

Submission to the Inquiry into the Costs of Healthcare by the Parliamentary Standing
Committee on Health and Ageing

Providing Cost Effective and Efficient Services for Breast Reduction and
Abdominoplasty Surgery in the Public Sector

Introduction

The demand for breast reduction surgery and abdominoplasty is very high. Currently, only a small number of these procedures are being performed and there are many obstacles to those seeking this surgery in the public sector. At present, there is no system of prioritizing these patients in any ordered way - so that people with minor problems are treated the same as those with major problems. There may also be some patients seeking surgery who are doing so to improve their appearance rather than because they have significant health problems.

It is this group's belief that the introduction of a quantitative measurement tool for patients seeking this surgery would allow fairer prioritization of patients. It may also be decided by the government that the patients who were given a low priority score by this method would be advised to seek treatment in the private sector. This would free up resources in the public hospitals for those who had **significant health problems** from their large breasts or overhanging abdomens and mean that those who really needed the surgery could actually receive it. This system would **reduce public hospital waiting lists and be fairer**. This issue is important Australia-wide and in fact is an unresolved problem in many other countries. If we can devise a solution to this issue, it may well be taken on board in other countries too.

Why do people seek breast reduction and abdominoplasty?

For those with very large breasts there are significant health problems. These include neck and back pain (often severe enough to require time off work), rashes under the bust and shoulder pain from brassiere straps. Women with large breasts also find it difficult to exercise and therefore have all the health problems associated with being unfit (cardiovascular risk etc.). Lastly women with very large breasts can experience psychosocial problems and workplace discrimination. Breast reduction surgery involves reducing the weight and size of the breasts and is extremely effective in relieving the health problems of these women. The surgery typically leaves long scars on the breasts.

Some women requesting breast reduction surgery simply do not like the appearance of the breasts and prefer slightly smaller breasts. This group would suggest that this is not a valid reason for surgery in the public sector.

Those who have lost large amounts of weight either through dieting and exercise or through surgical procedures to make the stomach smaller usually have a large overhang of skin on the abdomen. This again makes it difficult to exercise and hence maintain a healthy lifestyle. Abdominoplasty surgery involves cutting away the excess skin so that it is not overhanging. This surgery again leaves a long scar.

Many women have a more pendulous abdomen or have more fat on their abdomen than they would like and some of these women seek surgery although they do not have any significant health problems. This group would suggest that this is not a valid reason for surgery in the public sector.

What evidence is there that breast reduction and abdominoplasty improve health?

There are several studies that have already been performed that show patients' general health improves significantly after breast reduction and abdominoplasty (Klassen 1996) and (Shakespeare and Cole 1997). The scale used for measuring health outcomes in these patients is a generic scale which is used for many different health problems (SF36), hence showing that patients had significant improvements of multiple aspects of health rather than just the symptoms related to the breasts or abdomen.

The demand for breast reduction and abdominoplasty surgery

The demand for this surgery is not accurately reflected in waiting lists as many patients requesting this surgery do not get as far as being put on a waiting list.

In theory, the system should work as follows:

Patients attend their local medical officer for a referral to a plastic surgeon for consideration for surgery. The patient then receives an outpatient appointment to discuss this with a consultant surgeon. If the surgeon agrees that the patient is suitable for surgery they are then put on a waiting list as "non-urgent". The patient then undergoes surgery within some reasonable time frame.

Because public hospitals have limited resources to treat any non-urgent cases (even though they may result in great health benefit), only a few of these cases are performed each year. Typically, a patient in South Australia will wait between 2 and 10 years from the time they are put on a waiting list. This means that there is little point in seeing lots of these patients in outpatient clinics because the doctors seeing them know that they cannot perform the surgery for all these patients. They therefore put a limit on the number of patients to be seen in outpatients for assessment. Thus, when the local doctor refers a patient they have to wait before they are even assessed. Although this is a sensible efficiency in resources in terms of the specialists, it means that many of those waiting for assessment are "hidden" from the waiting list. I estimated that in South Australia alone there are approximately 500 patients waiting for assessment at the moment but this number is increasing all the time. Any one patient referred for assessment may have to wait 5 to 10 years just to get to their assessment appointment, and this is before they are put on a waiting list.

The follow on effect from this is that local doctors are advising patients that there is no point in seeking referral for breast reduction or abdominoplasty, hence hiding a further cohort of patients from the statistics of "demand".

This system is clearly not working.

How can we focus the service on those who really need it?

