restrictions. Fig. 1 shows the proportions of PCTs that allow selected procedures to be performed as long as target criteria were met for each patient.

5. Specific procedures

Not all trusts provided details of policies for all procedures. Where percentages are given, these are of PCTs that did provide details.

5.1. Abdominoplasty

Seventy-one PCTs (62%) allowed abdominoplasties to be performed in the NHS (Fig. 1). Of these, 45 PCTs (63%) set target for patient body mass index (BMI), which ranged from 25 to 30 kg/m^2 (Fig. 2), The AOPS guidelines set the upper limit of BMI at 27.

Fifty-six PCTs specifically required patients to have functional problems relating to scar tethering, intertrigo or ambulatory difficulties, although 15 PCTs applied no symptomatic exclusions. Specific conditions required by a number of PCTs are shown in Fig. 3. Note that two PCTs *only* allowed abdominoplasty for postpartum complications such as for women who had polyhydramnios or unsightly caesarean section scars, whilst one PCT specifically

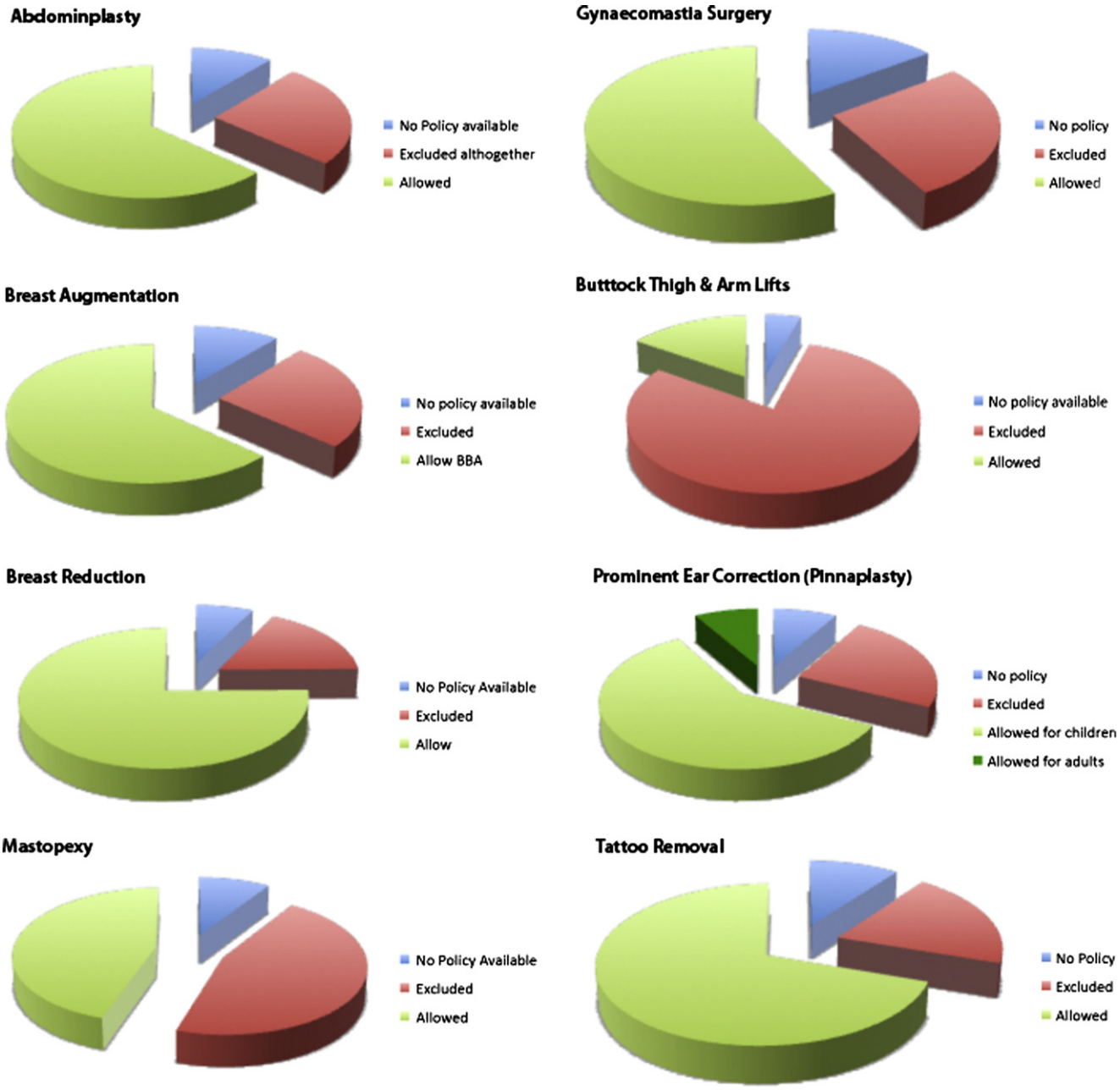


Fig. 1. Pie charts showing the proportions of PCTs ($n = 122$) that allow or exclude the cosmetic procedures shown for NHS patients. Each PCT sets its own eligibility criteria for every procedure that must be met by individuals seeking surgery.

excluded these indications. A further PCT excluded patients who had undergone massive weight loss following bariatric surgery, which is a group that made up a significant proportion of patients undergoing this type of surgery elsewhere. Five PCTs specifically required patients to have divarication of the rectii, and four PCTs set very specific rules about the degree of overhanging pannus required.

For patients that have undergone massive weight loss, 12 trusts required this to have been maintained for two years, four PCTs required the patient to have been stable for 1 year, and two PCTs required a period of six months weight stability. The remainder of PCTs did not specify any timescale criteria.

Only four PCTs specifically excluded smokers from undergoing abdominoplasty, whilst 65 made no mention of smoking.

5.2. Breast reduction

