

## CANCER OF UNKNOWN PRIMARY

- Commonly a term for cancers that have spread from the primary site (i.e. metastases) for which site of origin cannot be determined with confidence; involving a single or multiple metastatic sites.
- CUP can also cover a primary cancer of an ill-defined site, possibly limited to an anatomical area, with or without the mention of metastases.
- In Australia and the UK, latest figures show CUP as the 7th/9th most common cancer diagnosis and 6th/5th most common cancer cause of death, respectively.<sup>[1],[2]</sup>
- Prognosis for these cases is generally poor, although there are a small proportion of subtypes that have better outcomes.

### Textbox 1: Why might CUP registration be problematic?

CUP is clinically heterogeneous, comprising a range of morphologies and often complex presentations.

This clinical uncertainty leads to ambiguous notifications with varying terminologies, which result in coding differences at registration.

Codes used for reporting CUP vary substantially:

- England tends to use ICD10<sup>[3]</sup> codes C77-C80;
- Some countries use just C80;
- Others again use C26, C39 and/or C76 in addition to either of the above.

ICD10 code	ICD10 section	ICD10 code definition
C26	Malignant neoplasms of digestive organs	Malignant neoplasm of other and ill-defined digestive organs
C39	Malignant neoplasms of respiratory and intrathoracic organs	Malignant neoplasm of other and ill-defined sites in the respiratory system and intrathoracic organs
C76	Malignant neoplasms of ill-defined, secondary and unspecified sites	Malignant neoplasm of other and ill-defined sites*
C77	Malignant neoplasms of ill-defined, secondary and unspecified sites	Secondary and unspecified malignant neoplasm of lymph nodes
C78	Malignant neoplasms of ill-defined, secondary and unspecified sites	Secondary malignant neoplasm of respiratory and digestive organs
C79	Malignant neoplasms of ill-defined, secondary and unspecified sites	Secondary malignant neoplasm of other and unspecified sites
C80	Malignant neoplasms of ill-defined, secondary and unspecified sites	Malignant neoplasm without specification of site

Figure 1: Definition of ICD10<sup>[3]</sup> codes used in reporting CUP

This obscures accurate assessment of the CUP burden, both nationally and internationally.

## FUTURE DEVELOPMENTS?

How cancers of unknown or ill-defined primary and metastatic presentations are counted and reported has the potential to have a significant impact on the profile of CUP, research investment, research findings, and ultimately patient treatment, experience and outcomes.

- The ultimate goal is to ascertain accurate and comparable CUP incidence and mortality.
- This requires national and international standardisation of coding practices for cancer of unknown primary (including the recording of metastases) and ill-defined primary cancers.
- It is hoped that the data provided in response to this survey can help start and support such a standardisation process.

### Textbox 2: Core issues towards standardisation?

More specific guidance might be helpful with regards to:

- Coding of ill-defined or unknown primaries and metastatic presentations:** record and report ill-defined primaries similar to CUP notifications? address differences in coding rules for metastases, especially multiple metastases?
- Emphasis on seeking clarification about ambiguous CUP notifications:** cases to reflect genuine clinical uncertainty, rather than bad documentation.
- Follow-up process of CUP notifications:** reviewing CUP or ill-defined primary cases after a set period with regards to further information becoming available.
- Consistent process for death certificate notifications:** in particular for CUP cause of death relating to a site-specific registration, or site-specific cause of death relating to a prior CUP registration.

Differences resulting from the use of differing coding systems (ICD10<sup>[3]</sup> and ICDO3<sup>[4]</sup>) may also benefit from agreed 'translation table' of codes from one system to another to avoid reporting differences between countries.