What this group proposes is to develop a measurement tool that could be used by GPs to prioritize patients. This would be a way of assessing breast size or abdominal laxity and comparing it to the measurements for a normal population. In concept this would be similar to the percentile chart used for child growth. Patients seeking surgery for breast reduction would have measurements of the bust size as a proportion of their body size and this measurement would be a percentile compared to a population of normal women. If the woman was above a certain percentile she

would be approved for referral to a specialist in a public hospital. If the woman was below this percentile she would not. Alternatively, all patients could still have referrals but they would be prioritized for an assessment appointment on the basis of their percentile score. This system is not intended to replace clinical judgement in terms of the indications for surgery - once patients attend for assessments the severity of their symptoms etc. would be important, but it could at least serve as a triage system, where currently there is none. This pre-operative quantitative evaluation of patients could also be reflected in the Medicare procedure codes.

How much does the surgery cost the government?

The manager in our department calculated the cost of a breast reduction in Flinders Medical Centre to be on average \$4584.48 and the cost of an abdominoplasty to be on average \$4615.47 (see attached calculation sheet). Costs vary depending on issues with individual patients.

How much does not having the surgery cost the government?

It is much more difficult to quantify the cost to society and the government of having people living with the problems of very large breasts and overhanging abdomens. Certainly patients who come to us state that they have had to take time off work due to back and neck pain. Women who have very large breasts also state that they allow themselves to become overweight on purpose so that their breasts are less conspicuous. Obesity and lack of fitness among these women have well recognised health consequences and hence a need for ongoing healthcare expenditure that we would suggest far outweighs the cost of a one off operation.

Details of our proposal

We would like to develop a formal quantitative analysis system (measurement tool) for women requesting breast reduction and abdominoplasty. This would involve anthropometric measuring techniques and validation of the method with a laser scanner. Patients' measurements would then be calculated as a proportion of their body size and placed on a comparative chart with data from a normal population.

Once we have developed the measurement method we would enroll patients in a study to look at their health pre and post operatively. We estimate that we would need 400 patients for this study, which would take approximately 3 years. All patients would have their measurements taken then fill in questionnaires pre and post-operatively looking at their general health and psychological health.

We would then look at the correlation between where the patient was in relation to the normal population in terms of their breast size or abdominal laxity and the improvement in their health. This should give us a point in the chart of the normal population above which we can say patients are likely to have a significant health benefit if they have surgery. This can then be used for future referrals as a triaging method for determining which patients should be given priority in the public system.

What do we need to carry out this proposal?

In order to carry out this work we will need an allocation of resources to cover set up costs and ongoing costs of the research itself (see attached budget). As well as the core research costs, the project would require sanctioned resources for carrying out the surgery i.e. specifically allocated beds, operating time etc. to carry out 200 breast reductions and 200 abdominoplasties over a three year period.

We are exploring the possibility of research grants but as this project is centred on efficiency of healthcare provision rather than a new surgical technique or medical innovation it falls outside the scope of many traditional medical research funding sources.

Summary

This group believes it may have a workable solution to a nationwide problem of prioritizing breast reduction and abdominoplasty patients in public hospitals. To test this a preliminary project needs to be performed, as outlined above. If this system of prioritization works the following agents will benefit:-

- the patients - as those who have the worst health problems will actually receive their surgery rather than be waiting on a waiting list for an indeterminate period
- the clinicians - who will be able to offer a better service within the public system and be able to structure waiting lists more fairly.
- the government - who may decide to use this system to revise medicare numbers and allocate lower priority patients to the private system, resulting in more resources and lower waiting lists in the public system.

**Budget for a 3 year research project on
correlation of percentile position and health outcome
in abdominoplasty and breast reduction surgery**

SET UP / CAPITAL ITEMS	unit cost	no. of units	Total
Stationary (pens, paper, envelopes, CDs, cartridges etc)			500.00
Office equipment- desk/chair/filing cabinet			1,500.00
Mobile phone	\$175.00	1	175.00
Pager	\$99.00	1	99.00
Anthropometric Training	\$80.00	2	160.00
Measuring tapes	\$3.00	3	9.00
Digital cameras- Sony Cybershot DSCT5	\$498.95	4	1,995.80
Hammamatsu Bodyline Laser Scanner+ freight	\$149,597.70	1	149,597.70
SF36 scoring licence	\$200.00	1	200.00
SF36 manuals + customs	\$512.00	1	512.00
SF36 scoring software + customs	\$1,185.60	1	1,185.60
Laptop- DELL Latitude D510	\$1,684.40	1	1,684.40
Data analysis program (approximate cost only)	\$7,000.00	1	7,000.00
Total Set up/Capital costs			164,618.50
ONGOING COSTS	cost per unit	no. of units	Total
Photocopying/printing	\$0.10	30000	3,000.00
Postage	\$0.55	1200	660.00
Phone/fax costs	\$0.50	500	250.00
Admin time- 0.1 FTE, 3 years with on costs	\$40,000.00	0.1	12,000.00
Research assistant time, 0.5FTE, 3 years, with on costs	\$60,000.00	0.5	90,000.00
Purchase of anthropometric data and consultancy per yr	\$5,000.00	3	15,000.00
Travel-staff, \$20/week for 150 weeks	\$20.00	150	3,000.00
Parking-staff	\$20.00	150	3,000.00
Reimbursement of participant costs- parking, travel	\$40.00	400	16,000.00
Final report binding/printing	\$5.00	100	500.00
Conference presentation related costs- regn, flights,accurr	\$750.00	4	3,000.00
Miscellaneous			1,000.00
Total Ongoing costs			147,410.00
TOTAL RESEARCH COSTS			312,028.50