Breast reduction was available in 74% of PCTs responding (Fig. 1), the majority (62%) requiring patients to present with mechanical back pain or intertrigo. Three PCTs (4%) allowed breast reduction routinely for psychological distress, and 28 (34%) did not specify any symptoms required. Twenty two PCTs (27%) required that symptoms have not been alleviated by a professionally fitted brassiere, which is one of the modernisation agency criteria;, four (5%) required an opinion from a physiotherapist or rheumatologist in the case of patients with back pain, and only five PCTs (6%) excluded smokers from undergoing surgery.

Most trusts applied a BMI or patient weight criteria, with six requiring patients to undergo laser or white light scanning to calculate torso:breast volume ratios (a procedure carried out by an

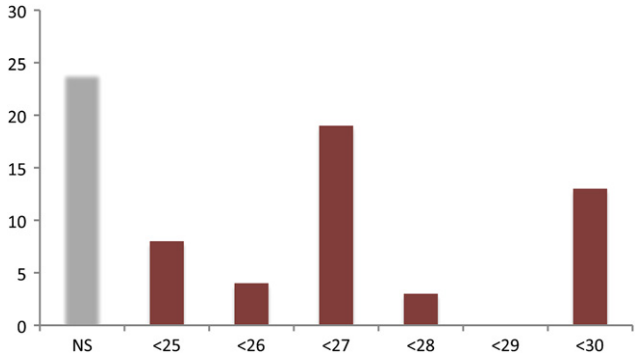


Fig. 2. Chart showing body mass index (BMI) targets that must be reached by patients seeking abdominoplasty. The number of PCTs specifying each target BMI is shown on the Y-axis. NS = no BMI target was specified. The total number of PCTs that allow abdominoplasty was 69.

external company, carrying an additional cost to the NHS.) These results are shown in Fig. 4. The AOPS guideline is a BMI of 30 or less, because it is recognised that the weight of the breasts may raise the BMI of an otherwise normal patient into the obese range.

A variety of different measuring criteria were used to limit surgery to women with very large breasts. These are shown in Fig. 5. The AOPS guidelines did not set a minimum preoperative breast or resection volume because the decision to operate is based on symptoms.

5.3. Breast augmentation

Breast augmentation was allowed by all PCTs in the context of reconstruction after surgery for breast cancer. Seventy-one (64%) of PCTs allowed breast augmentation for other indications as shown in Fig. 6. Four PCTs (4%) required patients to undergo laser body scanning to assess their suitability.

Restrictions on BMI were imposed by 12 PCTs (17% of those offering the procedure) and on age by two PCTs. Only two PCTs expressly forbade augmentation for smokers.

