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Private-sector caesarean sections in perspective

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In a recent issue of the *Journal*,¹ views were expressed that our national private sector caesarean section (CS) rate is too high at over 60%, and government and/or funders are likely to intervene unless doctors begin to self-regulate by developing appropriate protocols and guidelines. This is not a new issue for South Africa or for medically insured populations around the world, and the sheer volume of literature on the subject of high CS rates indicates that it is unlikely one will reach consensus on a national target CS rate simply by means of a decree, whether issued by providers or regulators.

However, what is not clear from Chris Bateman's article¹ is whether the core issue is one of women's (and children's) health, of consumption of scarce financial resources, of concern about doctors being exposed to medico-legal risk, or of a

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patient's right to choose a health intervention that may not be medically necessary.

Is the concern around health or costs?

We contend that this is not primarily about maternal and child health or about exposure to unnecessary anaesthetic and operative risk, because if the country was truly concerned about such matters we would have acted long ago to reduce rates of cosmetic surgery. In general we accept a patient's right to undergo procedures such as breast reduction, augmentation and liposuction, but deal with them on the basis of the patient's willingness to self-fund, assuming of course that consent for surgery has always been fully informed and all risks have been explained. Bateman's article implies that in the case of CS the risks are not fully explained and that women might be unreasonably and unnecessarily influenced by their doctor's bias.¹ Overseas research does not consistently support this contention; in fact several recent studies^{2,3} show that the overwhelming majority of obstetricians favour vaginal delivery. However the data further indicate that most



obstetricians also respect their patients' right to choose how their babies will be delivered.^{4,5}

As already stated, South Africa respects patient choice in the context of medically unnecessary cosmetic procedures and we can probably also invoke patient choice in other areas where rates may be higher than necessary. For example, research abounds to demonstrate that large numbers of circumcisions, tympanostomy tube placements and wisdom teeth removals are not medically necessary. Certainly some have definite medical indications, but one should probably conclude that the others are performed as a result of patient or parental choice following informed consent (although in some of these examples the doctor's or dentist's bias will almost certainly influence the nature of the information and how a patient or parent will respond).

The medico-legal issue is a real one, but in truth the debate does not revolve around concern for the doctor. Certainly there is a chance of an obstetrician being sued for performing a CS that was not medically necessary, and informed consent and patient choice would no doubt be central evidentiary themes in any legal proceedings, but in practice, doctors are far more likely to be sued for *not* performing a CS, usually following delivery of a damaged infant. This aspect has prompted many to conclude that high CS rates are the result of obstetricians practising 'defensive medicine,' but even that contention has been negated by research.^{6,7}

What is the CS rate supposed to be and what can be done to influence it?

Logic dictates that nature cannot have devised a birth process that most often relies on unnatural surgical intervention to bring it to its natural conclusion, so based on first principles a rate in excess of 60% must be too high — but what is the appropriate rate?

There is already agreement around standard maternal and fetal indications for either elective or emergency CS, viz. fetal distress, cephalopelvic disproportion, placenta praevia, eclampsia, breech presentation, etc. Particularly relevant to South Africa is the importance of CS in the prevention of mother-to-child transmission of HIV⁸ and this would obviously increase the base rate of the procedure. Taking all factors into account, the Bateman article cites current CS rates for private and public sectors of 65% and 25% respectively, and implies that even our public-sector rates are high.¹ We submit that our public-sector rates might actually be lower than appropriate, not only because of the HIV pandemic and high rates of infection in antenatal clinic attendees, but also because fairly common public-sector resource issues (e.g. access to care and staff, theatre, equipment and linen shortages) might result in vaginal delivery of cases that would more appropriately be delivered operatively. In the end we are still left with a sense

that 65% is definitely too high, but getting to the 'right' number is not easy.

