South West Public Health Observatory

# Completeness of Basal Cell Carcinoma Excisions in an English Region

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## 1 Introduction

The National Institute for Health and Clinical Excellence (NICE) guidance for skin cancer recommends that appropriately trained General Practitioners (GPs) excise only suspected low-risk basal cell carcinoma (BCCs), referring high-risk and unknown lesions to specialists.

BCC can arise at anatomical sites requiring complex surgery with resultant morbidity. Complete excision needs to be achieved to minimise risk of recurrence. The South West Public Health Observatory (SWPHO) in collaboration with its Skin Cancer Tumour Panel has undertaken an audit of BCC histopathology reports to determine completeness of excision of BCCs in primary and secondary care.

## 2 Method

SWPHO cancer registry data were used to identify the first 100 excisions per Trust in 2007 for inclusion in the audit. Fields collected included name, status and place of work of clinician requesting the analysis, anatomical site and size of BCC, and excision margins.

## 3 Cohort details

***Histological subtypes and associated risk***

| Histological subtype | Number (%) | High/Low-risk subtype |
|---|---|---|
| Nodular | 640 (47%) | Low |
| Multi-subtype | 260 (19%) | High |
| Superficial | 99 (7%) | Low |
| Morphoeic/Infiltrative | 93 (7%) | High |
| Micronodular (<0.15mm) | 40 (3%) | High |
| Atypical Squamous Component | 6 (0.4%) | High |
| Other | 60 (4%) | - |
| Unknown | 167 (12%) | - |
| Total | 1,365 | - |

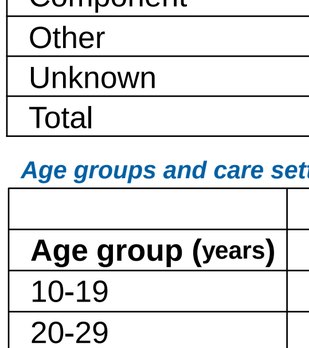
***Age groups and care setting***

| | Care setting | |
|---|---|---|
| **Age group (years)** | **Primary care** | **Secondary care** |
| 10-19 | 0 | 1 (0.1%) |
| 20-29 | 1 (0.4%) | 3 (0.3%) |
| 30-39 | 10 (4%) | 13 (1%) |
| 40-49 | 21 (9%) | 61 (7%) |
| 50-59 | 47 (19%) | 122 (13%) |
| 60-69 | 62 (25%) | 228 (24%) |
| 70-79 | 66 (27%) | 280 (30%) |
| 80+ | 41 (17%) | 234 (25%) |
| Total | 248 | 942 |

**Definition of care setting**
The care setting was not specified on the pathology reports and it had to be ascertained from the specimen source.

**Definition of high-risk BCC** is based on factors that may have an effect on recurrence rate, including histological subtype, other histological features, site, and other factors such as size, immunosuppression and genetic disorders.

***Figure 1. H-zone***



**Definition of high-risk site and low-risk site**
BCCs considered as high-risk 1 are localised on the zone H of the face as illustrated on the shaded area on figure 1.
BCCs considered as high-risk 2 are localised on the head and neck area (including H zone)
BCCs considered as low-risk are localised elsewhere on the body.

## 4 Results

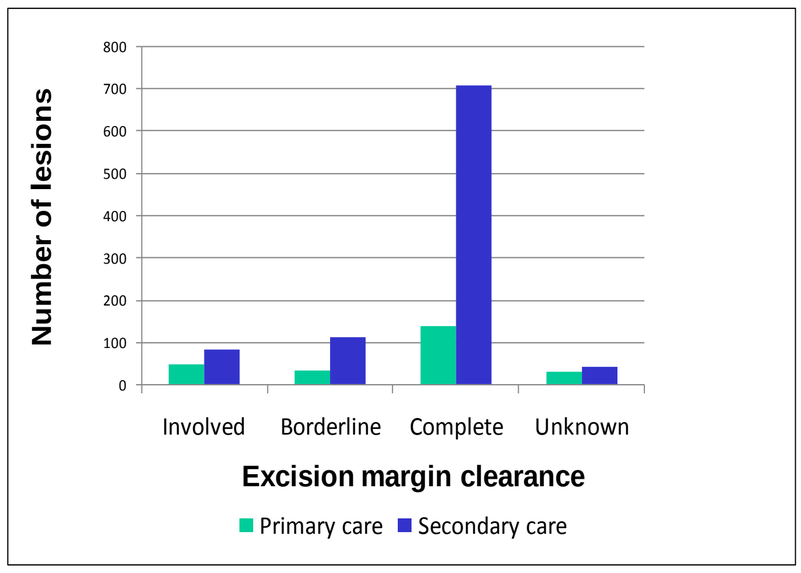
***Distribution of care setting for basal cell carcinoma excision***