Implant removal was allowed by all PCTs, although four trusts specified different grades of capsular contracture required (Fig. 7). The majority of PCTs forbade replacement of implants that were not

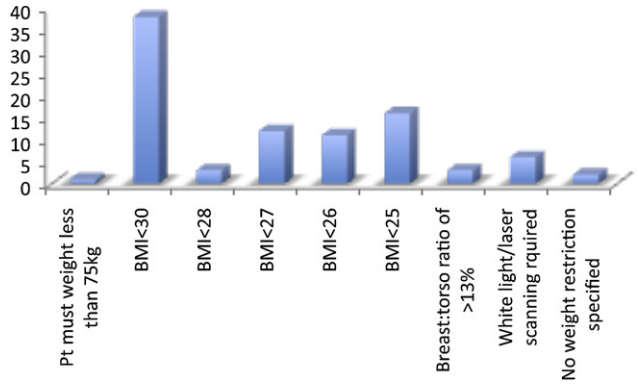


Fig. 4. Chart showing the number of PCTs that apply different weight or body mass index (BMI) targets for patients requesting bilateral breast reduction surgery.

inserted on the NHS, but three would allow insertion of implants that had been purchased by the patient.

5.4. Surgery for breast asymmetry

Most trusts (90%) allowed surgery for breast asymmetry, although a wide variety of criteria for assessment of asymmetry were used (Fig. 8). One PCT specified that it preferred patients to undergo reduction of the larger side only.

5.5. Mastopexy

All PCTs allowed mastectomy as a symmetrising procedure after contralateral breast reconstruction following mastectomy. 49 (44%) of PCTs also indicated that they would fund mastopexy for other indications (Fig. 9). Interestingly 10 PCTs (9%) indicated that mastopexy would be allowed to correct "gross ptosis with the nipple areolar complex below the inframammary fold".

5.6. Blepharoplasty

Lower eyelid blepharoplasty was excluded by all PCTs except in cases of skin cancer, ectropion or entropion.

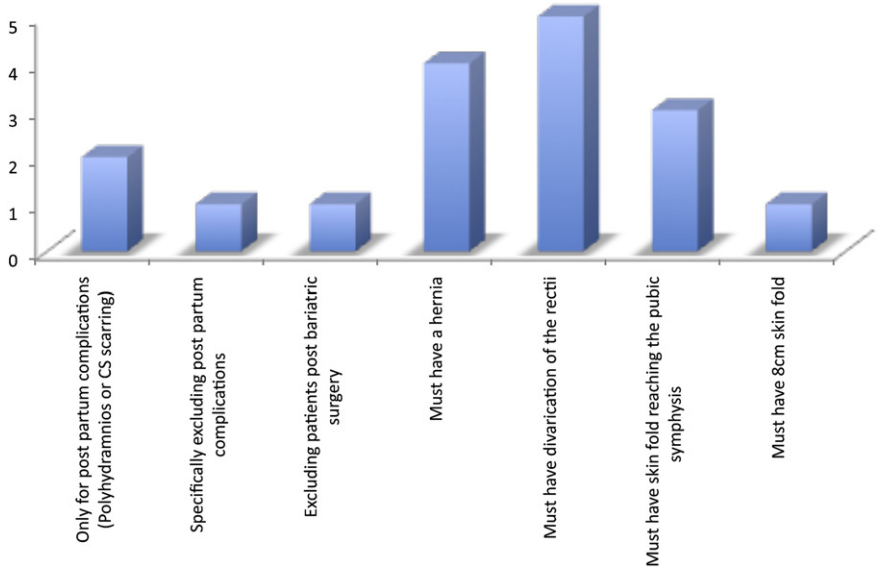


Fig. 3. Chart showing details of indications and contraindications specified by PCTs for patients requesting abdominoplasty. The number of PCTs stipulating each requirement is shown on the Y-axis.

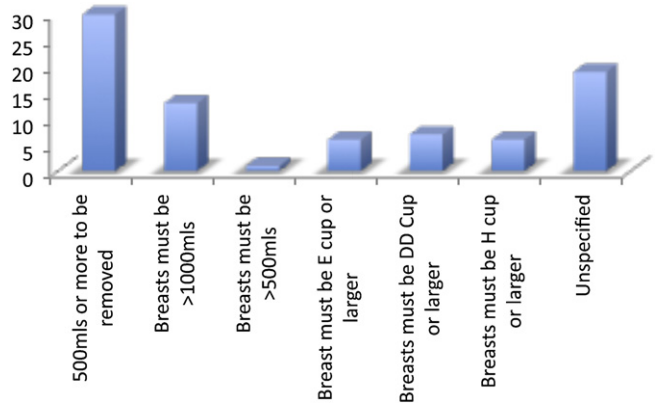


Fig. 5. Chart showing the number of PCTs that apply each of a variety of preoperative breast size criteria, which must be met by patients seeking bilateral breast reduction.

