

Non-melanoma Skin Cancer

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Skin Cancer

Non Melanoma Skin Cancer:

Squamous Cell Carcinoma and Basal Cell Carcinoma

Very high and underestimated number of Non Melanoma Skin Cancers

- 10 times more common than Malignant Melanoma
- Often arise in surgically difficult anatomical sites
- Associated with high morbidity and can impact on quality of life
- Metachronous tumours
- Burden on the NHS

Skin cancer registration in the UK – a baseline assessment

Methodology

- A proforma was developed focusing on the registration methodology for Malignant Melanoma (MM), Squamous Cell Carcinoma and Basal Cell Carcinoma (BCC) and in-situ non Melanoma Skin Cancer (NMSC). It covered registry specific information, understanding of UKACR rules, and completeness of data captured via Royal College of Pathologist proformas, and completeness of staging.
- All cancer registries were invited to complete this online survey using Survey Monkey (a web-based survey tool).

Results

- Data are received via 3-7 methods , with an average of 4.5 methods per registry. **Pathology and death certificates are the main data sources.**
- Nearly all cancer registries record **staging information** for MM but **few record it for SCC and BCC**. Some registries receive staging information but do not enter it on their data computer systems.
- Of the registries who replied, **5 record more than the first SCC, 3 more than the first BCC** and 4 more than the first in situ NMSC. In addition the rules for NMSC registration differs across all the registries.
- The **main barrier** to the registration of additional SCC, BCC or in situ NMSC per patient, **is the cost of the process**. It is believed that an efficient automated electronic system would enable registries to make better use of data collected in Trusts.

Skin cancer: staging information held on cancer registry databases

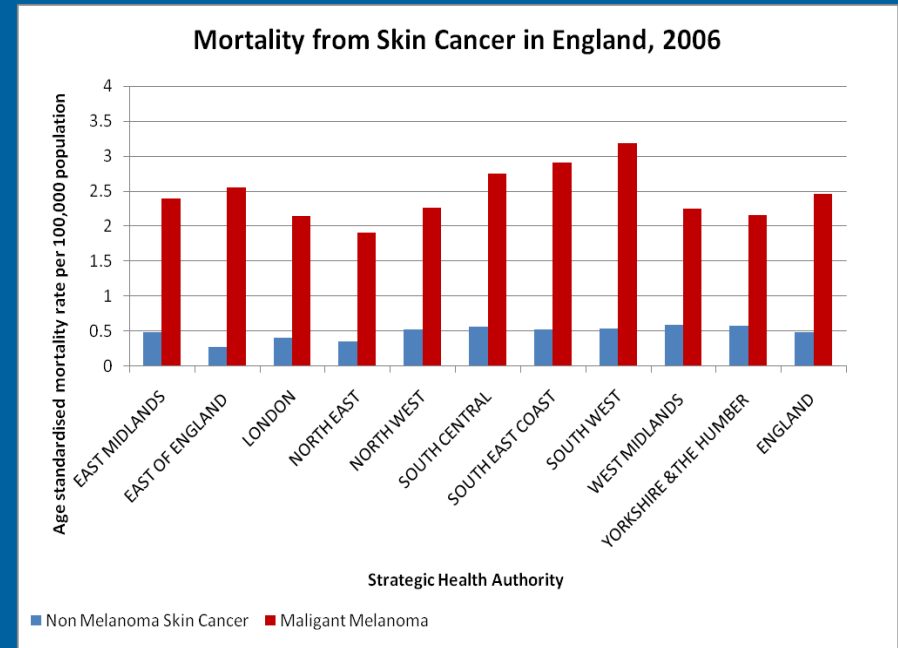
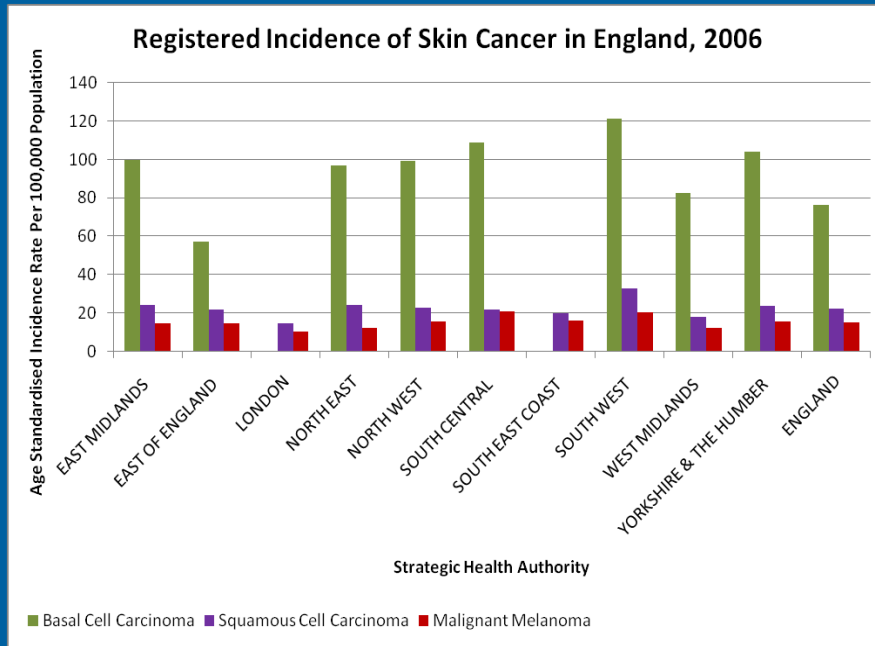
| | BCC | SCC | | MM | | |
|----------|------------------|------------------|------------------|------------------------------------|------------------------------------|------------------------------------|
| | TNMpT | TNMpT | Clark Level | TNMpT | Clark | Breslow |
| NYCRIS | Not held | Not held | Not held | Not held | Complete or near complete coverage | Complete or near complete coverage |
| Trent | Not held | Not held | Not held | Not held | Not held | Complete or near complete coverage |
| ECRIC | Not held | Not held | Not held | Not held | Complete or near complete coverage | Complete or near complete coverage |
| Thames | Not held | Partial coverage | Partial coverage | Partial coverage | Partial coverage | Partial coverage |
| OCIU | Not held | Not held | Not held | Not held | Not held | Complete or near complete coverage |
| SWCIS | Partial coverage | Not held | Partial coverage | Complete or near complete coverage | Complete or near complete coverage | Complete or near complete coverage |
| WMCIU | Not held | Partial coverage | Partial coverage | Not held | Complete or near complete coverage | Complete or near complete coverage |
| NWCIS | No information | No information | No information | No information | Partial coverage | Partial coverage |
| WCISU | Not held | Not held | Not held | Not held | Partial coverage | Partial coverage |
| Scotland | Not held | Not held | Not held | Not held | Complete or near complete coverage | Complete or near complete coverage |
| NICR | Not held | Not held | Not held | Complete or near complete coverage | Complete or near complete coverage | Complete or near complete coverage |

