National Screening Unit
BreastScreen Aotearoa

BSA Medical Radiation Technologist Workforce Survey 2007

In December 2007, the annual BreastScreen Aotearoa (BSA) Medical Radiation Technologist (MRT) workforce survey was carried out by BSA Lead MRTs. The same survey was used for 2007 that was designed by a Lead BSA MRT in 2004.

The survey was designed to collect current, accurate demographic information on MRTs currently employed by Lead Providers and subcontractors, and gain their views on some key issues within the BSA Programme. In addition, demographic information was sought on MRTs who had previously been employed within BSA.

Each Lead MRT spoke directly with the BSA MRTs and filled in the relevant information to ensure a maximum number of responses and complete information. The Lead MRTs then collated the information, which was presented with no identifiable information for the National Screening Unit (NSU) to analyse and disseminate through the BSA MRT unidisciplinary group (MRT UDG).

The NSU gratefully acknowledges the work of the Lead MRTs in collating the information in the survey.

Survey Results

The statistical results are presented first, followed by qualitative information collected from the MRTs.

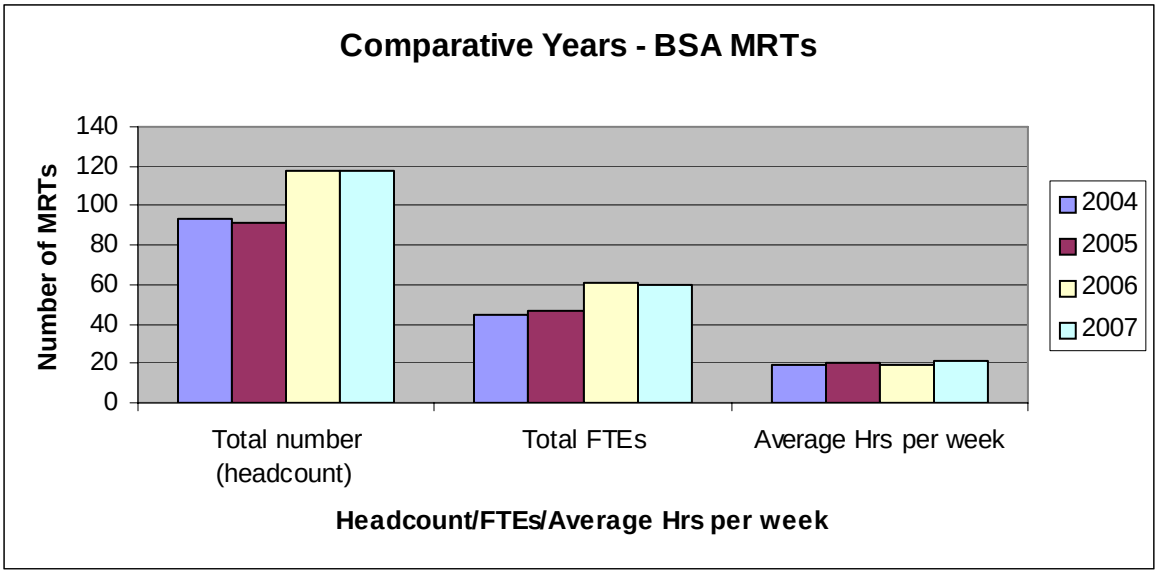
BSA MRT workforce numbers and hours worked

	Lead Providers	Subcontractors	Total
Number employed (headcount)	**67**	**47**	**114 headcount**
Total hours worked per week	**1696**	**700**	**2396 hours**
Average hours worked per week	**25.3**	**14.9**	**20.1 hours**
Average FTE using 40 hour standard week	**0.63**	**0.37**	**0.5 FTE**
Total FTEs	**42.4**	**17.5**	**59.9 FTEs**

Comparative Years Data

	Total number (headcount) employed in BSA	Total FTEs employed in BSA	Average FTE	Average hours per week
2004	**93**	**45**	**0.48**	**19**
2005	**91**	**47**	**0.52**	**20.6**
2006	**118**	**60.4**	**0.51**	**19.4**
2007	**114**	**59.9**	**0.53**	**21.0**

The number of MRTs (headcount) working within BSA has remained relatively stable. However, the number of hours worked by MRTs has increased slightly.