## THE REGISTRATION AND REPORTING SURVEY

- This survey is a first attempt at documenting existing cancer registration and reporting with the direct participation of cancer registration services.
- The aim is to compare CUP registration and reporting practices in Australia, the UK and Ireland, with a view to supporting improved national/international standardisation.
- 20 registration services in Australia (n=8), the UK (England n=8, Scotland n=1, Wales n=1 and Northern Ireland n=1), Ireland (n=1) participated. All responded to the questionnaires.
- The questionnaire consisted of two parts: the first covering registration (coding systems and rules; coding scenarios; death certificate notifications; clarification process); the second reporting practices (CUP incidence by site-code, source of diagnosis and morphology)

## RESULTS FROM THE SURVEY

All registries responded to the questionnaires. Results confirm variation in registration and reporting practices on almost every aspect covered, though some displayed greater consistency than others.

		Australia	England	Ireland	Northern Ireland	Scotland	Wales	Total	Percent
<b>Q1_Does your registry have guidelines that specifically cover the registration of CUP?</b>	Yes	3	5		1	1	1	11	55%
	No	5	3	1				9	45%
<b>Q3_Do you use additional local rules for recording CUP?</b>	Yes	2	1					3	15%
	No	1	3		1	1	1	7	35%
	N/A	5	4	1				10	50%

