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Clinical decision guidelines for NHS cosmetic surgery: analysis of current limitations and recommendations for future development

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Summary Because of increasing demand for publicly funded elective cosmetic surgery, clinical decision guidelines have been developed to select those patients who should receive it. The aims of this study were to identify: the main characteristics of such guidelines; whether and how they influence clinical decision making; and ways in which they should be improved. UK health authorities were asked for their current guidelines for elective cosmetic surgery and, in a single plastic surgery unit, we examined the impact of its guidelines by observing consultations and interviewing surgeons and managers. Of 115 authorities approached, 32 reported using guidelines and provided sufficient information for analysis. Guidelines mostly concerned arbitrary sets of cosmetic procedures and lacked reference to an evidence base. They allowed surgery for specified anatomical, functional or symptomatic reasons, but these indications varied between guidelines. Most guidelines also permitted surgery 'exceptionally' for psychological reasons. The guidelines that were studied in detail did not appreciably influence surgeons' decisions, which reflected criteria that were not cited in the guidelines, including cost of the procedure and whether patients sought restoration or improvement of their appearance. Decision guidelines in this area have several limitations. Future guidelines should: include all cosmetic procedures; be informed by a broad range of evidence; and, arguably, include several nonclinical criteria that currently inform surgeons' decision-making.

Demand for elective cosmetic surgery is increasing in Western countries. For example, in the USA six times as many patients received breast augmentation in 2001 as in 1992,[1] while private hospitals in the UK have reported a steady increase in referrals for breast surgery over the past 10 years.[2]

There is concern as to how far publicly funded healthcare should meet this increasing demand.[3] First, cosmetic procedures are expensive and resources are limited. Secondly, although the

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primary goal of elective cosmetic surgery is often described as psychotherapeutic,[4,5] the clearest evidence of benefit is in patients with mild, and nonclinical, levels of pre-operative distress.[6-10] There is no conclusive evidence that surgery leads to psychological benefit in the majority of patients.[11,12] Indeed, for some patients the desire for surgery might reflect serious psychopathology or relationship problems which are irremediable, and might be exacerbated, by surgery.[5,13-15] Finally, despite the increasing demand, undergoing surgery for aesthetic reasons is still not widely acceptable in British society[16] where 'growing old gracefully' remains the expectation and cosmetic surgery is perceived as trivial compared with other medical interventions.[3,17] Therefore, elective cosmetic surgery is one of the few areas of healthcare that has been explicitly restricted by the UK National Health Service (NHS), and many health authorities have developed guidelines to help surgeons identify those patients for whom surgery can be purchased.[18]

Clinical guidelines have become widespread in healthcare. They are intended to ensure that clinical decisions are consistent, transparent and justifiable on the grounds of research evidence or health policy. In principle, they should prevent idiosyncratic decisions and minimise inequality of care between patients. However, scrutiny of guidelines has shown that many are not based on the best evidence, have not been developed systematically and are not perceived as legitimate beyond the group that created them.[19,20] Moreover, guideline implementation is often unsuccessful and effects on patient outcomes have been limited.[19] Guidelines that restrict access to treatment in publicly funded healthcare have received very little scrutiny.[21] We therefore examined the characteristics of guidelines for restricting NHS cosmetic surgery across the UK and, for one representative set of guidelines, we explored in detail their impact on clinical decisions. The aim was to identify whether and how such guidelines should be improved in future.

Method

National survey

Directors of Public Health of all UK health authorities were asked by letter for their guidelines concerning provision of cosmetic surgery and for information about how these had been developed. Of 115 authorities contacted, 36 (31%) responded and 32 provided their guidelines. These were examined to establish commonalities and differences between them and to confirm that those selected for case study were typical of those used nationally.

Case study

The study centre was a regional plastic surgery and burns unit. In individual semi-structured interviews, each of the six consultants who assessed cosmetic referrals was prompted to describe decision-making at successive stages of the referral process. Additionally, current practice was discussed with managers and clerical staff and four consultant clinics were observed for information about the negotiation of decisions between patients and surgeons. Contemporaneous notes from interviews and observations were transcribed immediately and supplemented by a field diary. Quantitative analysis would be premature because, without previous research in this area, the variables that should be quantified are not yet clear. We therefore used qualitative methods, which have been used previously to identify critical features of clinical communication and decision-making in healthcare.[22] As is conventional in qualitative research, findings were tested through regular discussion amongst the research team and with clinical and managerial staff. Additionally, referrals and decisions during the study period (6 months) were noted for all patients identified by surgeons as seeking surgery in the absence of physical indications.