- Not held
- Partial coverage
- Complete or near complete coverage
- No information

Conclusion

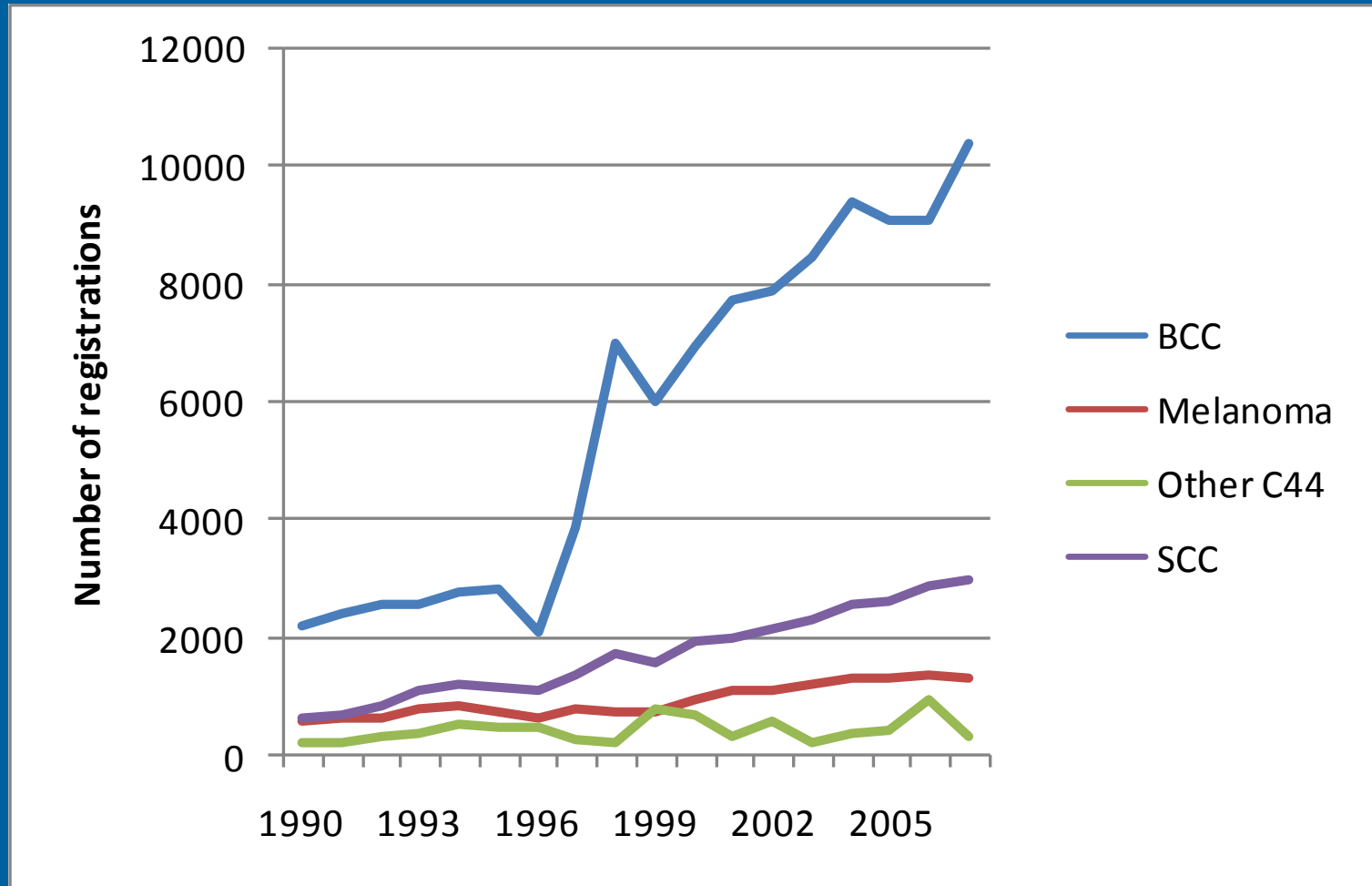
- This research highlights the need to develop a standard format across the cancer registries for receiving all skin cancer information, and priority should be given to the consistent recording of diagnosis data.
- The quality of skin cancer data would improve with a well defined and mandated pathology data set, with pre-coded reports automatically sent to cancer registries.
- Improvements in registration would lead to improvements in our understanding of the most common cancer in the UK and could play a monitoring role in the quality of care received by patients.

