



Prioritisation of unwarranted variations in culturally and linguistically diverse communities' cancer

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List of acronyms

Acronym	Definition
ALIC	Analysis of Linked Information in Cancer
CALD	Culturally and linguistically diverse
ICS	Integrated Cancer Service
MDM	Multidisciplinary meeting
MDT	Multidisciplinary team
OCP	Optimal Care Pathway
VICS	Victorian Integrated Cancer Services

Background

The Victorian Cancer Plan 2024–2028 highlights the importance of reducing variation in cancer care experience and outcomes across the state. (1) To support this, the nationally recognised Optimal Care Pathways (OCPs) provide a framework for the delivering consistent, safe, high-quality, and evidence-based cancer care. (2) The OCPs aim to ensure that all people diagnosed with cancer receive the best possible care, regardless of where they live or receive treatment. (2)

The *Victorian Integrated Cancer Services (VICS)*, Victoria’s cancer service improvement network, lead initiatives that bring together healthcare providers to strengthen cancer care delivery. There are 8 regional ICS and one statewide paediatric ICS. One of their flagship initiatives is the *VICS Optimal Care Summits program*, which examines cancer care, patient experience, and outcome measures against OCP standards and targets. Through these summits, stakeholders identify data-informed patterns of care, highlight unwarranted variations, set priorities for improvement, and implement targeted quality initiatives. (2)

The Victorian Cancer Plan 2024–2028 identifies the summits program as a key enabler for reducing variation in clinical practice and outcomes. Using a mixed-methods approach including expert advisory groups, statewide surveys, strategic consultations, and broad stakeholder engagement, the program identifies and resources priority improvement initiatives across Victoria. In 2025–26, the program focused on culturally and linguistically diverse (CALD) communities with cancer, engaging clinicians, stakeholders, and consumers to identify and prioritise unwarranted variations for action.

Unwarranted variations in cancer care

While some degree of variation in cancer care is expected, and often necessary because treatment decisions should be patient-centred and responsive to individual needs, preferences, and clinical circumstances, not all variation is beneficial. (3,4) Unwarranted variation occurs when differences in care cannot be explained by patient factors and instead reflect inconsistencies in healthcare delivery that may compromise quality, equity, or outcomes. (5) Unwarranted variation is problematic because the structure and processes of care are closely linked to patient outcomes. (6) Identifying and addressing such variation offers opportunities to improve outcomes, patient experience, and system efficiency. (7) Despite its importance, there is no universal framework for identifying unwarranted variation in healthcare.

To address this gap, the VICS Optimal Care Summits program developed a set of criteria in 2022 to guide consistent identification of unwarranted variations in cancer care across Victoria. These criteria, outlined in Table 1, ensure variations are assessed for reliability, significance, alignment

with OCP indicators, impact on outcomes and equity, and feasibility for improvement. Additional criteria apply at repeat summits, focusing on persistent or worsening variations.

Table 1. Criteria for identifying unwarranted variations in cancer care across Victoria

All Summits	1. The data identifying a variation is reliable and the variation is unwarranted (any data limitations have been identified).
	2. The variation is statistically significant.
	3. There is variation from the OCP performance indicators, e.g. time to referral, treatment, etc.
	4. The variation is unacceptable and negatively impacts patient outcomes and/or experience.
	5. The variation demonstrates inequitable access to services and/or treatment impacting patient outcomes and/or experience.
	6. Multidisciplinary clinicians, cancer services, and/or Integrated Cancer Services (ICS) have influence and capability to undertake cancer services improvement activities to reduce the variation.
Repeat Summits	7. There is no improvement to a prioritised unwarranted variation and/or recommendation from the previous summit.
	8. There are poorer outcomes and/or experience since the last summit.

This report examines the process by which unwarranted variations in cancer care for CALD communities were identified, assessed, and prioritised for discussion at the VICS CALD Cancer Summit in February 2026.

Aim

To identify, examine and prioritise unwarranted variations in CALD communities' cancer care across Victoria.