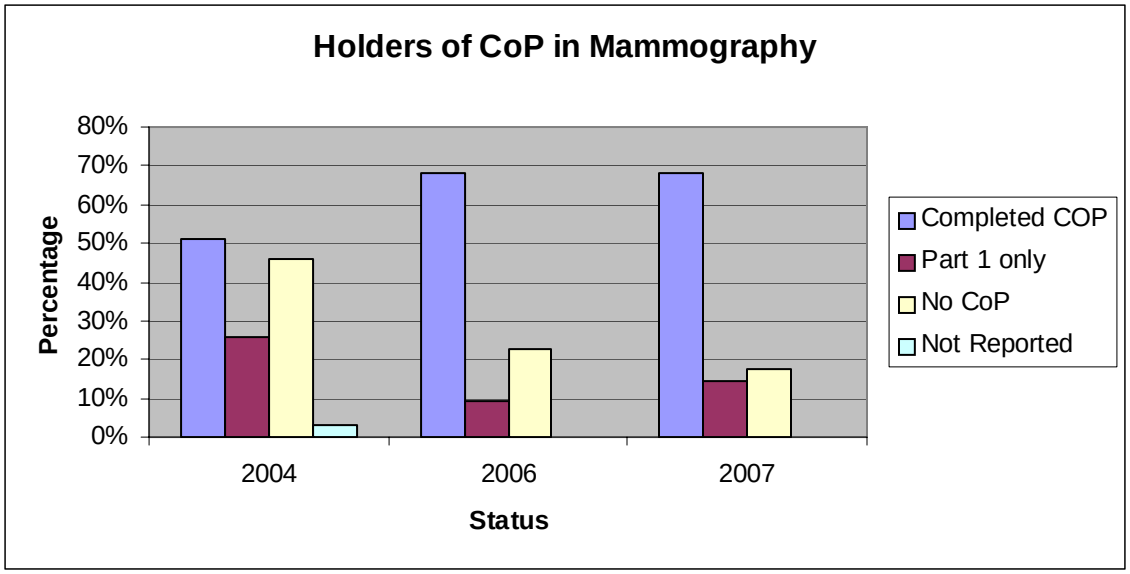


Holders of Certificate of Proficiency (CoP) in Mammography

	Lead Providers	Subcontractors	Total
Completed	**49**	**27**	**76**
Part 1 only completed	**8**	**8**	**16**
Not completed	**10**	**12**	**22**
% completed CoP	**66.6%**		
% Part 1 only	**14%**		
% No CoP	**19.3%**		

Comparing 2004 and 2006 CoP data to 2007

	% completed CoP	% Part 1 only	% No CoP	Not Reported
2004	**51%**	**26%**	**46%**	**3%**
2006	**68%**	**9.3%**	**22.9%**	**0**
2007	**66.6%**	**14%**	**19.3%**	**0%**



The comparative 2004 data shows there has been a significant increase in BSA MRTs with a full CoP in mammography.

In February 2005 the NSU commenced a project to reimburse BSA providers the cost of MRTs completing the CoP.

The MRT UDG has actively encouraged BSA MRTs to complete the CoP in order to comply with BSA National Policy & Quality Standards (NP&QS).

In 2007, the number of MRTs who did not comply with the NP&QS by having no CoP was 19% (n=22). This represents a slight drop from 2006, when 26% of the BSA MRT workforce did not have a CoP.

The number of MRTs with CoP (if we include those with Part 1) was 81% in 2007, the highest percentage recorded since the survey's inception.

There are no comparative results for 2005 as this question was not completed in the majority of surveys.