Skin cancer incidence and mortality in England



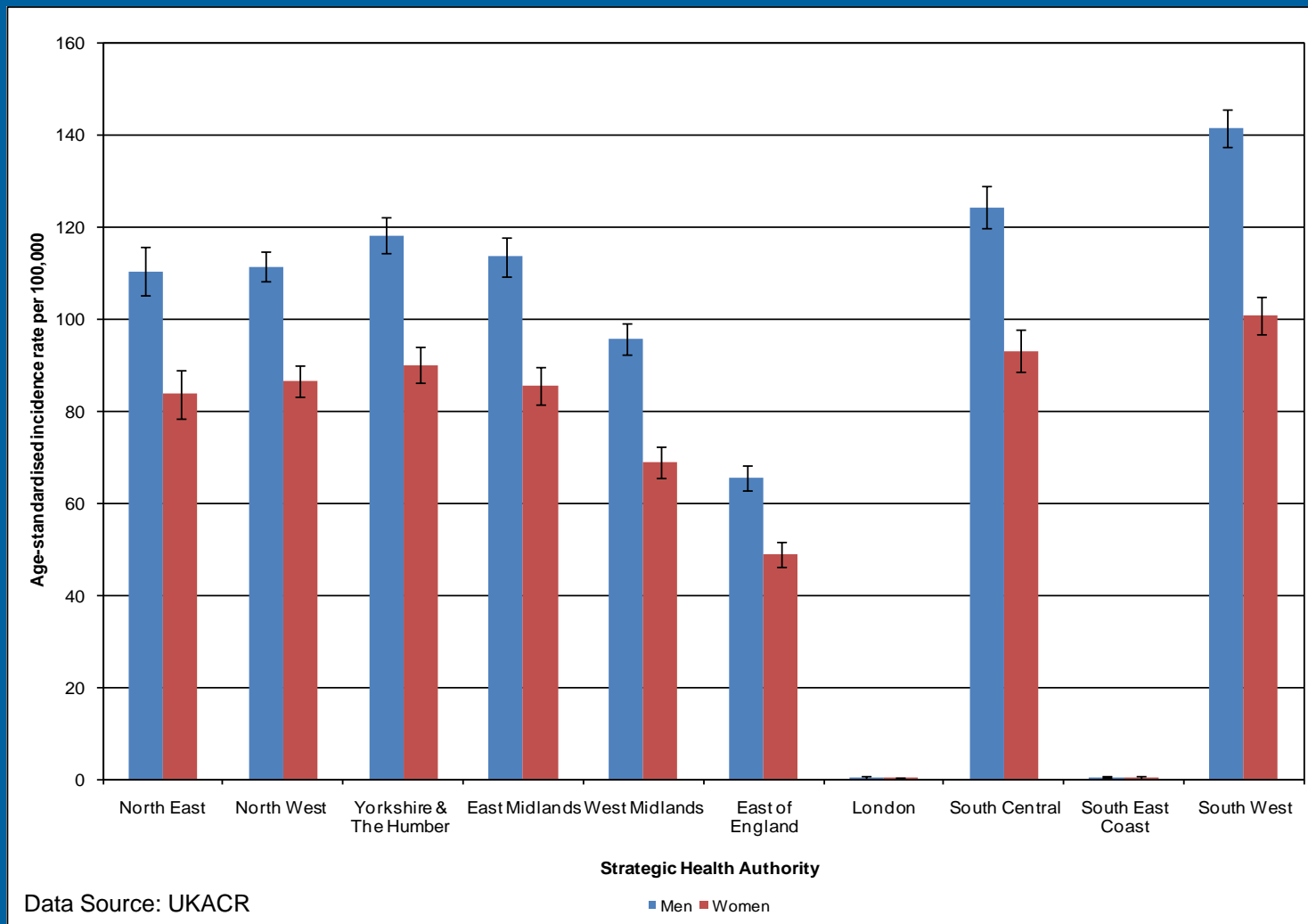
Data from the UK Association of Cancer Registries national database for registered incidence and from the Clinical and Health Outcomes Knowledge Base web site (<http://www.nchod.nhs.uk>) for mortality are shown for 2006 by Strategic Health Authority

Recorded Skin Cancer in the South West



- Despite an underestimate, the incidence of Basal Cell Carcinomas in England are still 1.8 times more common than lung
- (UKACR database (based on total number of BCC registered in England)/National Cancer Intelligence Service) 2006

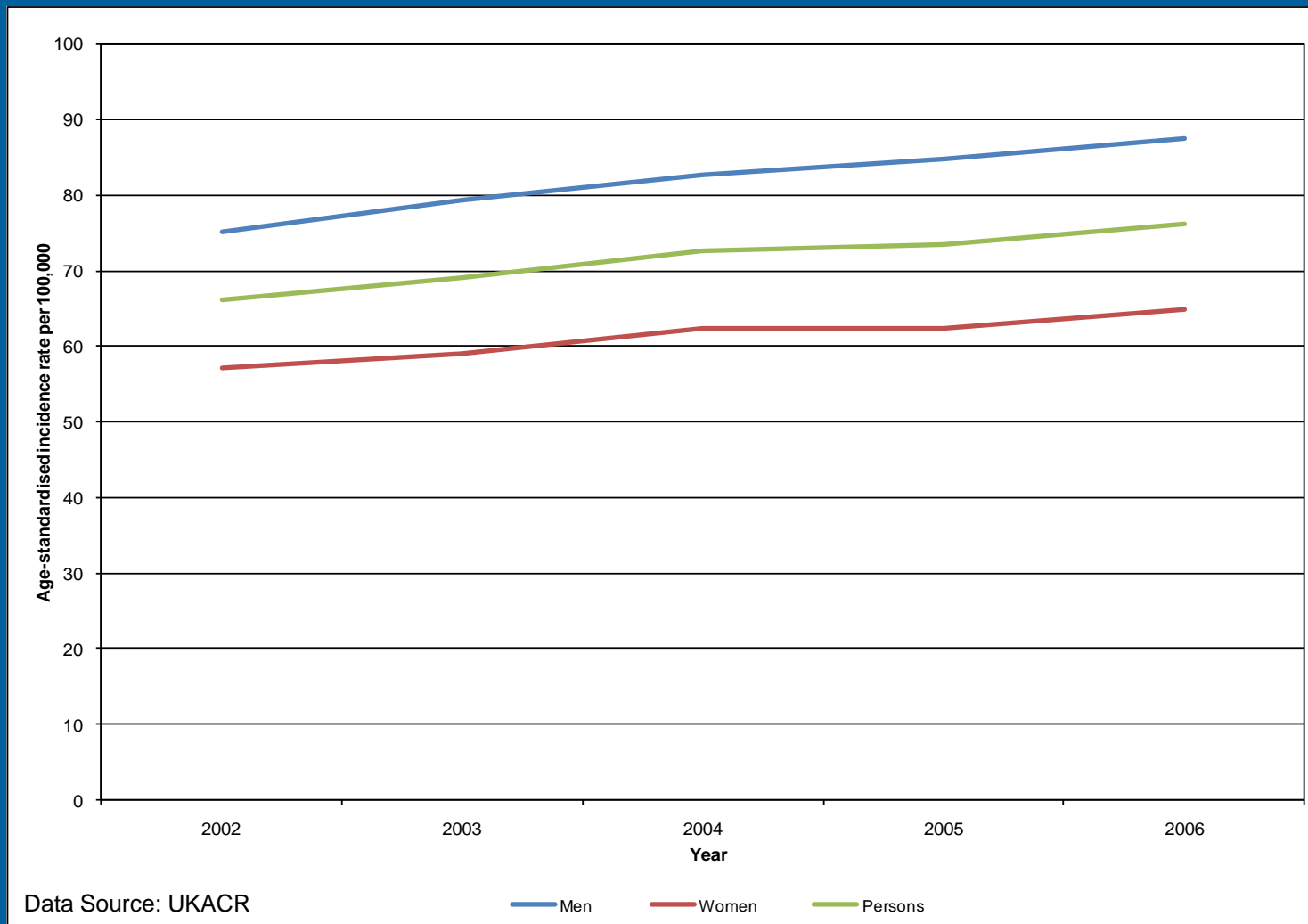
BCC Incidence (ASR per 100,000), by sex, by SHA 2006



BCC Incidence (ASR per 100,000), by sex, by SHA 2006

- In all SHAs, apart from London and South East Coast, men have a higher incidence rate than women
- Overall England ASR of 76 per 100,000 persons is distorted by minimal registration in London and South East Coast
- Average ASR of other SHAs is 93 per 100,000 persons, which could be a better average for comparison
- Highest rate is in South West, 121 per 100,000 persons
- Lowest rate in East of England, 57 per 100,000 persons (excluding London and South East Coast)