Results

National survey

The surveyed guidelines (Table 1) had generally been developed in consultation between GPs, surgeons and managers representing health authorities and surgical units. Few included justification or referred to an evidence base. In each, elective cosmetic surgery was a low priority, justified only when specified criteria were judged (by clinicians or the health authority in different guidelines or, in one case, by a committee incorporating clinical, managerial and lay representation) to have been met. However, the range and types of procedures to which guidelines applied varied. The indications for surgery also varied and included, in different guidelines, anatomical, functional and symptomatic abnormality. Most guidelines also permitted

Table 1 Characteristics of elective cosmetic surgery guidelines identified in the national survey. The case study guidelines are detailed for comparison

Characteristic	National survey ($N = 32$)	Case study guidelines
Number of cosmetic procedures: median (range)	14 (1–31)	10
Criteria assessed by		
Clinicians	18	Yes
Health authority	14	-
Psychological indications for surgery		
Surgery granted for psych. indications	24	Yes
Indications defined	13	No
Evidence defined	4	No
Timing of assessment defined	12	No
Assessor defined		
Mental health specialist	3	Yes
GP/surgeon	4	-
Not specified	17	-

surgery in response to 'exceptional' need, which was generally equated with psychological distress. However, they differed in the stage at which psychological opinion was required and whether a mental health specialist should provide it. Some guidelines specified neither, and few specified: the psychological indications for surgery; the evidence needed to demonstrate them; or the way that the decision-maker should use the psychological opinion.

Case-study

The guidelines studied in detail were typical of those used nationally (Table 1). They had been developed, in response to rising local demand for cosmetic surgery, by consensus among consultant surgeons and in consultation with others including health authority representatives and management and psychological staff. Like other guidelines surveyed, they specified limited physical indications for most of the 10 procedures that were included, and stated that all were permissible in response to 'exceptional' need, for which assessment by a psychologist was necessary.

Referrals and decisions during the study period are summarised in Fig. 1. Observations and interviews indicated that, in practice, the guidelines had limited roles in the initial response to referral and in the consultation.

The guidelines in the response to referral

Referrals were free text letters, reviewed and prioritised by consultants. None was refused; surgeons regarded the available information as insufficiently reliable. Nevertheless, where none of the specified physical indications were apparent, the referrer was sent the guidelines and an explanatory letter. In interviews, surgeons explained that this was to enable the referrer to withdraw inappropriate referrals and to avoid future inappropriate referrals. There is no evidence to show whether the procedure achieved these aims. However, because all referred patients received consultations, many consultations were with patients who would not receive treatment ultimately (see Fig. 1).

The guidelines in consultation

All surgeons stated in interview that elective cosmetic procedures were a low priority for scarce resources, and that they were therefore obliged to refuse many patients' requests. Refusal typically occurred in consultations for which patients had waited many months and during which many became disappointed, emotional and angry. Surgeons described the emotional burden of denying treatment in these circumstances, which was increased by the perceived failure of the guidelines to provide an authoritative and robust policy to justify their decisions. Indeed, in consultations, surgeons very rarely referred to the guidelines to justify refusal of surgery. Moreover, our observations of surgeons' decision-making indicated several ways in which this diverged from the guidelines.

Deviation of decision-making from the guidelines

Cosmetic surgery occurred outwith the guidelines. The guidelines were incomplete in their definition of both cosmetic surgery and the factors that surgeons took into account and thought that they