Upper lid blepharoplasty was allowed by 78 (70%) of PCTs for visual field obstruction. Fourteen PCTs (13%) allowed blepharoplasty if there was evidence that the patient is compensating to avoid visual field obstruction by brow elevation with consequent headaches. One PCT (1%) allows blepharoplasty if there is evidence of psychological distress.

5.7. Facelift

Facelifting was allowed by 69 (62%) of PCTs, most commonly for facial nerve palsy or conditions of congenital skin laxity such as cutis laxa, pseudoxanthoma elastica and progeria. Indications for which facelifting would be funded are shown in Fig. 10.

5.8. Liposuction

Liposuction was permitted by 77 (69%) of PCTs. In order to ensure that liposuction is not used for the treatment of obesity, one PCT states that liposuction will only be funded for asymmetrical lesions, whilst another simply states that it may not be used for obesity. Acceptable indications for liposuction are shown in Fig. 11.

5.9. Rhinoplasty

Rhinoplasty was allowed by 71 (64%) of PCTs. The commonest fundable indications were airway problems, congenital defects (i.e. associated with cleft lip/palate) or following trauma (Fig. 12). Two PCTs requested GPs to refer patients with airway obstruction to be referred to the ENT service. The fundable indications by number of PCTs are shown in Fig. 12.

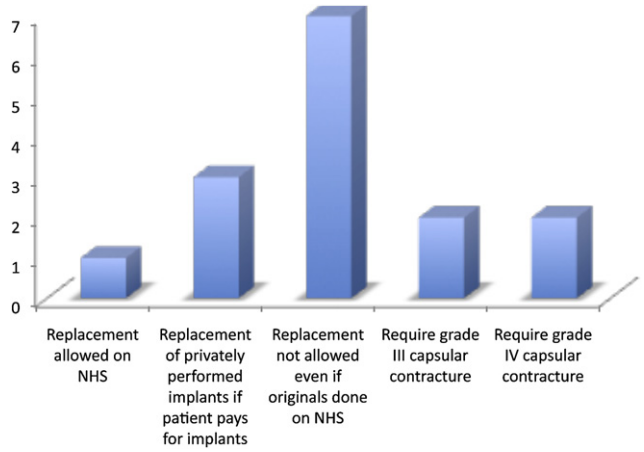


Fig. 7. The number of PCTs that apply the policy shown regarding replacement of breast implants removed on the NHS, and also specific grades of capsular contracture that are required before explantation will be funded by some PCTs.

5.10. Pinnaplasty

The majority of PCTs (66%) allowed prominent ear correction for children, and 92% exclude pinnaplasty for adults (Fig. 1). Four PCTs (4%) required children to undergo psychological assessment. A range of cut-off ages for different PCTs was found (Fig. 13).

5.11. Buttock, thigh & arm lift

The majority of PCTs grouped these procedures together, as they are usually indicated in the post massive weight loss group of patients. These procedures are excluded by 89 (80%) of PCTs. The Trusts that do allow buttock, thigh and arm lifts will fund surgery for the indications shown in Fig. 14. The restrictions applied by some PCTs with regard to BMI are also shown.

5.12. Botulinum toxin

The majority of PCTs did not appear to have policies regarding the use of botulinum toxin type A (botox®). The fundable

