There is a very high prevalence of basal cell carcinoma (BCC) in north Queensland,¹ and general practitioners play an important role in BCC management.² Each of the BCC histological subtypes, body sites, and growth patterns have different risks.³

General practitioners can use a range of treatments appropriate for the histological variant.⁴ Surgical excision is an appropriate treatment for all BCC, but not the only appropriate treatment.⁵⁻⁷ Double freeze thaw cryotherapy and shave curettage/cautery are also effective for some superficial BCC (SBCC),⁸ as are topical imiquimod 5% cream (an immune response modifier⁹), and photodynamic therapy (PDT) (topical photosensitising agent plus red spectrum light activation¹⁰). However, there is little data on how GPs select from these options.¹⁰

**Questionnaire**

The questionnaire was seven pages long with 28 items, including demographic questions modelled on the Bettering the Evaluation and Care of Health (BEACH) report.¹¹ Only demographic data were collected from GPs who self reported they typically treated less than two SBCC per month. Those who treated two or more per month were asked about their current management. Each SBCC could be counted for as many treatment options as the GP recorded. The questionnaire also asked about alternatives to surgery when this was less appropriate for reasons of age, co-existing medical conditions, medication, or patient preference, or when the GP’s level of surgical skill or confidence was low.¹⁵ Finally, there is little data on how GPs select from these options.¹⁰
the questionnaire asked how management would change if some topical applications were subsidised through the Pharmaceutical Benefits Scheme (PBS).

**Statistical analysis**

Statistical analysis dichotomised the number of primary SBCC lesions treated in a month and report numerical variables as medians and interquartile ranges (IQR). The bivariate relationships between the dependent variable and the GPs’ demographic data were assessed by means of chi-square tests and nonparametric Wilcoxon and Kruskal Wallis tests, as appropriate. Significance was set at <0.05.

Ethical approval for this study was obtained from a human ethics committee at James Cook University.

**Results**

**Demographics**

The total response was 107 (59%) (56% of urban GPs, and 66% of rural). Nearly half (49%) of respondents were women. Most respondents:

- were aged 35-54 years (70%)
- graduated in Australia (67%)
- had postgraduate general practice qualifications (74%)
- had been in practice >10 years (65%)
- were currently working full time (62%), and
- considered themselves a ‘regular’ GP (ie. not working in a hospital or skin cancer clinic) (70%), although 43% reported not working in a private general practice.

Compared with BEACH data, respondents were significantly more likely to:

- be younger (p=<0.001)
- be women (p=<0.001)
- have been in practice longer (p=<0.012)
- have Fellowship of The Royal Australian College of General Practitioners (FRACGP) (p=<0.001), and
- work in group practices (p=<0.022).

**Current management of SBCC**

Sixty-six (62%) GPs treated two or more SBCC each month. The most common self reported method of treatment for newly diagnosed primary SBCC in the past 12 months was surgery (56%) followed by imiquimod 5% cream (19%) (Figure 1). Most GPs (80%) would only treat 1–2 SBCC at one time per patient, although some (8%) said they would do so for four or more. If monitoring, the median time GPs would wait between treatments was 4 weeks (IQR 0–8 weeks).

**Reasons for referral**

General practitioners treated a median of 90% (IQR 90–99%) SBCC themselves. Referrals were most likely to be to plastic surgeons (40%; IQR 10–50%), other surgeons (10%; IQR 0–50%), or dermatologists (5%; IQR 0–40%). Very few referrals were to hospitals or skin cancer clinics. Main reasons for referral were:

- problematic body sites (60%; IQR 50–83%)
- large lesions (15%; IQR 0–30%), and
- patient request (10%, IQR 0–10%).

Less common reasons cited included lacking equipment, or skills (Table 1).

**Use and adequacy of different treatment modalities**

Recurrence rates and inadequate primary excision after surgery were estimated as 5% of lesions by 52% of GPs, 6–10% by 34%, and 11–20% by 14%. Some (77%) reported using cryotherapy, and 62% never...
used curettage or cautery. Estimates of further treatment required after cryotherapy were 0–10% of lesions by 45% of GPs, 11–20% by 32%, and >20% by 23% of GPs. Of the 27 GPs who used curettage and cautery, 30% estimated 10% or more lesions required further treatment. Liquid nitrogen was used for most cryotherapy. Self-reported management of SBCC where primary treatment failed is outlined in Table 2.

General practitioners considered surgery would not be their first-line treatment in 40% (IQR 10–70%) of SBCC. Most (90%) (IQR 80–100%) reported they would initiate treatment with imiquimod themselves. Half (50%) (IQR 0–100%) would refer to a dermatologist for photodynamic therapy (PDT). Few (6%) reported they never biopsied, 38% sometimes, 27% mostly, and 29% always.

Many reported their management would change if topical imiquimod were subsidised (Table 3).

**Discussion**

The study had limitations. Respondents may not have been representative (data were significantly different from those from the general GP population in the BEACH report, although no different from those from the provincial division of general practice in 1998). Moreover, these data report neither actual practice or clinical diagnostic accuracy – the doctors’ behaviour might differ to that reported. Recall bias is one potential reason for this.

It was unexpected that few GPs reported treating more than two SBCC per month in an area of high skin cancer incidence. This uneven delivery of care in general practice for skin cancer has been previously reported.

