

Activities of the Pharmacoepidemiology and Pharmaceutical Policy Program



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To better understand access to, use and impact of cancer medicines in real world clinical practice



The Program

- Health Services Research
 - Quantifying resource utilisation and cancer treatment costs
- Prescribing Practice
 - Uptake of evidence in clinical practice and physician behaviour change
 - Computerised clinical decision support
- Medicine Use Outside Clinical Trials
 - Classic pharmacoepidemiology



Challenges

- Exposure data (medicines use) held by the Commonwealth
- Outcomes data (morbidity and mortality) held by the states
- Cancer notifications held by the states



Approaches

- Department of Veterans' Affairs
 - The exception
- Commonwealth
 - Medicare Australia (FOD now available)
 - DoHA: 'data linkage studies'
- Cohort studies
 - individual consent for cross-jurisdictional linkage



Use, effectiveness and safety of cancer medicines in a subset of elderly Australians

	NSW Data Sources			DVA Data Sources		
	CCR	APDC	RBDM	Client Data	R/PBS	Treatment Accounts
Cancer diagnosis	✓	✓				
Hospitalisations		✓				✓
Prescribed medicine use		✓*			✓	
Medical services use		✓				✓
DOD	✓	✓*	✓	✓		
COD	✓*	✓*	✓			

DOD=Date of Death; COD=Cause of Death; * Absence or presence of chemotherapy; † if death occurred in hospital; ‡ cancer-related versus no cancer related death only



Herceptin (trastuzumab) Program

- **Observational study (n=1500)**
 - Chemotherapeutic partners (off-label use)
 - Duration of therapy and overall survival
 - Risk factor management
 - Wastage (volume and cost) based on administration schedules
- **Significance**
 - Regulatory approval
 - International studies (registHER)
 - Australian studies
 - Adjuvant setting



Cohort Studies

- **Elements of Cancer Care**
 - Chemotherapy patients at 11 NSW hospitals
 - Breast, CRC and NSCLC
 - Public and private
 - Metropolitan, regional and rural
- **Comprehensive Data**
 - Primary and secondary (cross-jurisdictional)
- **Comprehensive Analyses**
 - Validation!!



The future

- **Moving beyond the cottage industry**
 - System change
- **The new frontier**
 - Pharmacogenetic epidemiology
 - New and emerging targeted therapies
 - Biological specimens in clinical trials and population studies
 - Australia could lead the way.....