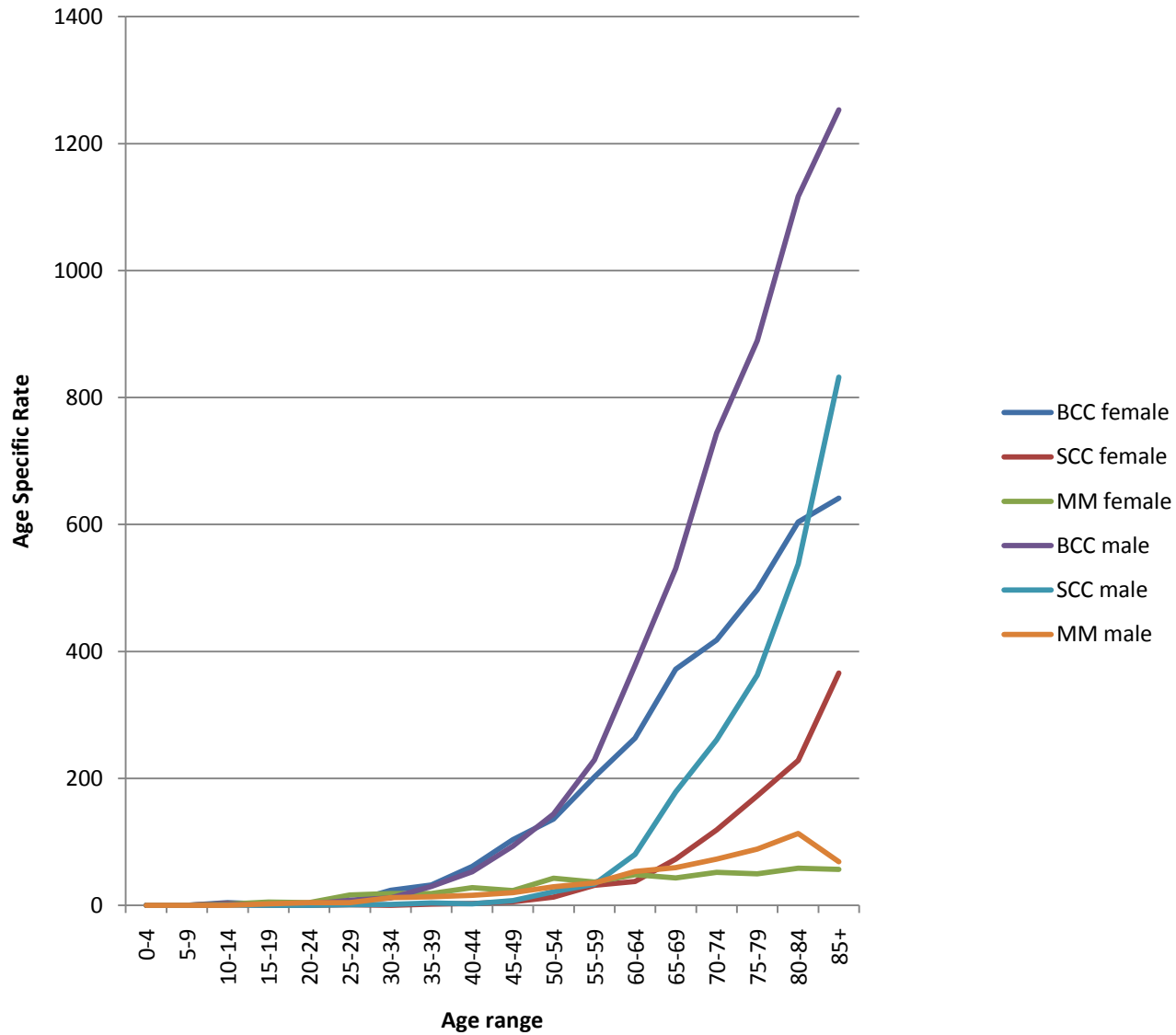
BCC Incidence (ASR per 100,000), by sex, England 2002-06 trend



BCC Incidence (ASR per 100,000), by sex, England 2002-06 trend

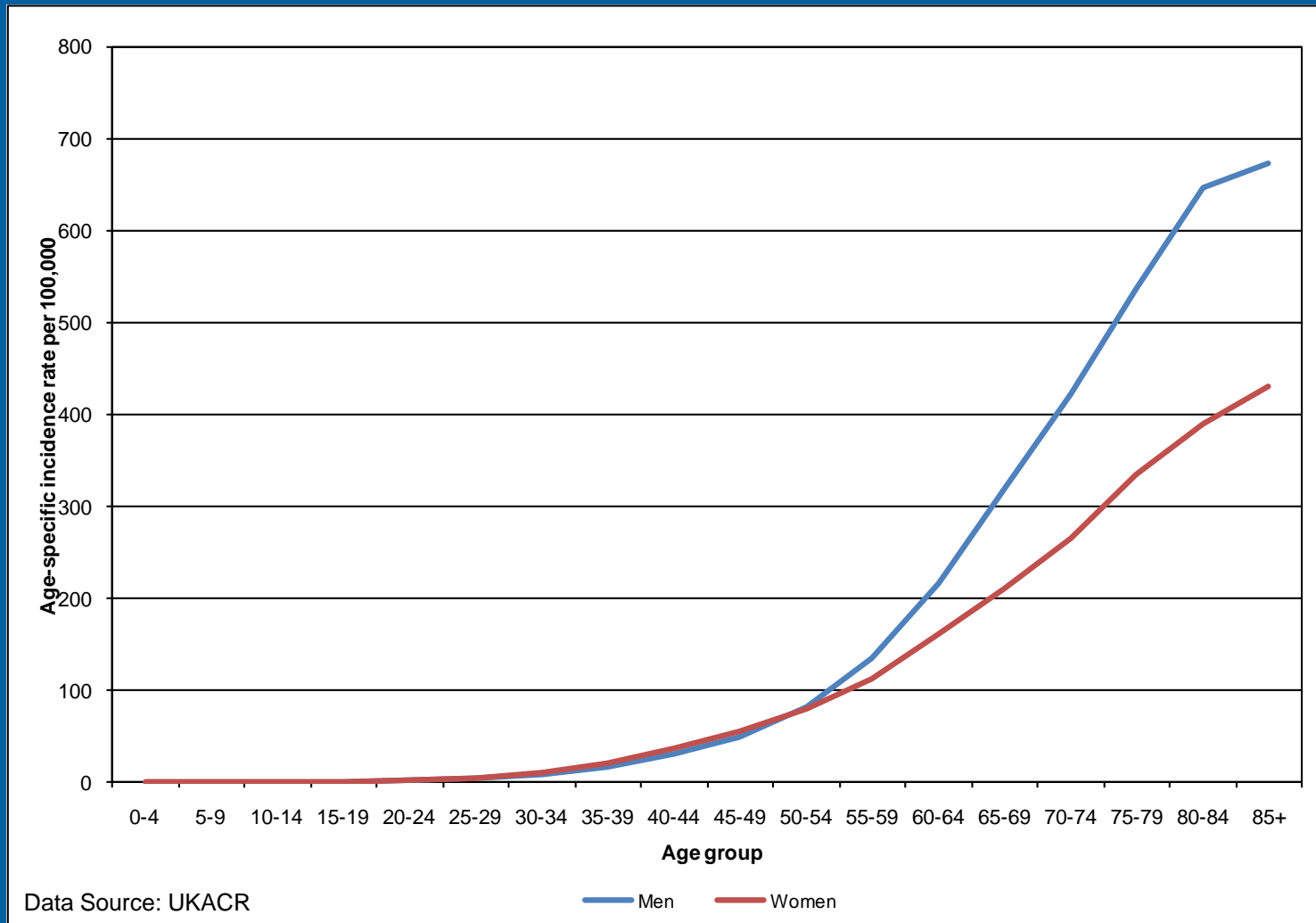
- From 2002 to 2006 ASR has risen significantly in both men and women
- (p < 0.01)
- Increase in men is larger, 16% compared to 14% for women
- Overall number of extra cases in 2006 compared to 2002 is 8400.