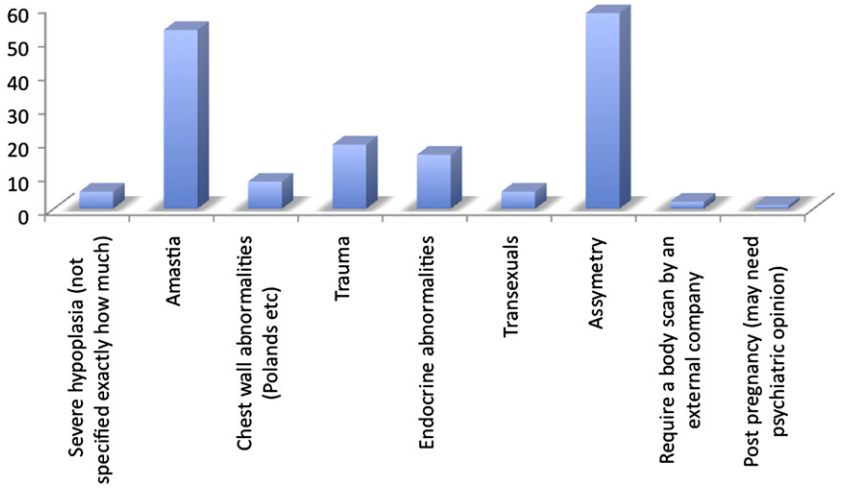


Fig. 6. Chart showing the number of PCTs that use each of a variety of criteria to assess patients seeking f bilateral breast augmentation.

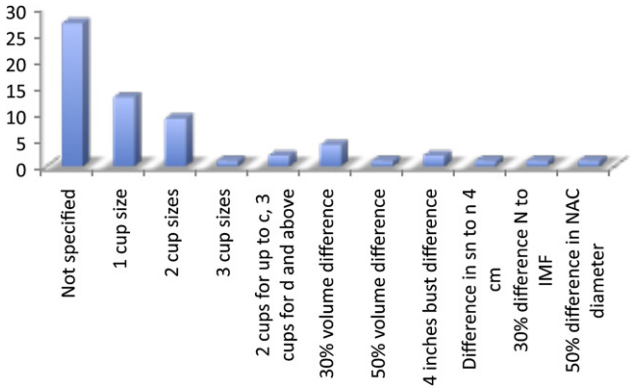


Fig. 8. Chart showing the number of PCTs that use each of a variety of different assessment criteria to determine eligibility for surgery of patients seeking treatment for breast asymmetry.

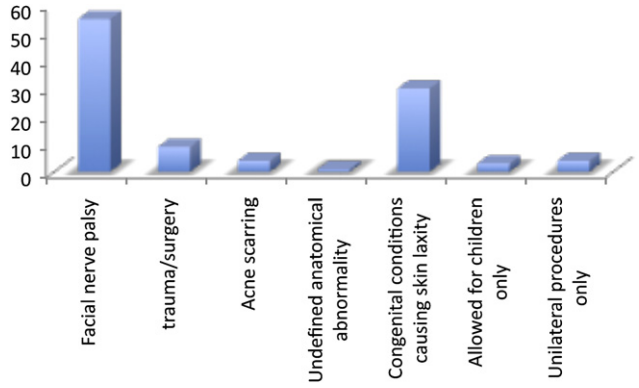


Fig. 10. Chart showing the number of PCTs offering funding for each of the indications shown for patients requesting facelifts.

indications for the 26 trusts that did provide policies are shown in Fig. 15. Note that 24 PCTs will fund treatment of hyperhydrosis with botox®, whilst two specifically exclude its use for this purpose.

5.13. Tattoo removal

Tattoo removal was funded by 52 (46%) of PCTs. The commonest indications are for tattoos inflicted by others, with the patient under duress, or too young at the time of tattooing to be competent, and now old enough to be competent in requesting removal. Fundable indications for tattoo removal by PCTs are shown in Fig. 16.

5.14. Scar revision

Most PCTs did not provide guidelines on scar revision. Thirteen PCTs indicated that it was excluded, Three PCTs limited scar revision to burn scars, a further 14 to trauma in general. Four PCTs required the patient to be functionally limited by their scar, one PCT would fund revision of "severely disfiguring", one "moderately disfiguring", and one facially disfiguring scars of unspecified severity. One PCT limits the size of facial scar that may be revised to greater than 2 cm in length.

6. Discussion

Rationing is a reality of the modern NHS, and it is difficult to argue that cosmetic procedures of the types considered in this paper should be available to all patients. Nonetheless, it is widely recognised that selected patients will benefit appropriately from all of the procedures discussed.[4,5,6,7,8]

Despite widespread availability of the NHS Modernisation agency's "Action on Plastic Surgery",[13] designed as a guideline for funding bodies to help in making decisions about restrictions, the majority of PCTs appear to have made individual policies, although many of these use some of the same principles and limits as AOPS. PCT committees are comprised of lay members, managers, and at least one doctor, although in practise this is rarely a surgeon, and more likely to be a general practitioner (GP) or public health doctor.