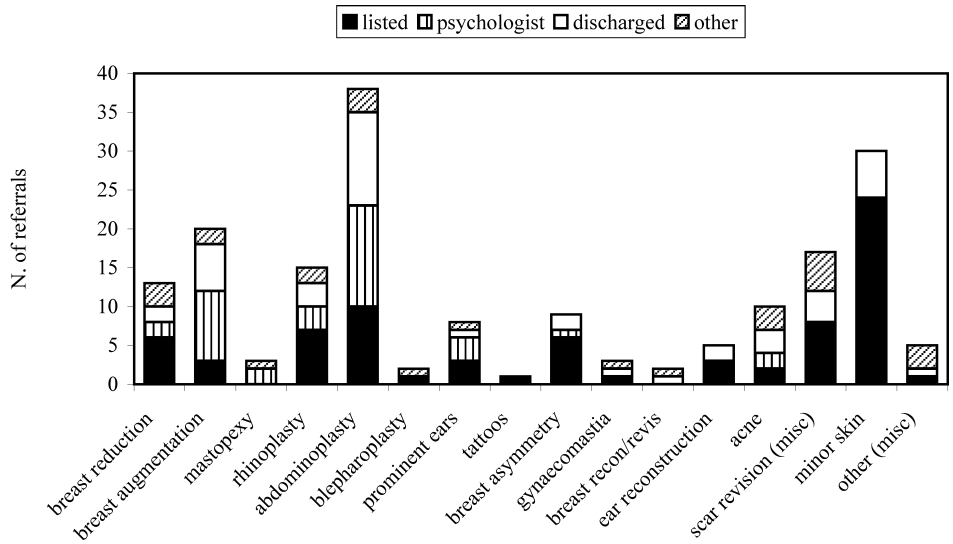

Fig. 1 Procedures requested and outcomes of consultation for consecutive patients during study period (6 months). Only those patients judged by surgeons to have no physical indications for surgery are shown.

should take into account—in deciding on surgery (Table 2). In particular, requests for minor cosmetic surgery such as removal of moles and other skin lesions were invariably granted because, as the surgeons explained, the cost was low. Nevertheless, the guidelines cited neither these procedures, nor the importance of cost in decision-making. Similarly, whereas observation and interview showed that adults' requests for cosmetic correction of congenital abnormality, disproportionate development or physiological processes were acceded to only rarely, comparable requests following exogenous causes—injury and disease—were granted where a satisfactory surgical response existed. That is, the cause of the abnormality was a further influence on decision-making.

Table 2 Surgeons described several factors that, although omitted from the guidelines, would influence them to offer surgery

Cost of procedure
'We do moles because of the length of time it takes to explain not doing it. It's quicker to remove them'

Exogenous vs. endogenous causes
'If it is an ugly scar, you could say it's cosmetic but they're trying to restore it to normality. Cosmetic surgery is alteration of the normal condition to something the patient would prefer, changing something that's a result of normal physiological processes—childbirth or aging, say. I would do it if it's an ugly scar. Scars are abnormal'

Degree of abnormality
'Where there is obvious deformity and severe distress, I may take this decision (for surgery)'

Impact on future quality of life
'If you have a young girl, late teens or early twenties, who is not able to form a relationship, then fair game to be done on the NHS as she's socially crippled. If it's an older woman with a stable relationship who has involution after having children then I think it ought not to be done, not socially crippled therefore not justified'

Patients' 'deservingness'
'You do take pity on some people, someone for example who has lost a considerable amount of weight and has an overhanging apron of abdominal skin. They've made an effort to lose weight and it would turn their life around, so fair enough'

Surgeons also provided surgery that the guidelines explicitly excluded, such as adult prominent ear correction or breast augmentation. Although one explanation is that they were informally judging psychological need (see below), they also reported in interview that extreme abnormality could justify the decision for surgery. Similarly, surgeons' decisions were influenced by the potential impact on future quality of life or how 'deserving' patients were (Table 2).

Psychological need was assessed and weighted variably. Although the guidelines required a psychologist to assess all psychological indications for surgery, they did not define: a sufficient psychological indication; the evidence needed to substantiate it; when surgeons should seek an assessment; or how they should respond to it. Correspondingly, surgical practice varied considerably (Table 3) and their decisions sometimes diverged from the psychologist's recommendations (Table 4).