Age of BSA MRTs

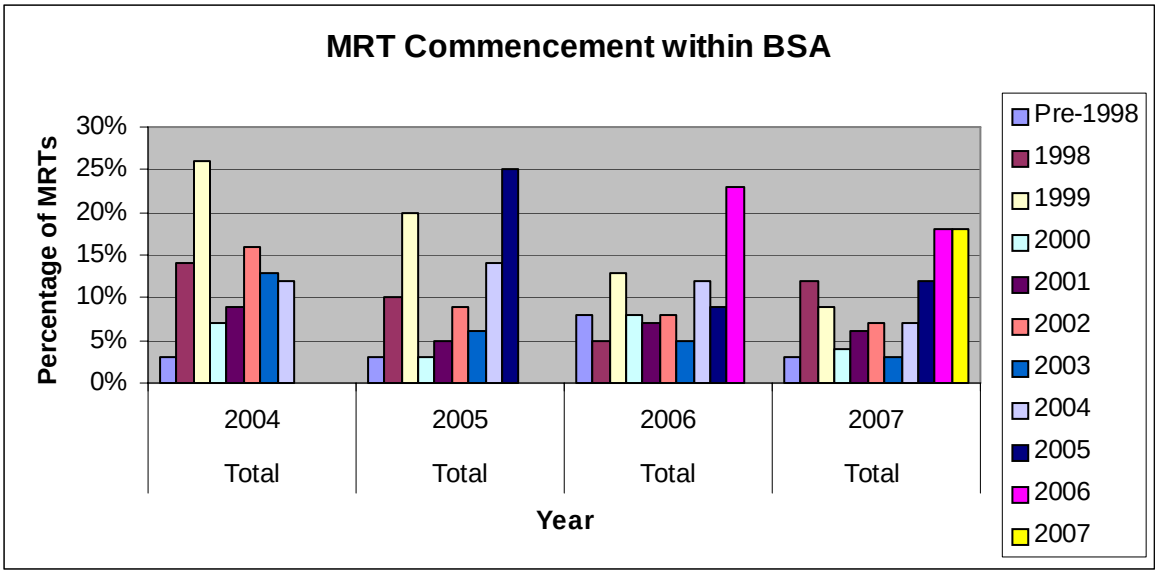
Age	Total 2007	Total 2006	2005	2004
20-30	12% (n=14)	10%	8%	11%
30-40	25% (n=28)	24%	28%	35% (note:30-45yrs)
40 +	63% (n=72)	66%	64%	54% (note: 45+ yrs)

The age of the BSA MRT workforce has remained comparatively stable over the years, with a slight decrease in the 40+ demographic in 2007; although this group still comprised the majority of the MRT workforce.

Year Started with BSA

Year	Total 2007	Total 2006	Total 2005	Total 2004
Pre-1998	3%	8%	3%	3%
1998	12%	5%	10%	14%
1999	9%	13%	20%	26%
2000	4%	8%	3%	7%
2001	6%	7%	5%	9%
2002	7%	8%	9%	16%
2003	3%	5%	6%	13%
2004	7%	12%	14%	12%
2005	12%	9%	25%	
2006	18%	23%	5%*	
2007	18%	3%*		

*****Because of the delay in the return of some surveys into January of the following year the numbers include MRTs who joined BSA within that following year.



Modality of Work

To identify if MRTs were also working in other modalities within medical imaging, MRTs were asked if they worked in mammography only, which included diagnostic services and breast screening.

	Yes	No	Total
Lead Provider	**42**	**22**	**64**
Subcontractor	**4**	**43**	**47**
	46	**65**	**111 (note: 3 no response)**

The majority (63%) of MRTs at Lead Provider sites worked only in mammography.