6.1. BMI targets

Where PCTs do not follow the AOPS guidelines, it appears that they often set stricter criteria, making it harder for patients to obtain funding for surgery. This is illustrated by looking at the target BMIs for patients seeking breast reduction. AOPS set the target at 30 kg/m^2, and although this is the commonest (mode) BMI target found, stricter targets are used by the majority of PCTs (Fig. 4). Patients with BMIs greater than 25 have not been found to have significantly greater complications rates for breast reduction that those below 25,[10,11] although those with morbid obesity may have higher reoperation rates.[12]

PCTs do not appear to be consistently using BMI targets as means of rationing. In abdominoplasty, AOPS sets the BMI target at 27 kg/m^2, and Fig. 2 shows that this is the commonest target used by PCTs. In this case however, a significant number of PCTs set a more easily achievable target of 30 kg/m^2, and the majority of

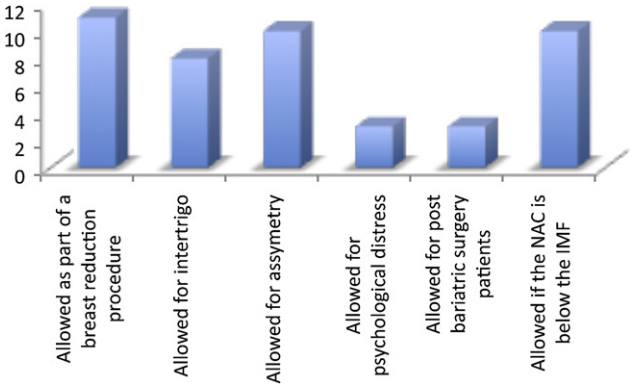


Fig. 9. Chart showing the number of PCTs funding mastopexy for each of the indications shown.

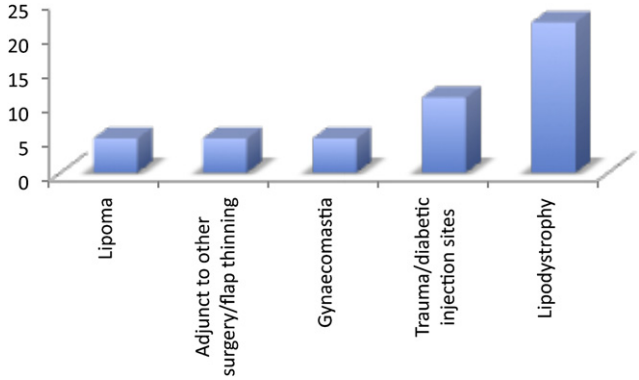


Fig. 11. Chart showing the number of PCTs that will fund surgery on patients requesting liposuction for each of the indications shown.

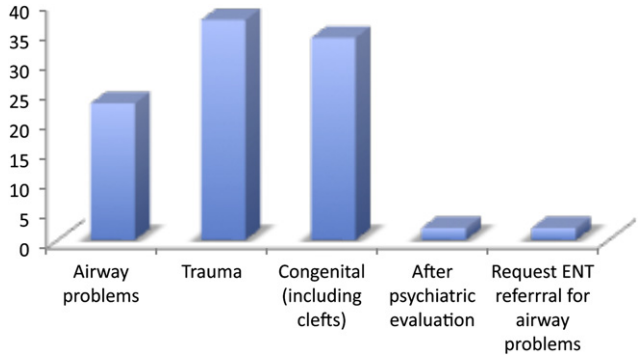


Fig. 12. Chart showing the number of PCTs that will fund rhinoplasty for each of the indications shown.

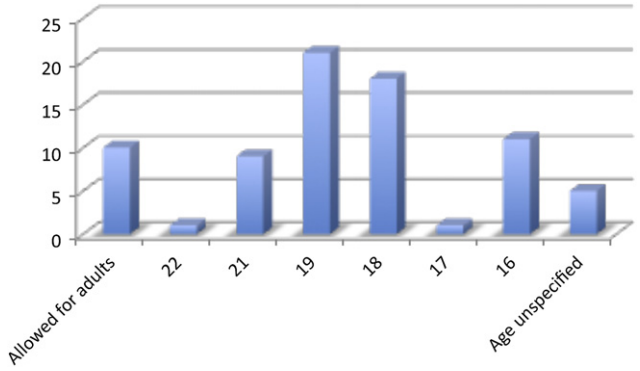


Fig. 13. Chart showing the number of PCTs that apply each of the different age limits for patients seeking surgery for prominent ears (pinnaplasty).