Figure 2a and 2b: CUP coding guidance

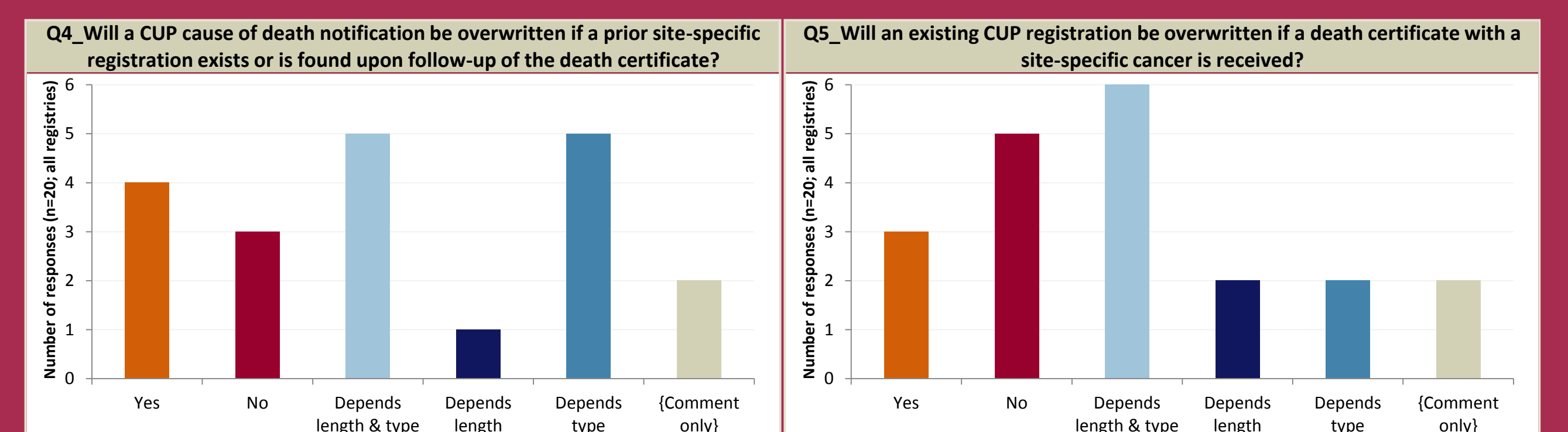


Figure 3a and 3b: Impact of cause of death notifications on prior registrations

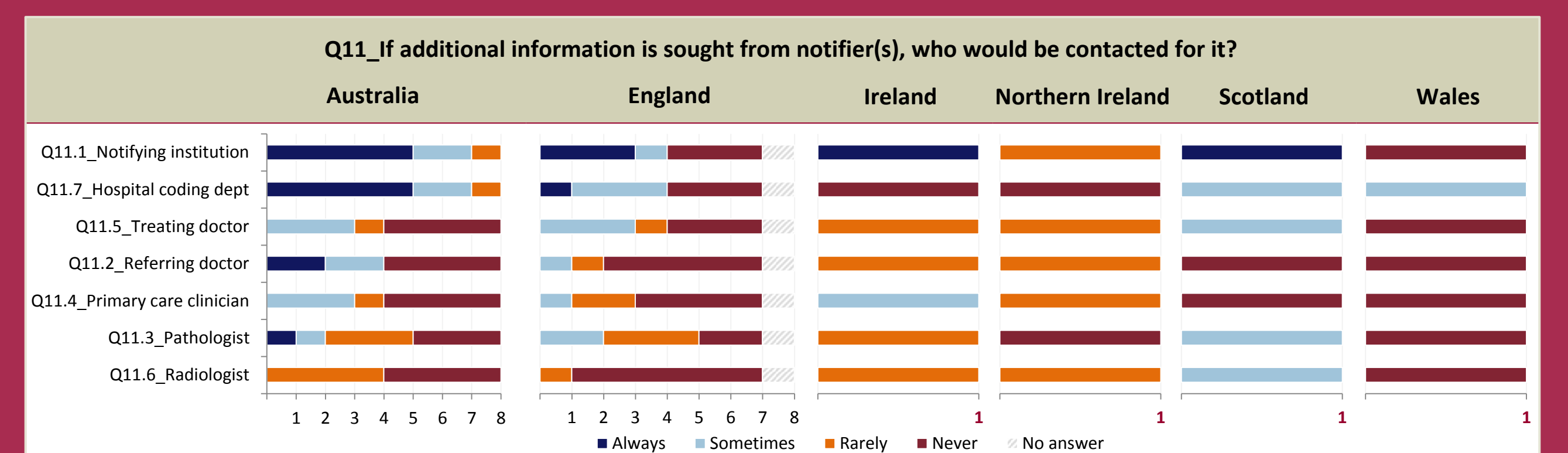


Figure 4: Likelihood of contact with other organisations and individuals for clarification of ambiguous notifications

Q17_Which codes does your organisation currently use to report CUP?	Australia	England	Ireland	Northern Ireland	Scotland	Wales	Total	Percent
Behaviour /6 or /9	1						1	5%
1559,199,C26,C80	1						1	5%
C26,C39,C42,C48,C76,C80	1						1	5%
C260,C268,C269,C39,C76,C77,C78,C79,C80					1		1	5%
C76,C77,C78,C79,C80	1	1				1	3	15%
C77,C78,C79,C80		6*		1			7	35%
C80		1					1	5%
C809	3		1				4	20%
C809/80003	1						1	5%

\* Q17 left blank in 4 out of 6 responses; codes inferred from data submitted to Q18/Q19

Figure 5: Spread of code combinations used for reporting CUP

### Textbox 3: Limitations and caveats

These are draft results – registries will be given the opportunity to review and comment.

- A few questions were left blank / answers were unclear.
- Responses included codes from differing coding systems (ICD10<sup>[3]</sup> and ICDO3<sup>[4]</sup>, a cancer specific coding system).
- In April 2013, the English registries merged to form the National Cancer Registration Service, in Public Health England, with eight regional offices.

## REFERENCES AND NOTES

<sup>[1]</sup> Australia data for persons. Based on table 2.2 page 13 (cases, 2012 estimate) and table 3.2 page 26 (deaths, 2010 provisional) in [Cancer in Australia: an overview 2012](#). Australian Institute of Health and Welfare & Australasian Association of Cancer Registries (2012). Cancer series no. 74. Cat. no. CAN 70. Canberra: AIHW.

<sup>[2]</sup> UK data for persons. Based on [CUP incidence \(9,762 cases in 2011\) and mortality \(10,625 deaths in 2012\)](#) and ranking in the [Cancer Statistics report: Cancer incidence and mortality in the UK for the 10 most common cancers](#). Cancer Research UK (2014).

<sup>[3]</sup> [International Statistical Classification of Diseases and Related Health Problems 10th Revision](#) (ICD10), 2010 edition. World Health Organisation (2010).

<sup>[4]</sup> [International Classification of Diseases for Oncology 3rd Edition](#) (ICDO3). World Health Organisation (2011).

## ACKNOWLEDGEMENTS

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