South West Skin Cancer Age Distribution, 2006



Source: UK Association of Cancer Registries national database

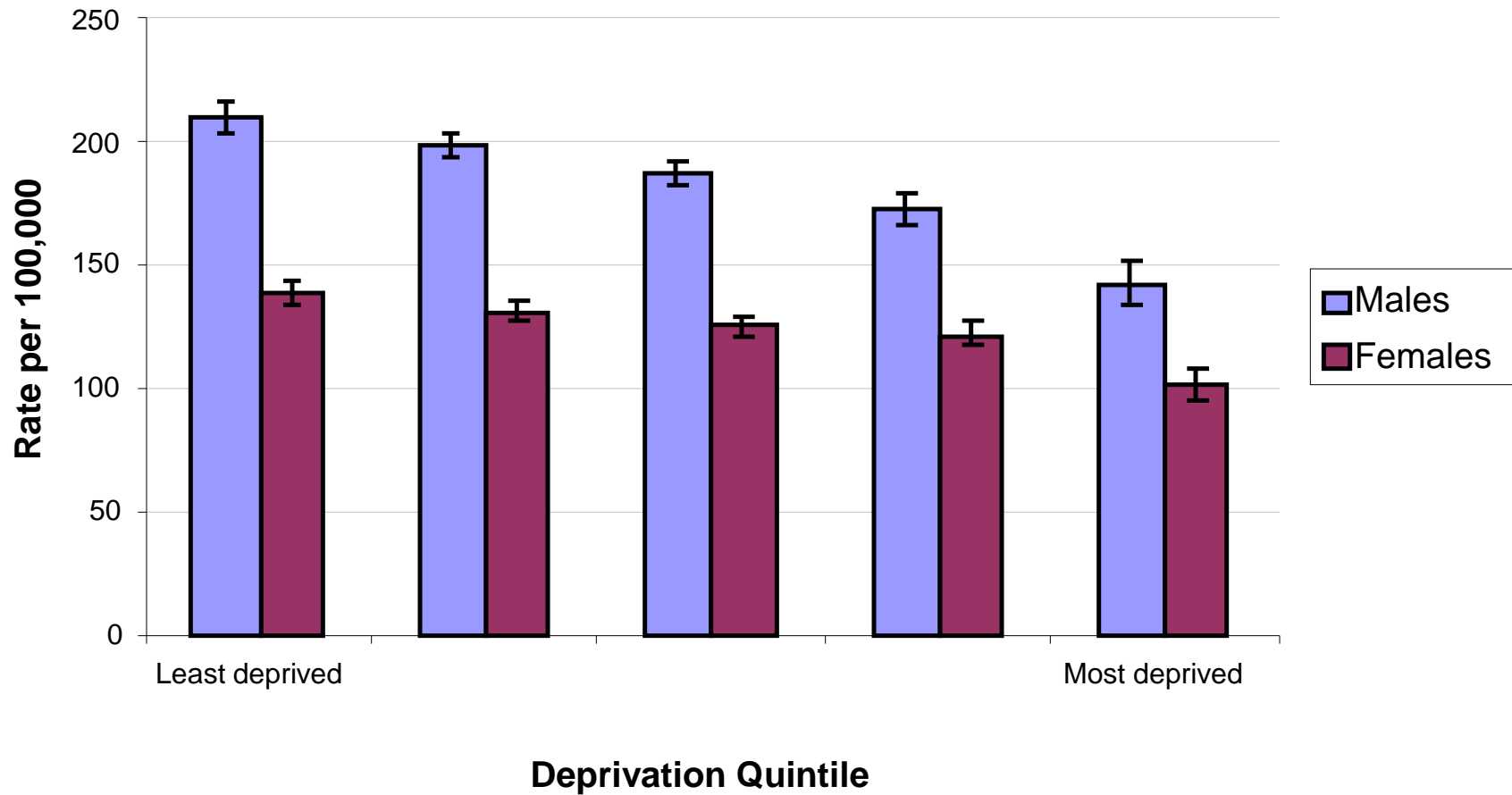
BCC Incidence (ASR per 100,000), by age, England 2002-06 average



BCC Incidence (ASR per 100,000), by age, England 2002-06 average

- Age-standardised rates increase with age
- Below 50 years of age, women higher than men, or no significant difference
- At 50 years and older, men have higher rates than women, peaking in 80-84 age-group where rates in men 66% higher.

