



10 April 2008

The Director  
Diagnostic Imaging Section  
Mail Drop Point 107  
Department of Health and Ageing  
GPO Box 9848  
CANBERRA ACT 2601

Dr Peter McCombe  
Level 9  
Watkins Medical Centre  
225 Wickham Terrace  
Brisbane 4000  
Australia

T 07 38317034  
F 07 38326021

Dear Ms Korn,

### **Discussion Paper - Managing the Transition to Digital Imaging**

The Spine Society of Australia (SSA) is the peak professional body representing multidisciplinary spine surgeons (Orthopaedic and Neurosurgeon). The Society is affiliated with the Australian Orthopaedic Association (AOA).

The SSA has been concerned for some time about the provision of spinal radiological images. We have previously made representations to both the RANZCR and the Department of Health and Ageing. I enclose a position statement of the Society in this matter. The AOA, as our parent body has made a formal submission to you regarding the Discussion Paper, *Managing the Transition to Digital Imaging*. The SSA supports this submission; however we wish to make an extra submission on behalf of the special interest of spine surgeons. As we are in agreement with the AOA's position our response will be limited to those matters that have special relevance to spine surgery.

Spine surgeons are some of the highest users of radiological images. The planning of spinal surgery is a complex visuo-spacial exercise. In the past this has been performed with film based radiology. Most spine surgeons would have more light boxes in their consulting rooms than any other practicing surgeon. Spine surgeons often have to simultaneously view multiple examinations of multiple types (ie CT, MRI, Plain radiographs) from multiple providers. Our membership has been highly critical of the move by certain suppliers of radiological images to provide images on CD only. The main reasons are well described in the AOA submission. I also enclose a survey of our membership that has also been included in the AOA submission.

The Society is aware that there are cost saving that could be made in the transition to digital imaging. However these savings would only be made by the suppliers of radiological images. The net effect of any move to digital imaging is likely to *increase* costs to consumers of these images. As spine surgeons consume more images than most, spine surgeons stand to incur more extra costs than most other clinicians. The extra cost is due to both the cost of extra hardware and software and a time penalty cost due to the extra time required during a consultation to retrieve digital images from portable storage. It is conceivable that with a complex patient with multiple images on multiple CD's from multiple suppliers that the entire consultation could be taken up with loading images.

The SSA supports quality clinical outcomes. The SSA rejects the notion that the suppliers of radiological images should decide the clinical adequacy of images, particularly if they stand to gain by reduction in costs. The SSA is of the view that the only arbiter of the clinical adequacy of spinal images should be the relevant professional bodies representing spine surgeons. (The SSA, the AOA and the Neurosurgical Society of Australia (NSA)). The SSA does not support the current practice of provision of spinal radiology on CD. The SSA believes that this can produce images of inferior quality with lower

utility to the spine surgeon. The SSA is particularly concerned about the current practice of provision of digital radiology on CD that include poor quality or often absent scout views. A scout view is a reference image taken in a plane at right angles to a series of CT or MRI cuts that defines the anatomical position of each cut. This is more relevant in the spine than other areas as most vertebrae look alike. It is not possible to make either an accurate diagnosis, or avoid wrong level surgical interventions without adequate scout views. Indeed the current standard of the provision of scout views on film based radiology is poor. The SSA believes that the provision of adequate scout views should be mandatory – irrespective of whether films or digital images are involved.

The SSA's responses to each of the questions raised in the Discussion Paper are provided below.

*Q1. Are problems with the provision of digital images common place? If so, what are the issues compromising the quality of diagnostic imaging services in terms of treatment of patients, costs and repetition of examinations?*

Spine Surgeons commonly find problems with the provision of digital radiology.

These are:

- Poorer quality than film (44.9%).
- Time taken to load onto computer too long (79.5%)
- Unable to view as many images on CD as on Lightbox (69.4%)
- Poor quality included software (44.9%)
- Lack of availability of computer hardware (ie in operating theatre) (77.5%)
- No scout view or difficulty determining levels (67.3%)
- In the previous 6 month period to the survey 87% had been provided with images with no scout view at all.