Self-reporting by GPs regarding treatment of one of the most common skin cancers confirms previous data from the same region, providing validity to these data. As expected, the most common management for SBCC was surgery.

The National Health and Medical Research Council nonmelanoma skin cancer management guidelines differentiate between management of primary and recurrent BCC, as recurrent lesions recur at least 50% more often than nonrecurrent lesions, and best management of inadequately excised or close to margin tumours remains controversial. This study’s data on reported management options for recurrent SBCC demonstrated a range of approaches, some probably suboptimal, highlighting education needs.

A clearer definition is needed, in the form of evidence and guidelines, of where surgery is less appropriate in management of SBCC, and topical applications (eg. imiquimod 5% cream and PDT) more.

**Implications for general practice**

What we already know:

- Appropriate GP management of most SBCC is surgical.

What this study shows:

- General practitioners consider surgery inappropriate in 40% of SBCC.
- Topical treatment modalities (eg. imiquimod 5% cream and PDT) would

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**Table 2. Treatments for recurring SBCC treated previously with surgery, cryotherapy, curettage and cautery, or topical applications**

<table>
<thead>
<tr>
<th>Management options for recurrent SBCC</th>
<th>Surgery (n=65)</th>
<th>Cryotherapy (n=53)</th>
<th>Curettage and/or cautery (n=25)</th>
<th>Topical applications (n=63)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>59</td>
<td>66</td>
<td>56</td>
<td>67</td>
</tr>
<tr>
<td>Cryotherapy</td>
<td>–</td>
<td>11</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Curettage and/or cautery</td>
<td>3</td>
<td>4</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>Imiquimod 5% cream</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Refer patient</td>
<td>11</td>
<td>–</td>
<td>–</td>
<td>8</td>
</tr>
<tr>
<td>Biopsy plus imiquimod 5% cream</td>
<td>–</td>
<td>–</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Surgery plus curettage/cautery</td>
<td>–</td>
<td>2</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Surgery plus imiquimod 5% cream</td>
<td>8</td>
<td>13</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Cryotherapy plus imiquimod 5% cream</td>
<td>3</td>
<td>–</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Curettage and/or cautery plus imiquimod 5% cream</td>
<td>–</td>
<td>–</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>2</td>
</tr>
</tbody>
</table>

**Table 3. Predicted change in usage of topical applications for treatment of SBCC if subsidised through PBS**

<table>
<thead>
<tr>
<th>Modality of treatment</th>
<th>Unsubsidised* (n=58)</th>
<th>Subsidised* (n=61)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryotherapy double freeze</td>
<td>34.3</td>
<td>15.8</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Cryotherapy single freeze</td>
<td>8.2</td>
<td>4.5</td>
<td>NS</td>
</tr>
<tr>
<td>curettage and/or cautery</td>
<td>6.6</td>
<td>4.5</td>
<td>NS</td>
</tr>
<tr>
<td>Imiquimod 5% cream</td>
<td>34.4</td>
<td>57.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Photosensitising agent plus PDT</td>
<td>5.9</td>
<td>9.6</td>
<td>NS</td>
</tr>
<tr>
<td>Noninterventional monitoring</td>
<td>2.5</td>
<td>1.9</td>
<td>NS</td>
</tr>
<tr>
<td>Other</td>
<td>8.8</td>
<td>5.2</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Some data missing.
be used more often by GPs if subsidised through the PBS.

Conflict of interest: Beverly Raasch has acted as a consultant for pharmaceutical company 3M.

Acknowledgment
Thanks to J Woosnam for research assistance, the GPs who completed the survey, and 3M, which funded the study through an unrestricted educational grant.

References

Poetry

How to be Old in a Hospital Bed

Your clothes are at least musty, if not positively grubby, if you have any
if you have a relative to bring them in, you have no friends
who are able to come, if they aren’t dead they can’t drive
or are in a nursing home or hostel or they’ve lost their Elgins.
If you have sons and daughters who visit, their grandkids’ll complain
then run off to play with the wheelchairs and be yelled at by the nurses.
Then you must choose your disease, there’s a comprehensive list
but one thing’s for sure, at your age you’ve got pain
arthritis, cracked back bone, whatever, they’ll give you Paracetamol
and you’re not allowed to smoke or drink
(getting shickered is out of the question, even on Christmas Day)
the only taste you have left is for sweet things
chocolates, jubes and desserts, but if you’re diabetic, bad luck
and anyway you might cop a ‘Swallowing Deficit’ diagnosis
from the speech pathologist so all your meat’s mashed up
and your drinks closely resemble custard
you’ll sleep sixteen hours a day because you no longer drift deeply
(and therefore you no longer dream) you’ll doze in a chair
and they’ll say you are lazy or lack motivation
you’ll be treated like a child even if you can do a crossword
with your tongue tied in the back of your throat
which it could be, by various things. Parkinson’s does a neat job
and tresses your limbs up as well.

So

here you are, waiting for something to happen
but it never does, not quickly, ninety year-old bones
can take six months to heal and sometimes they don’t
they won’t operate, even a skin cancer’s out of the question
you’d be smothered by the anaesthetic
which would suit you just fine, you’ll find yourself thinking
after being here less than a day.

John West

We glide through this poem on a prosodic wheelchair, that groans with the weight of our aging bodies, and stops at our bed as we become exhausted. The poet’s empathy knows more than shared contentment: it identifies profoundly with all emotions, including the one that closes this neat conversational piece.

Tim Metcalf