Over the years funders both locally and internationally have devised strategies to force CS rates down, mostly without success. An extremely aggressive approach was cited by Bateman, i.e. that of a UK health care fund that has apparently taken the decision to deny payment for all CSs because of the excess of cases that were not medically necessary.¹ At the other extreme, reference is made to a dominant local funder with a generous policy of universal cover for CS, whether medically necessary or not.¹ Other local experiences over the years include higher professional fees for vaginal delivery than for CS, and even cash rebates for women who elected to deliver at home. In terms of the latter examples, one can clearly picture the awkward position of a funder or obstetrician if challenged in court to defend such perverse incentives in the event of problems that resulted in fetal death or damage. Other strategies such as routine second opinion before approval for CS have also not been successful.⁹

An issue that will require specific attention in the medical schemes environment is that of CS rates in the emerging market, i.e. within low-cost schemes or options that are being developed for lower-income groups, typically those that have previously not been covered. The health care delivery model for this population usually focuses on clinic-based primary health care, with a nurse acting as 'gatekeeper'. Recent research within the Medscheme environment strongly suggests that where the model specifies antenatal care at the primary health care clinic but permits delivery at a private hospital (because the clinics typically do not provide maternity services), then delivery tends to be by a specialist and the CS rate is still fairly high at 46% (versus the 57% CS rate in higher-cost schemes or options).¹⁰ Low-cost medical scheme options or plans that offer antenatal care at clinics but restrict delivery to public-sector hospitals may well have lower CS rates, but here too the problem remains one of fragmented care. The Medscheme research also suggests that medical aid models that promote GP networks as the primary care providers have CS rates that are $\pm 10\%$ lower than for a population with immediate access to specialists.¹⁰ The implication here is that since GP networks are likely to become more prevalent in the future, the required service level agreements will most likely specifically target CS rates for reduction.

An innovative proposal from the BHF

Another model, one that currently enjoys favour with the Board of Healthcare Funders (BHF), would see delivery by a midwife as the prescribed minimum benefit (PMB) for normal pregnancy and birth.¹¹ The BHF subcommittee working on this has already recommended such an approach to the Council for Medical Schemes, its view being that midwife care in



pregnancy, birth and after birth offers many advantages including lower rates of CS. It is further recommended by BHF that, in addition to the midwife fees, schemes should cover two visits to an obstetrician during the pregnancy, and obviously cover the costs of specialist delivery where the midwife refers the patient. Patients would continue to have the freedom to choose their level of care, but the minimum benefit reimbursement for normal pregnancy and birth would be at the midwife level. The important principles to be noted here are the freedom to choose the level of care, and the patient being responsible for payment for care above that level unless referred by the midwife for care and/or delivery by a specialist.

While fully appreciating the rationale, we nevertheless doubt that the BHF model would succeed if implemented immediately. Firstly, as already stated by the BHF, in order to attract midwives into the business of private-sector deliveries one would have to pay them substantially more than their current fees. This would reduce the differential between midwife and doctor costs, and in turn reduce or eliminate the financial incentive for a patient to seek care from a midwife. More important, however, is the problem of applying data from midwife-based practices to the broader medical scheme population. Midwives currently practise in communities that are demographically different from the broader covered population (and that are less disposed towards CS) or, where the demographics appear to be similar, midwives serve a subgroup of women who differ attitudinally in terms of favouring natural childbirth, home delivery, etc., and it would be unrealistic to assume that a decree specifying midwife delivery as the PMB would override the demographic and attitudinal differences.

In its recommendations to the Council for Medical Schemes, the BHF also makes reference to data implying that if elective CS rates are cut then certain cases of prematurity would also disappear; however, is it not more likely that an alternative to elective CS would simply be a planned induction of labour? Yes, CS has been shown to be associated with anaesthetic risks, higher maternal mortality, future pregnancy risks (e.g. stillbirth, rupture of a scarred uterus), but planned induction may also be associated with preterm delivery and also have significant maternal consequences.¹²⁻¹⁵

Considering the arguments thus far one must reach the conclusion that the imperative is less about how to reduce the high CS rate and more about how the private sector should be authorising and/or paying for the medically unnecessary CSs that are done predominantly as a result of patient choice. Clearly the profession should have specific guidelines that define the circumstances under which elective and emergency CS should be performed, but in general, such guidelines are non-contentious, have existed for years and (given appropriate resources) are almost certainly already being followed by practitioners. Undoubtedly there is still debate about how to

deliver a woman who has had a previous CS, and while research fairly universally shows that a trial of labour is appropriate and that almost all who undergo trials will deliver vaginally,^{14,15} in South Africa this subgroup continues to have a high CS rate. The latter is most likely again heavily influenced by the patient, who mostly has had a positive previous experience, but provider bias is probably also a factor because while failed trial of labour is uncommon, the maternal and fetal consequences of such failure are often disastrous.^{14,15} As for guidelines for the CS that is not medically necessary, one can only say that this is a contradiction in terms; however the patient should always be fully informed as to the risks to herself and her baby.