In addition only 6.1% of our members were happy with images provided on CD only. There was moderate support for the provision of CD's as well as films.

Cost of provision of adequate hardware and software for consulting rooms, hospital wards and operating theatres is considerable

*Question 2: Should the legislation be clarified so that a copy of the images, relevant to the diagnostic report, be provided to requesting (and treating) medical practitioners for a Medicare benefit to be payable?*

The SSA strongly holds the view that either by voluntary code of conduct or by legislation that it should be mandatory that images be provided as well as a report. The SSA believes that the first step in setting an acceptable standard for digital images is to set a standard for film based images. In order for either of these processes to occur it is self evident that it be mandatory for an image to be provided.

*Question 3: Should the provision of 'diagnostic quality' images be a requirement for a Medicare benefit to be payable?*

As a minimum the quality, in terms of resolution, should be the same as those collected by the radiologist. For other matters (presentation, format, scout views) the quality and utility of the images should be of a standard that is acceptable to the relevant professional organization, after appropriate

negotiation and discussion with representatives of image providers. The SSA is available to help formulate guidelines for image quality and utility for spinal images.

*Question 4: Should digital images be provided in a format accessible and viewable by the requesting (or treating) medical practitioner? Should this be a requirement for a Medicare benefit to be payable?*

The SSA does not support the sole provision of images on CD. It should be a requirement that any future agreement to provide digital images on some other format be the subject of negotiation with relevant professional clinical organizations and that it be a requirement that images be provide in that agreed format in order for Medicare benefits to be paid

*Question 5: Should a Medicare benefit be payable contingent on the provision of additional copies of digital images to treating practitioners on referral within a reasonable time period?*

The SSA supports this.

*Question 6: What role, if any, should requesting and treating medical practitioners have in storage and transmission of copies of digital images?*

The SSA sees no role for the treating practitioner to store or transmit digital images.

*Question 7: Do you agree that storage of digital images by the diagnostic imaging service provider be a requirement for payment of a Medicare benefit? If so, for how long?*

The SSA believes that some form of long term (> 5 year storage would be required). It would seem appropriate that this figure be less if the patient was given an archival copy on CD or DVD at the time of service.

*Question 8: Under what clinical contexts should digital images be retained for longer than the proposed 18 months?*

The SSA believes that in *all* circumstances that spinal images be kept for 5 years in an easily accessible format.

*Question 9: What actions (and by whom) do you consider need to be taken to improve the ability of medical practitioners to view and use digital images?*

The major issue is infrastructure cost. Significant capital and recurrent expenditure would need to be made by surgeons and hospitals. In private medical practice this cost would need to be recouped in some way. In order for this cost not to be passed on wholly in fees some form of subsidy would be required. The source of this subsidy is unclear. The only apparent options would seem to be either government or radiology image providers (who stand to gain by reduction in costs).

## Conclusion

Digital image data printed onto laser copied film (as distinct from analogue film) must remain the predominant interim image data transfer means at present. At present it is difficult to see a digital technology that meets the needs of spine surgeons in private practice. The current provision of digital images on CD is not appropriate and is seen to represent substandard clinical care. It is not supported by the SSA as a sole means of image transfer, however the SSA does support the provision of digital images on CD as *well as* film. The ultimate test of whether a future digital technology should be introduced is whether it is *superior* or at least *equal* to film. In order to make that test it is necessary that some form of standard for the provision and quality of film be made. It is therefore essential that at this time that it be either mandated or agreed by a code of conduct that films be provided for Medicare benefits to be paid and that adequate standards for the quality of these films be agreed upon with referring doctors. The SSA agrees to hold itself ready for such consultation regarding spinal radiology.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter McCombe'. The signature is fluid and cursive, with the first name 'Peter' and last name 'McCombe' clearly distinguishable.

Dr Peter McCombe  
Vice President  
Spine Society Australia