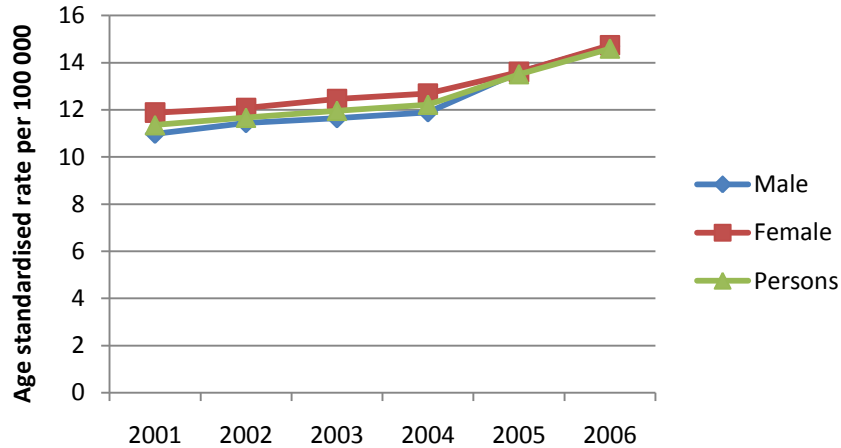
Figure 4: Age standardised incidence rates for non-melanoma skin cancer in the South West Region by deprivation quintile (2003-2005). Rates standardised to standard European population



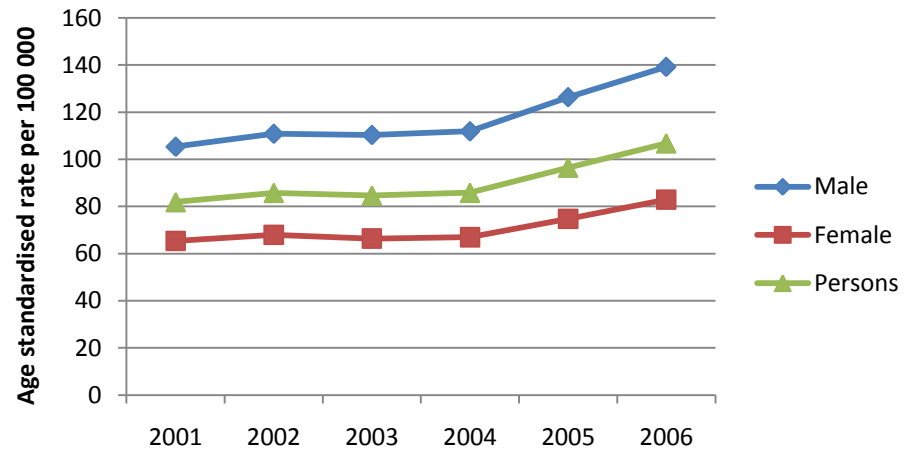
Source: South West Public Health Observatory

Admission rates to hospital at least once a year (HES data – England)

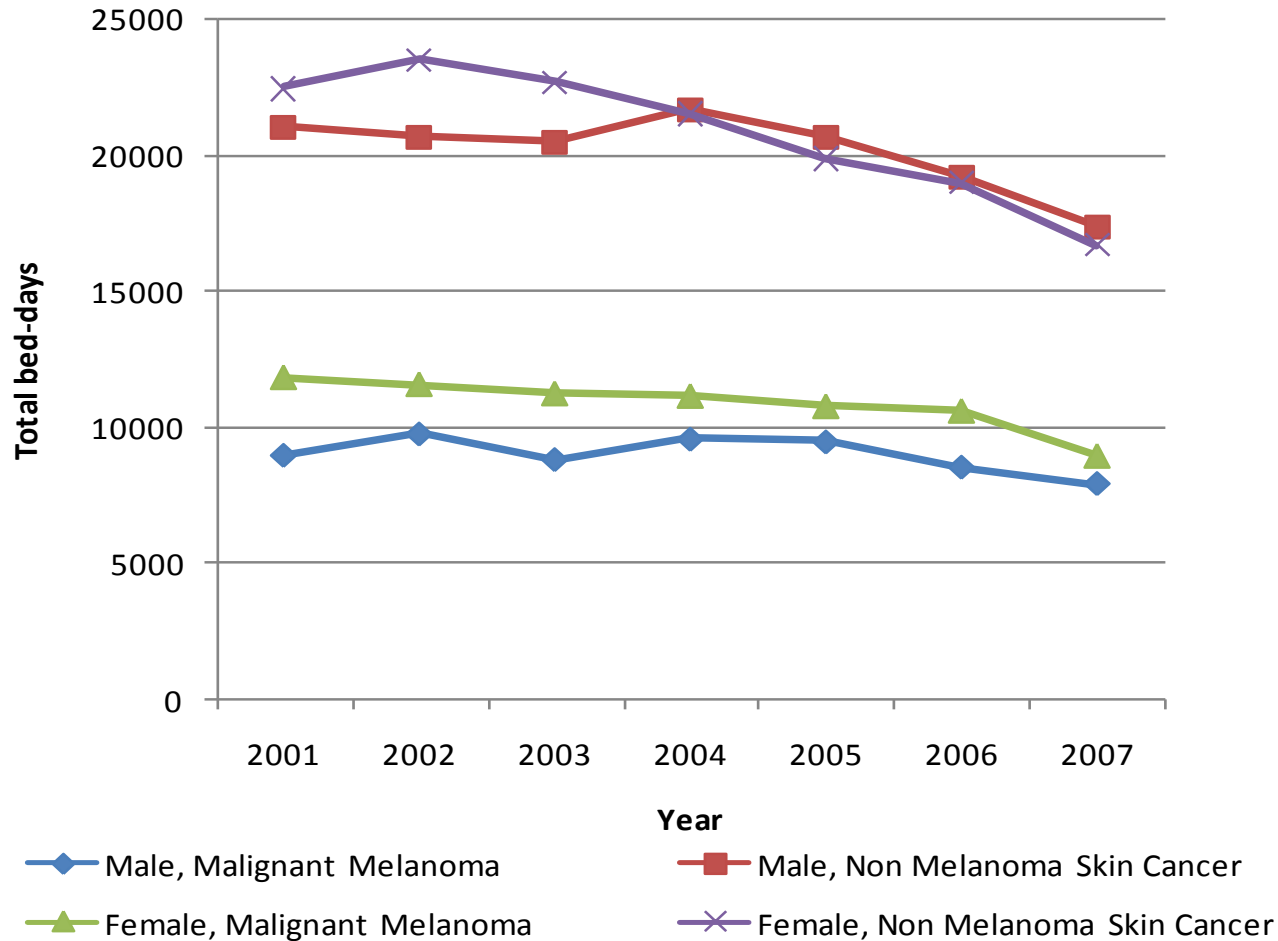
Malignant Melanoma



Non Melanoma Skin Cancer



Skin Cancer total bed-days per year in England



Source:
HES data

Risk of metachronous skin cancers

- N.B. previous rules on recording second SCCs and BCCs

The analysis

- South West SHA region
- Based on first skin cancer registration per person 1998-2006.
- Combined with “next” skin cancer registration during 1998-2007.
- Ignores effect of diagnoses before 1998
- Effect of registry rules regarded Non-Melanoma Skin Cancer ie generally a maximum of one BCC and one SCC per person