Risk-sharing and the role of the Risk Equalisation Fund

Turning now to the shifting of the burden of payment from the funders to the patient in the case of CS performed for non-medical reasons, the BHF midwife model would do so by prescribing a delivery system with an inherently low CS rate, and establishing the midwife as the gatekeeper who would determine when a higher level of care should be fully funded. However, because of doubt that this model will universally find favour with women and/or their doctors, perhaps as a first step the proposal should be piloted by those medical schemes serving lower-income groups, typically through network-based 'gatekept' models. Meanwhile one should also look to the other stakeholders (patients, doctors, funders) to fulfil the role of gatekeeper. As confirmed by Discovery Health in Chris Bateman's article,¹ doctors tend not to be the ideal gatekeepers because when challenged they will almost invariably supply some medical reason for a CS that was performed. It is also probably safe to say that provider behaviour is unlikely to change without incentives (e.g. built into network contracts) or financial or professional penalties being applied by the funders or the regulators for 'errant' behaviour.¹⁶ The focus must therefore shift to the medical scheme members and/or the funders themselves. The former would probably respond fairly appropriately if scheme benefits were unequivocal, and member communications warned that in the event of a medically unnecessary CS they would be responsible for the difference between total costs of a vaginal versus an operative delivery. This simple step of making members aware of the possibility of having to self-fund a confinement will make them consider their choice carefully. Funders would also have a role here by establishing the anticipated mode of delivery when authorising the confinement, and following up with the expectant mother and/or her doctor when an elective CS is planned.

A forthcoming initiative that will almost certainly stimulate medical schemes and funders to review their CS rates is the Risk Equalisation Fund (REF). This has been under discussion



since 1994 and is moving towards implementation as part of the broader reform of social health insurance. The REF will begin as a 'shadow' exercise in 2005 (medical schemes submit data but no money changes hands), and it seems likely that full implementation will be in 2007. The link between CS and the REF lies in the fact that in this country we have some medical schemes with older members in whom chronic diseases of lifestyle and degeneration are the dominant cost drivers, and others with younger members in whom chronic disease rates are low but maternal and child health issues prevail. The latter fact and a uniquely South African phenomenon of (anti-) selective membership by women during the childbearing years, led to a recommendation by the expert panel that dealt with the mechanics of the REF to also equalise for maternity rates.¹⁷ However, the quantum that schemes receive will be based on a composite amount that incorporates the cost of both vaginal and operative delivery, and in calculating that amount the CS rate will definitely not be set at current levels of 60%. The intention of the Risk Equalisation Technical Advisory Panel making recommendations on the REF is to use a 50% CS weighting in the first year, i.e. the 2005 'shadow year,' and to reduce this proportion subject to annual audit and input from stakeholders. The REF will therefore create an incentive for schemes to reduce their funding levels for CS to at least that incorporated in the REF formula, and ideally to strive for even lower rates so as to maximise the value of the REF payment and channel funds into reserves, enhance other benefits, or reduce contributions. Identification of the patient-driven, medically unnecessary cases and introduction of co-payments (i.e. the cost difference between a vaginal and CS delivery) in such cases would also add 'efficiency' to the REF, as would performance-based contracts with networks of doctors.

Conclusions

Overall we believe that important industry-related pieces of the puzzle are falling into place and that any additional intervention from other bodies such as the Health Professions Council or the Department of Health would not only be unnecessary but also inappropriate. The BHF model introduces exactly the kind of thinking required to acknowledge and respect choice of level of care, but at a cost to

the patient; the REF will promote medical schemes' awareness of the financial implications and consequences of unmanaged CS rates, and development of networks and provider-funder contracts will result in mutually acceptable targets for procedures such as CS. However, maximum gain from these initiatives will depend on active communication strategies so that those who are most affected, i.e. the women themselves, are fully informed and not only able to appreciate the difference between CSs that are medically necessary and those that are not, but also that in the case of the latter they will likely be the ones to select and partially pay for the procedure and the right to exercise their choice.

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