**National Institute for Health and Clinical Excellence**

**793/1 –Transperineal template biopsy of the prostate**

**Consultation Comments table**

**IPAC date: Thursday 15 July 2010**

| Com. no. | Consultee name and organisation | Sec. no. | Comments | Response<br>Please respond to all comments |
|---|---|---|---|---|
| 1 | Consultee 1<br>NHS Professional | **1** | It is probably worth noting that Template Prostate Mapping has become the agreed reference test for the evaluation of novel methods of imaging the prostate. It is the only reference test that can be applied to the population at risk. Â Radical prostatectomy (RP) can only be applied to a small proportion of men and therefore incorporates significant work up bias. Â Moreover, RP suffers from processing (shrinkage and distortion) artifact and tissue loss (trim). | Thank you for your comment. Section 2.1.1 of the guidance indicates that this procedure is intended for patients who have had negative or inconclusive transrectal biopsy. |
| 2 | Consultee 2<br>Specialist Adviser | **1** | I agree that a trial comparing mapping transperineal biopsies to radical prostatectomies would be very helpful but given the lack of accuracy of all imaging modalities in localised prostate cancer, staging must be biopsy based. There is no trial comparing other types of mapping biopsy to radical prostatectomy either. There is evidence that standard diagnostic TRUS biopsy is not sufficiently accurate. | Thank you for your comment. The recommendation on research at section 1.4 is not intended to imply that template prostate biopsy mapping is being recommended in preference to other imaging modalities. |

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|---|---|---|---|---|
| 3 | Consultee 3<br>NHS Professional | **1.2** | This implies there is evidence and this does not show a role in active surveillance or prostate mapping - clearly this is not the case. Currently insufficient evidence has been published to show whether or not template biopsies have a role in active surveillance or prostate mapping, is less misleading. We, and others, have submitted for peer reviewed publication, our data on over 100 AS patients who have undergone template biopsy, showing 40% are either upgraded and or upstaged. This is a similar proportion of patients who fail active surveillance. The evidence from Klotz (J Clin Oncol 2010), the largest AS series in the world, is that in 450 men who undergo AS, 30% will be subsequently found to have higher risk disease and undergo radical therapy - in these men there is a biochemical failure rate of 50% - which is double the failure rate expected if these men had undergone radical treatment from the outset. Template biopsies identify these higher risk men more accurately than TRUS biopsies and earlier so they can be treated appropriately at an appropriate time - whilst others can be spared the unwanted effects of radical treatment. For mapping see Furuno and Crawford. | Thank you for your comment. Section 2.1.2 of the guidance will be changed. The study referenced by the consultee uses a watchful-waiting protocol rather than template mapping biopsy. |
| 4 | Consultee 4<br>Private Healthcare Organisation | **1.1, 1.2** | 1.1 Bupa agrees. 1.2 Bupa has not looked at it in this context/ | Thank you for your comment |

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| 5 | Consultee 1<br>NHS Professional | **2** | My only reservation to this is that increasingly imaging is used to decide how to biopsy the prostate. Â Outputs from MRI series demonstrate the extent to which TRUS guided biopsy has sytematically missed anterior and apical tumours. Â If such a tumour is suspected then it makes sense to use a template or at least a transperineal approach in the first instance as TRUS in these circumstances is less reliable. | Thank you for your comment. This falls outside the scope of this guidance. |
| 6 | Consultee 4<br>Private Healthcare Organisation | **2.1** | Agree | Thank you for your comment |
| 7 | Consultee 1<br>NHS Professional | **2.1** | Should you be saying something about its use together with pre-biopsy MRI scanning? | Thank you for your comment. This falls outside the scope of this guidance. |
| 8 | Consultee 2<br>Specialist Adviser | **2.2.1** | 2.2.1 is incorrect. Â The transperineal aproach also offers an alternative trajectory to sampling. One that might be considered superior for anterior and apically disposed tumours. These targeted biopsies might only incorporate one or two needle deployments. The terminology in the recommendation is imprecise. Â Templates are merely a way of directing needles. Their use should not be confused with the process of mapping. Mapping implies a systematic sampling of the prostate at a given sampling frame (ususally 5 or 10 mm) that allows one to rule in or rule out clinically important cancers of 0.2cc and 0.5cc with 95% accuracy. | Thank you for your comment. Section 2.2.1 of the guidance will be changed. |
| 9 | Consultee 2<br>Specialist Adviser | **2.2** | Audits in our unit showed no significant infections associated with transperineal biopsy. | Thank you for your comment. |