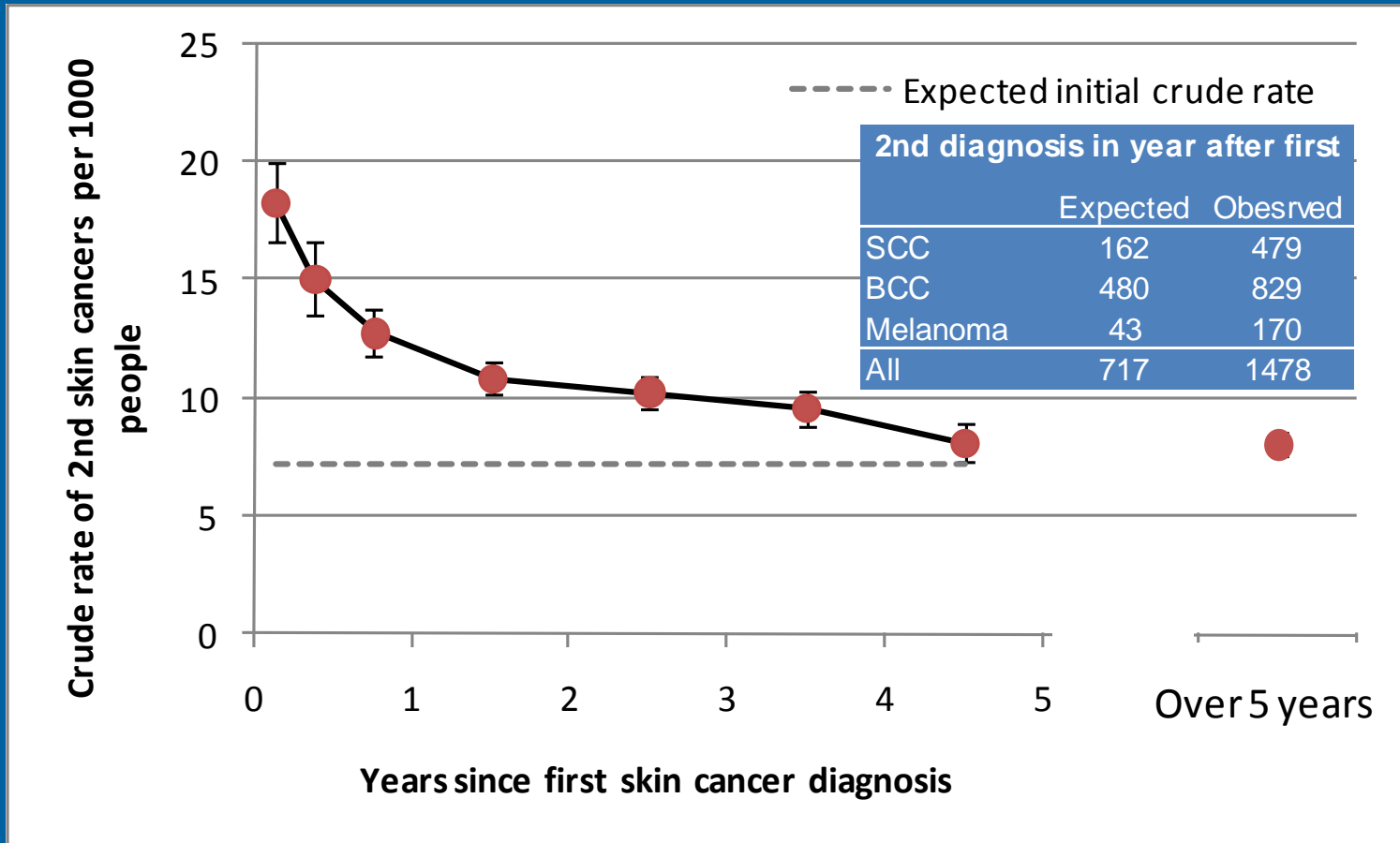
Multiple skin cancer registrations

Skin cancers (Melanoma and NMSC) diagnosed 98-07

| Number of skin cancer diagnoses per person | People |
|--|---------|
| 1 | 106,736 |
| 2 | 6,492 |
| 3 | 269 |
| 4 | 16 |
| 5 | 1 |

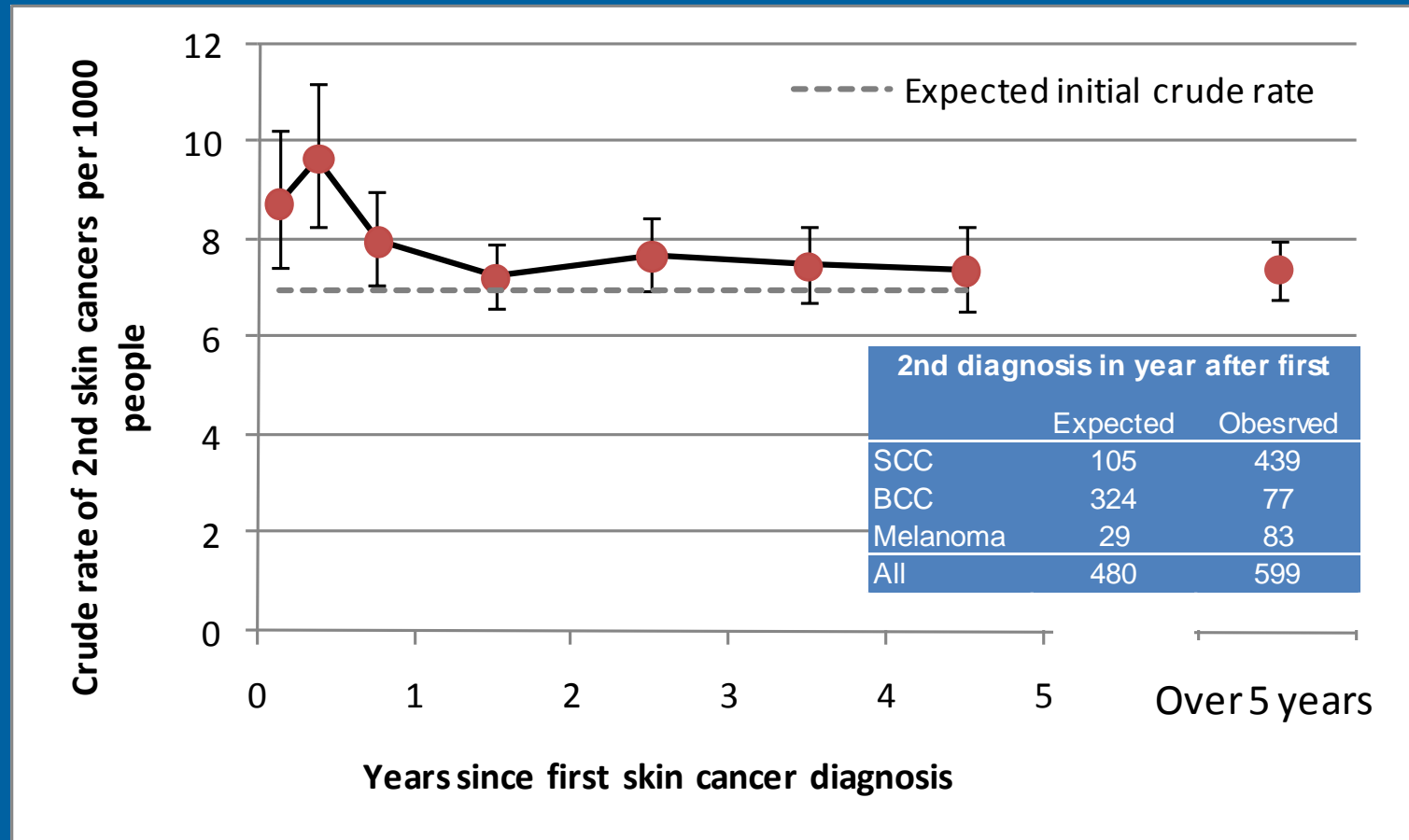
The Risk of a Second Skin Cancer Diagnosis