PCTs did not actually set a target at all. Obese patients do have higher rates of complications for abdominoplasty.[14] It may be that surgeons in the hospitals serving this PCT may be asked to apply local BMI targets to their patients. It may be that some PCTs have not considered manipulation of BMI targets as a way of reducing eligibility and hence cost.

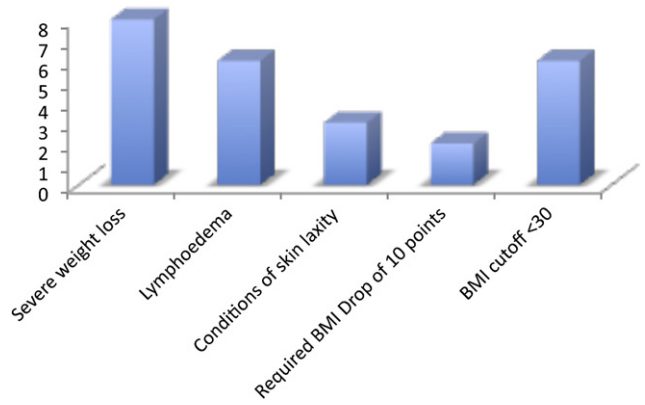


Fig. 14. Chart showing the number of PCTs that will fund buttock, thigh or arm lifts for each of the indications shown. The number of PCTs that applied BMI targets are also shown for the targets specified.

6.2. Other targets

Although sensible in principle, there are wide variations in methods of assessment of breast volume used to assess patients requesting bilateral breast reduction, or surgery for breast asymmetry. Fig. 5 shows that there is considerable variation in the criteria used to decide if a patient has large enough breasts to warrant bilateral breast reduction. The criteria for judging asymmetry are even more varied (Fig. 8): Although many trusts do not specify an exact degree of asymmetry required, others require up to three cup sizes difference. One PCT also specifies that it "would prefer patients to undergo reduction on the larger side rather than augmentation of the smaller". This can only be for financial reasons, although it is unclear to what extent if any that this will limit the decision making process of the surgeon and patient.

Six PCTs indicated that they would like patients to undergo laser or white light scanning to measure breast/torso volumes and ratios where this is available. For four PCTs this is mandatory. An external company performs the scanning. Presumably this process has been introduced to ensure objectivity in the assessment of patient

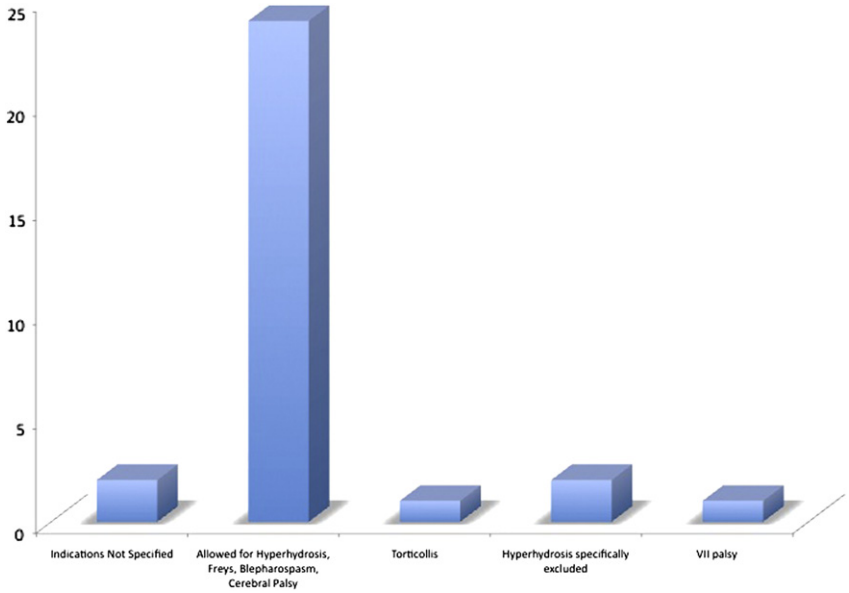


Fig. 15. Chart showing the number of PCTs that fund botulinun toxin type A (Botox®) treatment for each of the indications shown. Note that 26 PCTs will allow Botox®