The cost of a breast reduction at Flinders Medical Centre

THEATRE COSTS			
PROCEDURE TIME (hrs)	3.00 hrs		
SALARY & WAGES	FTE	Award Rate	Total
Theatre			
Surgeon	1.00	157.13	471.40
Anaesthetist	1.00	58.44	175.33
Clinical Nurse Consultant	1.00	30.84	92.52
Registered Nurse	2.00	24.46	146.76
Admin/Clerical	0.50	16.56	24.84
PSA	0.25	15.54	11.66
Recovery			
Registered Nurse	0.75	24.46	55.04
Oncosts	25%		244.39
Total Salary & Wages			1,221.93
GOODS & SERVICES			
Theatre Consumables (Attachment A)			464.41
Anaesthetic/Consumables (Attachment B)			190.76
CSSD			150.00
Total Goods & Services			805.17
Overheads	20%		405.42
FMC Service Fee	10%		243.25
TOTAL (excl. GST)			2,675.77
GST	10%		267.58
TOTAL (incl. GST)			2,943.35
WARD COSTS (based on 5E)			
LENGTH OF STAY (days)	3 days		
		Bed Day Cost	Total
Salary & Wages		232.00	696.00
Goods & Services		31.00	93.00
Overheads	25%		197.25
TOTAL (excl. GST)			986.25
GST	10%		98.63
TOTAL (incl. GST)			1,084.88
OUTPATIENT COSTS			
BASED ON FOUR VISITS			
Overheads, nursing & admin			264.12
Medical staff time			195.60
TOTAL (excl. GST)			459.72
GST	10%		45.97
TOTAL (incl. GST)			505.69
COST SUMMARY			
Theatre Costs			2,675.77
Ward Costs			986.25
Outpatient costs			505.69
TOTAL (excl. GST)			4,167.71
GST	10%		416.77
TOTAL COST (incl. GST)			4,584.48

The cost of an abdominoplasty at Flinders Medical Centre

THEATRE COSTS			
PROCEDURE TIME (hrs)	2.50 hrs		
SALARY & WAGES	FTE	Award Rate	Total
Theatre			
Surgeon	1.00	157.13	392.83
Anaesthetist	1.00	58.44	146.11
Clinical Nurse Consultant	1.00	30.84	77.10
Registered Nurse	2.00	24.46	122.30
Admin/Clerical	0.50	16.56	20.70
PSA	0.25	15.54	9.71
Recovery			
Registered Nurse	0.75	24.46	45.86
Oncosts	25%		203.65
Total Salary & Wages			1,018.27
GOODS & SERVICES			
Theatre Consumables (Attachment A)			440.35
Anaesthetic/Consumables (Attachment B)			190.76
CSSD			150.00
Total Goods & Services			781.11
Overheads	20%		359.88
FMC Service Fee	10%		215.93
TOTAL (excl. GST)			2,375.19
GST	10%		237.52
TOTAL (incl. GST)			2,612.70
WARD COSTS (based on 5E)			
LENGTH OF STAY (days)	4 days		
		Bed Day Cost	Total
Salary & Wages		232.00	928.00
Goods & Services		31.00	124.00
Overheads	25%		263.00
TOTAL (excl. GST)			1,315.00
GST	10%		131.50
TOTAL (incl. GST)			1,446.50
OUTPATIENT COSTS			
BASED ON FOUR VISITS			
Overheads, nursing & admin			264.12
Medical staff time			195.60
TOTAL (excl. GST)			459.72
GST	10%		45.97
TOTAL (incl. GST)			505.69
COST SUMMARY			
Theatre Costs			2,375.19
Ward Costs			1,315.00
Outpatient Costs			505.69
TOTAL (excl. GST)			4,195.88
GST	10%		419.59
TOTAL COST (incl. GST)			4,615.47