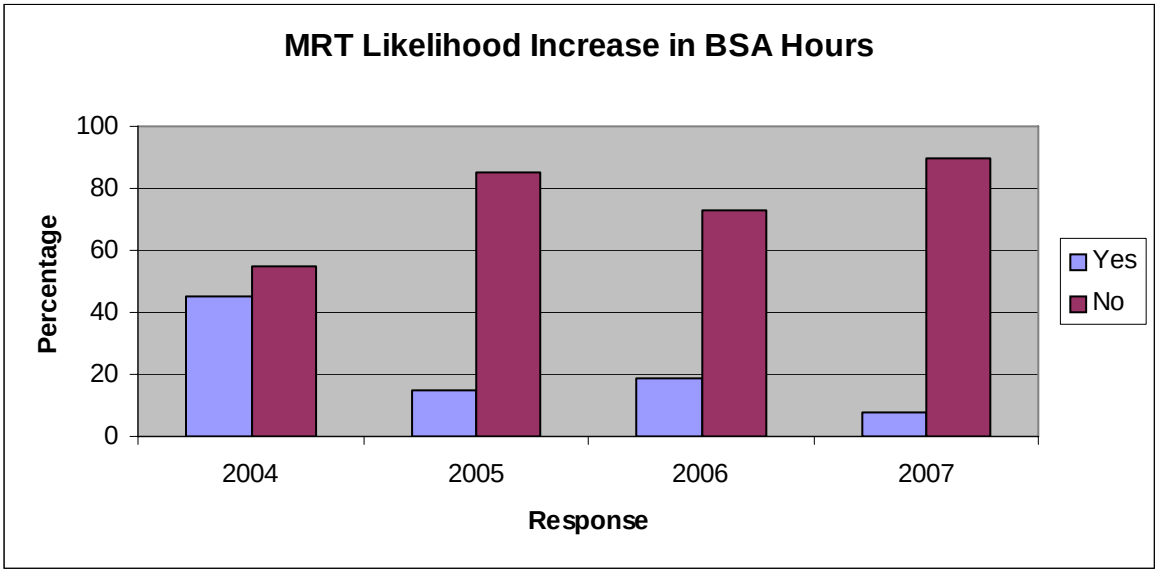
With the exception of four, MRTs (3.5%) at subcontracted sites indicated they worked in other modalities other than mammography.

MRTs at subcontracted sites generally work across modalities as breast screening can be a small part of the business for private facilities.

Increase of Hours within BSA

Provider	Yes	No	No Response
Lead Provider	**3%**	**60%**	**2%**
Subcontractor	**5%**	**30%**	
Total	**8%**	**90%**	

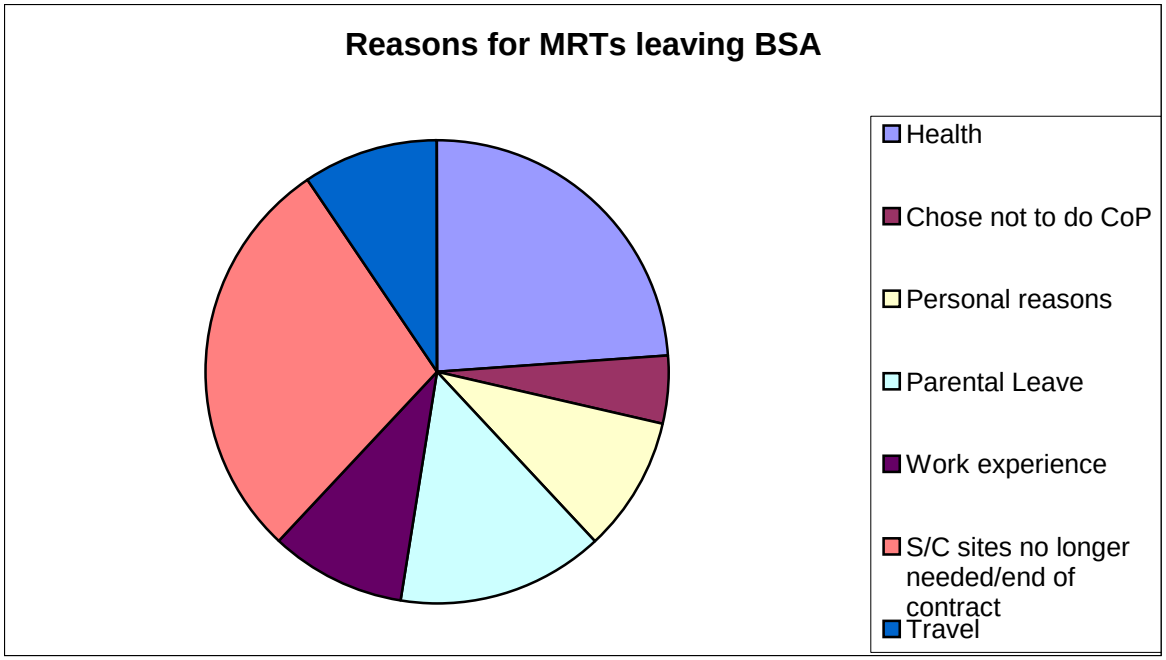
The vast majority of BSA MRTs indicated there was no likelihood of them increasing the number of hours they work within BSA.