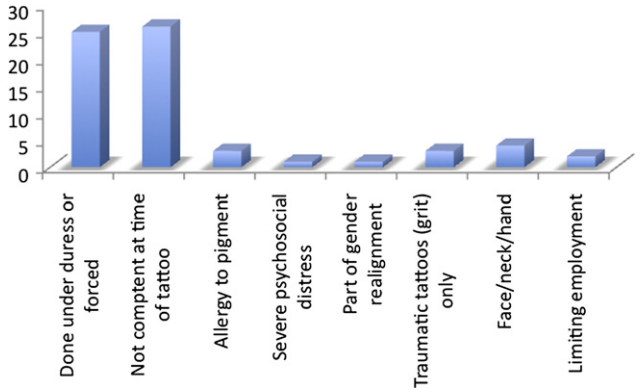


Fig. 16. Chart showing the number of PCTs that will fund tattoo removal for the indications shown.

eligibility for surgery, but it takes the decision away from the surgeon (which might make for easier consultations), and places it with an administrator. The patient is also subjected to what must be a reasonably embarrassing experience of being scanned, and this carries an additional cost to the PCT regardless of outcome. It is not clear if the scan is arranged prior to referral, or if only candidates who have been listed for surgery are scanned.

It was surprising to find that 10 PCTs would fund mastopexy for "Gross ptosis with the nipple areola complex hanging below the inframamary fold". This corresponds to grade II ptosis, and is very common in the population, suggesting that this guideline was made by someone with little clinical experience; i.e. that this decision was not made by a panel containing a doctor, which would be contrary to government advice. The finding that it has been adopted by 10 PCTs suggests that they are collaborating, sharing or copying policies to some degree.

Two PCTS expressly forbid prominent ear correction in children, claiming that there is no evidence that the procedure reduces bullying. One might assume that the decision was made by administrative staff who have no direct contact with patients, possibly looking for ways to reduce spending. Again this suggests that no GP or plastic surgeon was involved in the decision making process. Hopefully this exclusion will be lifted following the recent publication of work showing that 100% of children undergoing this procedure reported a reduction in bullying.[4]

6.3. Smoking

There is evidence to suggest that patients who smoke perioperatively should be declined surgery for certain procedures.[15] Nonetheless, only four PCTs expressly forbid smokers from funding for specific procedures. It may be that individual consultants apply their own restrictions in this respect. Smoking is not mentioned in the AOPS document.

6.4. Exceptional procedures panels

Because all PCTs have an "exceptional procedures panel", any patient with the support of her GP and surgeon can apply to have any procedure funded. Anecdotally this is often a difficult and stressful process for the patient, who may have to be seen by several doctors over a period lasting up to 12 months before a decision is reached. There is considerable scope for variability of treatment availability because the patient, GP, Plastic Surgeon, PCT panel members and any additional doctors asked by the PCT to give a further assessment (e.g. psychiatrist, second surgeon or PCT employed doctor) may each apply a separate value judgement to the specific procedure for the patient in question.

6.5. Limitations of this study

Data was only collected from England as healthcare in Wales, Scotland and Northern Ireland is devolved. It would be of interest for future studies comparing the availability of healthcare to look at Scotland where there is no internal healthcare market. A comparison of availability of treatments in Scotland with those of England could be made.

Eighty three percent is a very good response rate for this type of study, although it means that we cannot give a complete picture of the postcode lottery. The freedom of information act (FOI) can be used to obtain information from Government agencies, and is becoming increasingly common in the UK. The FOI has been used to gather information from PCTs about the availability of in-vitro fertilisation (IVF) by a member of the parliamentary opposition party who demonstrated a postcode lottery for IVF treatment. Despite consistent use of the FOI, that study only achieved an 80% response rate.[16]

6.6. Summary

Whether for good clinical reasons or for the purposes of rationing, PCTs act independently of each other in drawing up funding guidelines. Significant variation in the availability of treatments exists between PCTs if the policies that they provided are consistently applied. Although national guidelines were produced by the NHS modernisation agency specifically to resolve this issue, they are followed exactly by only nine PCTs, although many others other PCTs follow some of their principles. The use or reproducible and rigid targets (e.g. BMI, breast volume) removes individual clinical or value judgement from the decision making process. The aim of this is to provide equitable treatment to all patients within a geographical area. However the disparity found between PCTs confirms that that even in the presence of nationally produced guidelines the postcode lottery exists for plastic surgery procedures in England. This study is the first comprehensive review of funding policies for cosmetic surgery in England.

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