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| 10 | Consultee 3<br>NHS Professional | **2.2** | The catheter is not used to drain the bladder. The catheter is used to delineate the urethra on ultrasound - the bladder does not need to be emptied. | Thank you for your comment. Section 2.2.2 of the guidance will be changed. |
| 11 | Consultee 4<br>Private Healthcare Organisation | **2.2** | No comment, other than that it might be used as half of a two part test, following MRI. | Thank you for your comment. This falls outside the scope of this guidance. |
| 12 | Consultee 1<br>NHS Professional | **2.3** | The greater precision comes from reducing systematic error and capping the random error to pre-determined limits. | Thank you for your comment. |
| 13 | Consultee 2<br>Specialist Adviser | **2.3** | Agree with these comments but comparative trials have not been well constructed and are of limited value in this area. | Thank you for your comment. Section 1.4 of the guidance highlights where additional research might be useful. |
| 14 | Consultee 1<br>NHS Professional | **2.4** | Recent data from Canada has shown a 4 fold increase in serious septic complications associated with TRUS biopsy, due to multi-resistant e. coli. Biopsy through the perineum virtually abolishes this risk. | Thank you for your comment. |
| 15 | Consultee 2<br>Specialist Adviser | **2.4** | These findings are similar to clinical experience | Thank you for your comment. |
| 16 | Consultee 1<br>NHS Professional | **2.5** | It is possibly in AS that the greatest benefit may be derived. Â Much of failure in AS is agreed to be due to a re-classification error that occurs when TRUS biopsy is re-applied. Â Some AS protocols (Johns Hopkins) advocate TRUS biopsy every year. This intensity of sampling is, in part, a clinician response to the poor performance of the test. | Thank you for your comment. This falls outside the scope of this guidance. |

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| 17 | Consultee 2<br>Specialist Adviser | **2.5** | The number of biopsies is dependent on prostate volume and one would expect variation. The NICE prostate cancer guidelines recommend the use of prostate biopsy in active monitoring but do not specify biopsy type. The original practice of prostate biopsy in active surveillance was popularised by Klotz, L et al in Toronto. It is likely that a mapping biopsy will detect considerable numbers of under-staged patients from TRUS biopsy who would have undergone active surveillance on original TRUS biopsy but who have considerable and extensive cancer on transperineal mapping.We have evidence for this from a comparative trial between saturation biopsy and transperineal biopsy and this was presented at the EAU in Barcelona recently. It is expected that this will be published later this year. | Thank you for your comment. Sections 2.5 and 2.3.6 of the guidance will be changed. |
| 18 | Consultee 1<br>NHS Professional | **general** | It is probably worth noting that Template Prostate Mapping has become the agreed reference test for the evaluation of novel methods of imaging the prostate. It is the only reference test that can be applied to the population at risk. Â Radical prostatectomy (RP) can only be applied to a small proportion of men and therefore incorporates significant work up bias. Â Moreover, RP suffers from processing (shrinkage and distortion) artifact and tissue loss (trim). | Thank you for your comment. This falls outside the scope of this guidance. |
| 19 | Consultee 2<br>Specialist Adviser | **general** | I am a Proctor for Galil Medical and teach cryosurgery to Urologists. I am also Chairman of the European Group, EUCAP, which runs a European audit database for cryosurgery and directs research in this area and is part of the EAU. | Thank you for your comment |

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| 20 | Consultee 3<br>NHS Professional | **general** | I think the phrase NICE could find no evidence to support template biopsies for active surveillance and prostate mapping suggests there is evidence and this evidence does not show a role - clearly this is not the case. This is a new technique and trials have yet to be published. We and others have submitted for publication very promising data to support their role in active surveillance patients. This shows that 40% of patients are upstaged and/or upgraded by template biopsies - which is the same proportion who fail AS regimes where template biopsies are not undertaken. Others have published mapping data showing very accurate concordance with radical prostatectomy specimens (Furuno and Crawford). Perhaps Insufficient evidence has been published, so far, to show whether template biopsies have a role in active surveillanceis less misleading. | Thank you for your comment. The Guidance aims to convey that data on these two specific uses for template mapping biopsy were not found. |