| High-risk site 1 | | | | |
|---|---|---|---|---|
| **Care setting** | **H-zone** | **Other** | **Unknown** | **Total** |
| Primary care | 41 (10%) | 188 (26%) | 19 | 248 |
| Secondary care | 383 (90%) | 536 (74%) | 23 | 942 |
| Unknown | 68 | 99 | 8 | 175 |
| **Total** | 492 | 823 | 50 | 1365 |

| High-risk site 2 | | | | |
|---|---|---|---|---|
| **Care setting** | **Head and Neck** | **Other** | **Unknown** | **Total** |
| Primary care | 103 (13%) | 128 (35%) | 17 | 248 |
| Secondary care | 681 (87%) | 239 (65%) | 22 | 942 |
| Unknown | 131 | 36 | 8 | 175 |
| **Total** | 915 | 403 | 47 | 1365 |

***Lesion size***
When considering lesion size, only 46 of all BCCs were classified as high-risk (>=2cm) and the majority were excised in secondary care 40/46 (87%).

***Figure 2: Overall excision margin clearance of basal cell carcinoma***




**Definition of clearance**
Involved - margins are involved, one or more margins 0mm
Borderline - a 'narrow margin' is described, cannot guarantee complete excision, one or more margin < 1mm
Complete - excision is complete/margins are clear, one or more margin >1mm
Not specified - adequacy of excision cannot be guaranteed, not mentioned

*Based on the recommendations of the National Cancer Intelligence Network Skin Group*

***Clearance of excision of high and low-risk histological subtype basal cell carcinoma in primary and secondary care***

| Care setting | Clearance | High-risk subtype | Low-risk subtype | Unknown | Grand Total |
|---|---|---|---|---|---|
| **Primary care** | Involved | 19 (32%) | 23 (17%) | 6 (21%) | 48 (22%) |
| | Borderline | 6 (16%) | 24 (18%) | 3 (11%) | 33(15%) |
| | Complete | 35 (58%) | 85 (64%) | 19 (68%) | 139 (63%) |
| | Unknown | 10 | 10 | 8 | 28 |
| **Sub-Total** | | **70** | **142** | **36** | **248** |
| **Secondary care** | Involved | 33 (12%) | 31 (7%) | 17 (11%) | 81 (9%) |
| | Borderline | 37 (14%) | 63 (13%) | 11 (7%) | 111 (12%) |
| | Complete | 204 (74%) | 378 (80%) | 128(82%) | 710 (79%) |
| | Unknown | 9 | 24 | 7 | 40 |
| **Sub-Total** | | **283** | **496** | **163** | **942** |
| **Unknown** | Involved | 2 (5%) | 10 (10%) | - | 12 (7%) |
| | Borderline | 10 (25%) | 15 (15%) | 4 (15%) | 29 (18%) |
| | Complete | 28 (70%) | 73 (74%) | 22 (85%) | 123 (75%) |
| | Unknown | 6 | 3 | 2 | 11 |
| **Sub-Total** | | **46** | **101** | **28** | **175** |
| **Grand Total** | | **399** | **739** | **227** | **1,365** |

## 5. Conclusion

There was a small percentage of excisions in primary care compared with secondary care. Overall clearance in primary care was 63% compare to 79%.
The majority of head and neck BCCs were referred to secondary care for more specialist treatment. This shows that the NICE guidance is being implemented. However it was not always easy to assess the care setting. In addition the requesting GP/clinician is not necessarily the person undertaking the excision.

***Reference**: Improving outcomes for people with skin tumours including melanoma. NICE 2006*