Patients' persistence overcame surgeons' decisions. Surgeons described feeling pressured to offer surgery by some patients' emotional and insistent presentations, and believed that some patients contrived their presentation in the attempt

Table 3 Surgeons described several different reasons for using formal psychological assessment

Occasional use to resolve ambiguous cases
'I do not refer all cases seeking surgery on psychological grounds to the psychologist, only one where I cannot make a decision. For example, in the case of a young girl accompanied by her mother who walks in hunched over with head bowed I do not need the psychologist to make the decision. I may send her just out of interest but the decision is obvious, it just extends the process. Why put them through all that, a waste of resources if the benefit is obvious'

Routine use as a guide for the surgeon
'If someone requests surgery with no abnormality then it obviously requires a psychological opinion. A surgeon reviews the psychological opinion, and takes it into account when making his own decision on whether to offer surgery'

Routine use to objectify the decision
'I aim to put it on a more scientific basis. Having someone making the judgement who's trained to do so makes it a more uniform decision and also if the patient complains then all the appropriate steps have been taken, you have evidence supporting the decision'

to elicit a surgical decision. As one surgeon explained, they could 'turn the screws'. Reflecting the lack of definition of the circumstances in which psychological assessment should be sought, this was sometimes used as a response to patients' persistence after surgery had been refused. In addition, the guidelines did not preclude a patient being referred again without significant change in their problem or circumstances. We observed a few cases where patients who had been denied surgery were offered it in response to continued pressure (Table 4).

Table 4 In the absence of complete specification of the procedure for psychological assessment, surgeons were unable to sustain denial of surgery

Patient A—conflicting psychological information
Female, age 37, was referred for bilateral breast augmentation, which is precluded by the guidelines unless exceptional need is confirmed by psychological assessment. At surgical assessment, she reported being depressed about the size of her breasts. The surgeon informed her GP that a psychological assessment was required. The psychologist found no psychological indications for surgery. The GP referred the patient to a psychiatrist who found no psychiatric contraindications for surgery, and then re-referred her to the surgeon, who agreed to provide surgery

Patient B—patients' persistence
Female, age 26, also requested bilateral breast augmentation and was referred for psychological assessment. The psychologist recommended that surgery was inappropriate and the surgeon explained this at a second consultation. The patient complained that she had expected that the second consultation was to offer surgery. She became more distressed as the consultation continued, until the surgeon agreed to surgery

Discussion

Restricted access to elective cosmetic surgery is inevitable in publicly funded healthcare and should be fair.[23] The guidelines that we studied were intended to achieve this. Although a large literature has accumulated recently about the limitations and strengths of clinical decision guidelines[19,24] the present study is, to our knowledge, the first to evaluate guidelines to restrict healthcare, and the first to evaluate guidelines by examining clinicians' decision-making in practice. The case study found little evidence that guidelines influenced decision-making, and considerable evidence about ways in which decisions diverged from guidelines. One way of viewing such divergence is that clinicians simply failed to follow guidelines. However, this would be premature because the validity and utility of the guidelines were compromised by important omissions and a lack of clarity.

The need for an evidence base

Guidelines are often regarded as a way of effecting evidence-based medicine and, unless demonstrably based in evidence from research or clinical experience, the decisions that they indicate are difficult to defend. Therefore, it was striking that few of the guidelines surveyed referred to evidence or to a procedure for reviewing and evaluating the evidence—a common criticism of guidelines generally.[24,25] The role that evidence should have in guidelines for elective cosmetic surgery is, however, not straightforward. Evidence that is currently available is limited, and will remain incomplete because randomised controlled trials are impossible in this area. Research has focused on patients who have already been selected for surgery rather than on the wider group who are referred for possible surgery to whom the guidelines are applied. Some evidence is old and may not be relevant given current medical practice or cultural views. Finally, like most evidence that informs guidelines, it necessarily applies to 'average' rather than individual patients.[19,26]

Therefore, a broader view is needed about what evidence is relevant. Psychiatric caseness is more prevalent in patients referred to plastic surgeons for cosmetic reasons than in those referred with physical indications.[27] Such evidence could inform guidelines, when taken together with the view that patients with severe distress are unlikely to be helped by cosmetic surgery.[5,13,14] In the absence of more relevant evidence, findings from other areas of healthcare in which patients seek invasive

treatment in the absence of pathology might also be informative. For instance, the demand of some adult patients for physical treatment in the absence of disease can be a response to childhood abuse or adult emotional trauma.[28,29] Until more direct evidence is available, guidelines for cosmetic surgery might therefore emphasise the need to identify patients whose requests for surgery are linked to such events.