These results are significantly different to previous years with more MRTs indicating they were unable to increase hours within BSA (73% of MRTs in 2006, 85% in 2005 and 55% in 2004).

MRTs that have left BSA

Year Commenced BSA	Number left in 2007	Reason for leaving
1990		
1991		
1998		
1999	1	MRI
2000		
2001	2	Injury, personal reasons
2003	1	Travel, work
2004	1	End of subcontracted (s/c) contracts
2005	7	injury, travel, end of s/c contract, Parental leave
2006	4	End of s/c contract, chose not to do CoP
2007	2	Parental leave, end of contract
Not stated	3	Personal reasons, more work experience, Parental leave
Total	21	



A total of 21 MRTs left BSA 1999 - 2007. Of these MRTs, none took up BSA positions at other breast screening provider sites.

Reasons cited for leaving BSA included travel, sickness, and change of modality–comparable to previous BSA MRT surveys.

The number of MRTs who have left, n=21, indicates an attrition rate of 18%. This has returned to the 2005 rate, after an exceptionally high attrition rate of 23% in 2006.

The BSA MRT survey in 2004 indicated eight MRTs left BSA due to injury. Those leaving BSA due to injury has declined to three (included in health portion of the above pie diagram) which may indicate providers are aware of potential repetitive strain injuries (RSI) for MRTs working in breast screening.

Just over a quarter of those leaving BSA (N=6) did so as they were no longer needed for screening mammography.

Attrition of Lead Provider MRTs versus those in subcontracted sites 1999-2007

Fifty-seven percent of MRTs leaving BSA 1999-2007 were from Lead Provider sites, with an average length of service with BSA of 3.5 years. These MRTs worked an average of 26 hours per week for BSA.

Forty percent of Lead Provider MRTs cited injury or burn-out as a reason for leaving BSA with 15% leaving respectively for parental leave or travel reasons.

Those leaving subcontracted sites worked on average 16 hours per week, and had worked for BSA for an average of 1.7 years.

Overall Comments

Reasons for staying in BSA

Comments by MRTs included:

- No on-call/shift work
- Flexibility in hours
- Make a difference to women's lives
- Challenges to meet NP&QS requirements
- Working in a team environment
- Remuneration
- Passionate about BSA Programme
- Like working in a well structured and organised system
- Enjoy multidisciplinary approach
- Working on mobile unit.

Issues within BSA

MRTs were asked what issues MRTs consider require attention to encourage them to stay in BSA.

A summary of the comments included:

- Remuneration
- Pay parity between DHBs – mobile allowances vary significantly
- Maintaining continuing professional development with no erosion of conditions
- More flexible hours
- Annual study days
- Difficulties for subcontracted mammographers to meet multi-disciplinary meetings and assessment requirements in the NP&QS
- RSI difficulties – need to combine mammography with other modalities
- Less time away on mobiles
- Recognition of skill and extra work required of BSA requirements
- Encourage more 'pooling' of mammographers across BSA and local hospitals for more variation
- Expand MRT role within BSA e.g. health promotion, assessment support for clients
- Acknowledgement for those who work in both diagnostic and screening mammography
- PGMI (perfect good moderate inadequate) standard for assessing MRT work.
- Maintaining minimum volume standards

Replacement of BSA MRTs

MRTs were asked how hard it has been to replace MRTs who have left BSA. In particular, MRTs were asked:

How MRTs were replaced in the past?

One centre had replaced all of their vacancies from within BSA. However, they were the exception to the rule, with all other providers indicating that they sourced their replacements from outside BSA.

How MRTs were replaced currently?

Comments ranged for 'very difficult' to 'almost impossible' to recruit replacements, indeed many indicated that they have unfilled vacancies. All have had to look outside their organisations, including outside New Zealand for replacement MRTs.

How they intended to replace MRTs in the future?

There was an indication that providers will attempt to recruit new graduates to BSA positions. Some sites still indicate they may need to recruit from overseas if unable to attract New Zealand MRTs to breast screening. Adequate staffing with MRTs is a critical issue and will remain so. It will be the one of the greatest factors in the sustainability of the BSA programme long-term.