INTRODUCTION OF PET INTO THE AUSTRALIAN HEALTH CARE SYSTEM

by Richard King and John Hastings
on behalf of
Medical Services Advisory Committee funded by
Department of Health and Ageing
Commonwealth of Australia

PET IN AUSTRALIA

- PET prior to 1999 – two centres
- Rebate fee Aus$2,300
- In 1999 two other providers applied for benefits
FIRST 10 YEAR INDICATIONS FOR PET
- 10% Myocardial
- 40% Neurology
- 50% Oncology

CURRENT INDICATIONS
- 1% Myocardial
- 9% Neurology
- 90% Oncology
1999 ....

- Minister refers PET to Inquiry and Technology Assessment by MSAC
- MSAC (Medical Services Advisory Committee of Federal Department of Health
- Remit is to recommend to the Minister on new technology based on HTA (Health Technology Assessment) and evidence of safety, efficacy and cost effectiveness

MINISTERIAL ADVISORY COMMITTEE COMPRISED OF INDEPENDENT EXPERTS IN:

- Radiology
- Nuclear Medicine
- Administration
- Oncology
- Internal Medicine
MSAC (MEDICAL SERVICES ADVISORY COMMITTEE) COMPRISED

- Independent Chairman (from MSAC)
- Representatives from
  - Oncology
  - Cardiology
  - Neurology
  - Four PET providers

MINISTERIAL ADVISORY COMMITTEE RECOMMENDATIONS

- 1- 7 PET sites in Australia
- PET rate rebate to be at $800
- MSAC recommendations accepted
- Only full ring PETS to be used
- Data collection mandatory
1. MSAC REVIEW (Initial)

HTA’s were done on:
1. Complex Epilepsy
2. Myocardial disease
3. Lymphoma
4. Non-small cell carcinoma of the lung
5. Carcinoma of colon
6. Melanoma
7. Glioma

2. MSAC REVIEW (Subsequent)

1. CARCINOMA OF THE CERVIX
2. SARCOMA
3. CARCINOMA OF OESOPHAGUS
4. CARCINOMA OF STOMACH
5. HEAD & NECK CARCINOMA
6. METASTATIC SQUAMOUS CELL CARCINOMA
7. OVARIAN CARCINOMA
MSAC REVIEW FOUND

- PET SAFE AND EFFECTIVE BUT NO EVIDENCE FOR MANAGEMENT CHANGE

MSAC REVIEW RECOMMENDED THAT

- FUNDING BE UNDER AN INTERIM DETERMINATION
- THIS DOES NOT PUT IT ON TO THE MEDICARE SCHEDULE BUT PLACES A REQUIREMENT FOR DATA COLLECTION
- AUSTRALIA NEW ZEALAND SOCIETY OF PHYSICIANS IN NUCLEAR MEDICINE AGREED TO BE THE CENTRE FOR DATA COLLECTION
DATA COLLECTION

- Demographic for all patients
- Various Protocols were developed for each indication to show management change by PET
- The time frame was 3 years
Clinical Indication

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<th>Primary Site of Disease</th>
<th>Histology/pathology</th>
<th>Notes</th>
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- 1. Diagnosis
- 2. Staging
- 3. Re-staging
- 4. Therapeutic Monitoring
- 5. Other

Recent correlative imaging

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<th>CT</th>
<th>Date:</th>
<th>Provider/where:</th>
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<th>MRI</th>
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Please ensure patient can bring films with them for their appointment.

Staging/Diagnosis

- UTEK - Whole body FDG PET study performed for the primary staging of primary or metastatic disease for staging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
- IGUS - Whole body FDG PET study performed for the primary staging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
- LUM - Whole body FDG PET study performed for the primary staging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
- TEPK - Whole body FDG PET study performed for the primary staging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
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Response

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Restaging/Surveillance

- IGUS - Whole body FDG PET study performed for the restaging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
- TEPK - Whole body FDG PET study performed for the restaging of pelvic soft tissue sarcoma or rectal adenocarcinoma.
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1. 12 Protocols developed
2. Carcinoma of the cervix and myocardial infarction delayed because of not enough patient numbers
3. Non small cell carcinoma lung only required demographic data as local data showed PET was effective in changing management
OUTCOME ..... (contd)

4. Complex Epilepsy unresponsive to medical treatment was being reviewed

5. Data collection will continue till 2006 when a full review of the local and international literature will take place to see whether PET will be placed on a more open basis