Guidelines should be complete in their coverage of cosmetic procedures

The only way in which the guidelines clearly influenced clinical practice was when they were sent to general practitioners in the attempt to deter them from referring cosmetic patients. However, because the guidelines neglected minor procedures that were commonly performed for cosmetic reasons (in particular the correction of minor skin lesions), they were partial in their coverage of elective cosmetic surgery. Indeed, few of the guidelines surveyed nationally defined cosmetic surgery, and most were concerned with arbitrary sets of procedures. Such guidelines might confuse, rather than educate, patients and their referrers who find cosmetic referrals accepted for some procedures but rejected for others.

Guidelines should match the complexity of clinical decision-making

To ensure public accountability, guidelines should make explicit all factors contributing to decisions.[20] However, surgeons' decisions depended on more wider-ranging factors than the anatomical and functional criteria that the guidelines specified. Surgeons' provision of minor cosmetic skin surgery reflected one: cost. In addition, in explaining their readiness to provide cosmetic surgery that revised the effects of previous trauma or disease, surgeons probably reflected a culturally-based view that individuals have a right to their 'natural' appearance, but not more. Similarly, surgeons also weighed the degree of abnormality and the patients' age and gender in their decisions, although these factors, too, were omitted from guidelines. Although others have argued that clinical guidelines should address only clinical criteria, leaving cost and other issues in the domain of separate service guidelines,[30] surgeons' decisions about elective cosmetic surgery necessarily involve judgments that are not purely clinical. Since these criteria, and their weighting in relation to clinical criteria, are explicit[20,31] they should be included in future clinical guidelines.

Guidelines should be fully specified

Although most of the surveyed guidelines provided for surgery in response to 'exceptional' need, this was rarely defined further except by reference to the need for psychological assessment. The guidelines studied in depth were typical: they did not define the psychological indications for surgery, the evidence that would demonstrate them, or when and how the surgeon should seek and use such evidence. We therefore observed variable decisions in the absence of physical indications, and referral for psychological assessment was often a way of delaying and deterring patients rather than a response to positive psychological indications.[32] Paradoxically, specifying the psychological route to surgery as 'exceptional' had rendered it open to variable interpretation and much more than exceptional use.

The lack of detail about the 'exceptional' route to surgery might be regarded simply as incomplete specification. However, it might also reflect a fundamental difficulty associated with clinical guidelines. In its current emphasis on guidelines and evidence-based medicine, as well as a patient-centred approach, modern medicine replays the tension that has existed throughout its history between the autonomy of clinicians to make their own clinical decisions and their obligation to follow rules about patient care.[26,33,34] The lack of specification in these guidelines might be seen as a way of resolving this tension by allowing clinical autonomy in relation to individual patients. Nevertheless, surgeons described the emotional burden of exercising this autonomy in the absence of authoritative and robust guidelines, in particular when denying surgery to frustrated and angry patients. The consequent subjectivity of decision-making also left surgeons vulnerable to insistent patients (or general practitioners) who presented in progressively more compelling or coercive ways until the surgeon offered surgery as the only effective closure.

Conclusions

Although guidelines have been developed about how to develop guidelines,[24,35–38] these have not been informed by analysis of clinicians' decision-making in practice. Instead, they emphasise procedures for selecting and using an evidence base and for ensuring agreement and validation by stakeholders. Certainly, guidelines for elective cosmetic surgery need to become visibly evidence-based and they need to command accep-

tance by surgeons, general practitioners, managers and the wider community. However, these procedures will, alone, be insufficient to reduce the divergence of clinical decisions from guidelines. Guidelines need to be more completely specified and more realistic in incorporating the value judgements and clinical assessments that necessarily inform surgeons' patient-centred decisions in this 'grey' area in which decisions cannot be determined solely by evidence.[39,40] Future guidelines might seek to structure, rather than replace, subjective clinical decisions so as to make explicit the clinical and nonclinical criteria that are involved. Development of such guidelines could be informed by the factors that we have shown which the surgeons had already taken into account. These include: cost of the procedure; degree of abnormality of appearance; importance of appearance to the patient's future quality of life; and whether the patient seeks to improve or to restore their appearance. Future guidelines could thereby help to ensure access to cosmetic surgery that is fair, reflecting patients' needs and surgical effectiveness as well as judgments about who merits limited resources.[23]

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