2nd skin cancer diagnosed 98-07 after initial diagnosis during 1998-06



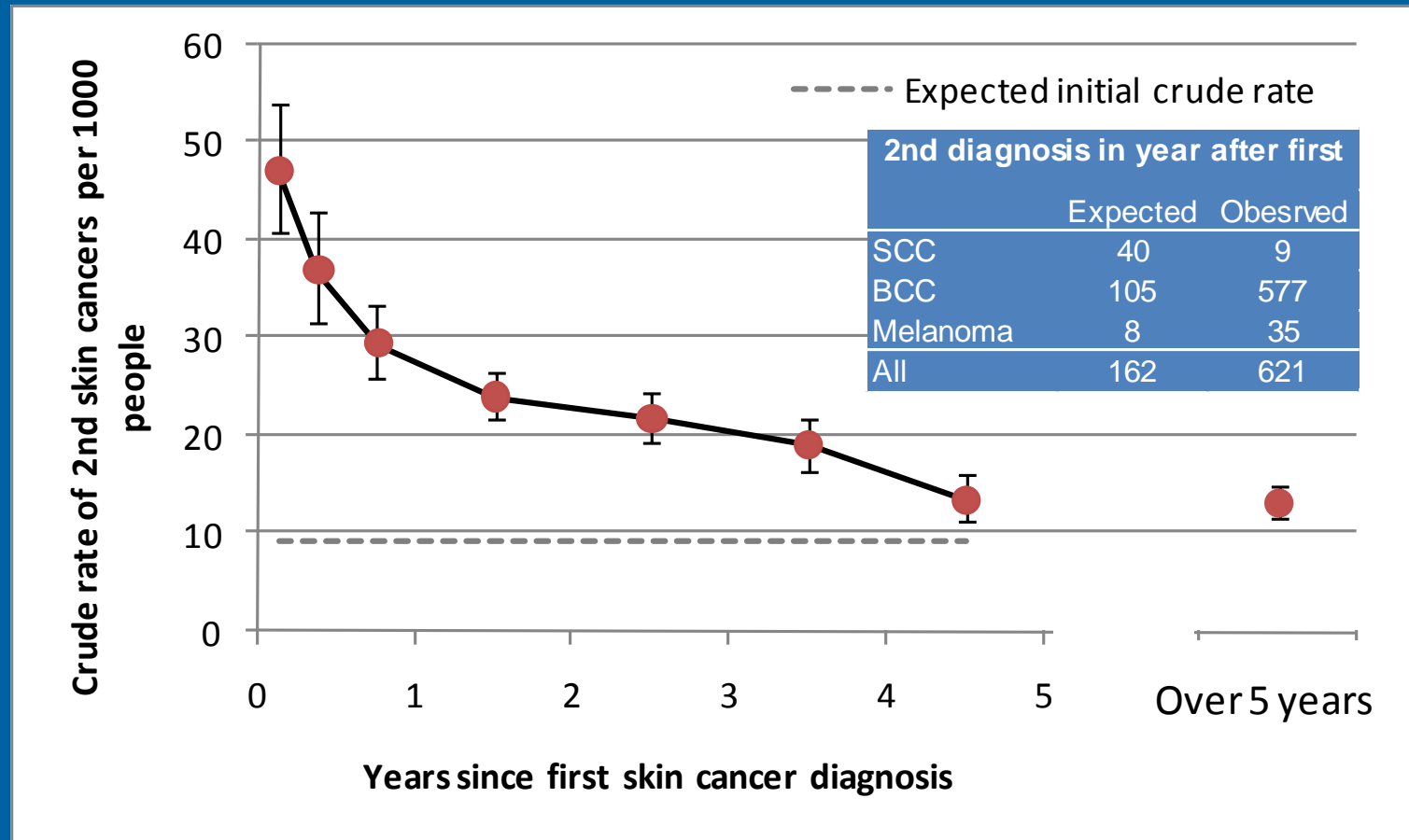
The Risk of a Second Skin Cancer Diagnosis

2nd skin cancer diagnosed 98-07 after initial BCC diagnosis during 1998-06



The Risk of a Second Skin Cancer Diagnosis

2nd skin cancer diagnosed 98-07 after initial SCC diagnosis during 1998-06



Initial breakdown of BBC according to the high risk site and size *(data from the ongoing excision margin audit)*

| High risk sites | Number of excisions |
|-----------------|---------------------|
| H Zone | 350 |
| Head and Neck | 263 |
| Others | 248 |
| Unspecified | 36 |
| Total | 897 |

| High risk size | Number of excision |
|----------------|--------------------|
| BCC \geq 2cm | 29 |
| Total | 897 |

BCC Histological subtypes (data from the ongoing excision margin audit)

| BCC Histological subtype | Number of excised BCC |
|-----------------------------|-----------------------|
| Atypical Squamous Component | 4 |
| Micronodular (<0.15mm) | 17 |
| Multisubtype | 174 |
| Morphoeic/Infiltrative | 56 |
| Nodular | 427 |
| Superficial | 58 |
| Other | 37 |
| Not Specified | 124 |
| Grand Total | 897 |

High risk subtype: Morphoeic/infiltrative; Micronodular; Atypical Squamous component