Methodology

Identification of unwarranted variations

The VICS Optimal Care Summits program examined patterns of Victorian CALD communities' cancer care, experience, and outcomes. Indicators assessing the OCP steps were identified and informed by previous cancer summits, local work undertaken by the ICS, VICS Optimal Care Summits team, an expert advisory group of 20 Victorian multidisciplinary CALD communities' cancer stakeholders, and the Analysis of Linked Information in Cancer (ALIC) data unit of the Victorian Department of Health.

Data analysis examining the endorsed OCP related indicators was completed by the ALIC team. A range of linked cancer datasets were accessed and analysed for CALD communities' cancer indicators. These included the Victorian Admitted Episode Dataset (VAED), Victorian Cancer Registry (VCR) dataset, Victorian Emergency Management Dataset (VEMD), Victorian Radiotherapy Minimum Dataset (VRMD), Notifiable infectious diseases – Public Health Event (PHESS), Statewide Cancer Indicator Platform (SCIP) and Cancer Service Performance Indicators (CPSI). Statistical methods were used to systematically identify potential unwarranted variations.

Data and indicators were then reviewed against the criteria for identifying unwarranted variations (see Table 1) and unwarranted variations of statistical significance identified. These were then cross-checked by members of the ALIC team and analysed in the context of clinical significance by the expert advisory group.

Delphi Survey development

From December 2025 to February 2026, the VICS distributed 3 online Delphi surveys to members of the expert advisory group and key stakeholders in Victorian CALD cancer care. Modifications to a typical Delphi study were required due to resource and time constraints. Two expert panels were engaged: an expert advisory group (n=21) comprising seasoned leaders in CALD cancer care and a broader stakeholder group, (n=217) representing key stakeholders in policy and provision of cancer care in Victoria. Unlike traditional Delphi methods relying on set agreement percentages, consensus here was guided by expert insights and mixed-method strategies for identifying priorities. The surveys were piloted and reviewed by clinical experts. All 3 surveys were administered using Qualtrics. Participation was voluntary and responses were anonymised to remove the effects of status and group pressure biases that can arise during the discussion of results.

The first Delphi survey was sent out to the 21 members of the expert working group in December 2025 to complete the first round of prioritisation of the unwarranted variations. From early January to early February 2026, a second Delphi survey was developed and circulated to a group of 217 Victorian CALD cancer stakeholders to gain a broader perspective and further prioritise the unwarranted variations identified. The third and final Delphi survey was sent to the 21 members of the expert working group in mid-February 2026, to identify the top 3 priority unwarranted variations. Results from all 3 Delphi surveys were collated and analysed using Microsoft Excel.

Results

Sixteen unwarranted variations in CALD cancer care across Victoria were identified from the data analysis and consultations with the expert advisory group. These are listed in Table 2.

Table 2. All 16 unwarranted variations identified in Victorian CALD cancer care 2026

Number	Variation
System issues	
1	22% of patients had multiple countries of birth documented in their medical record.
OCP Step 2 – Presentation, initial investigation and referral	
2	Patients from Arabic-speaking countries, Southeastern European and Southern European countries, and Vietnam had statistically significantly more presentations to an emergency department (ED) 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023.
3	CALD patients were statistically significantly more likely to present to a public hospital ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations: <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, South Eastern Europe, India • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: Arabic-speaking, South Eastern and Southern Europe • Prostate cancer: South Eastern Europe, Southern Europe, Vietnam.
OCP Step 3 – Diagnosis, staging and treatment planning	
4	CALD patients had statistically significantly more public hospital ED presentations, in the first 3 months after diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations: <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, India, South Eastern Europe • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern and Southern Europe

	<ul style="list-style-type: none"> Prostate cancer: South Eastern and Southern Europe.
5	<p>CALD patients had statistically significant differences in stage at diagnosis, compared with those from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer – higher likelihood of Stage 2 and 3: Arabic-speaking, India, South Eastern Europe Breast cancer – higher likelihood of Stage 4: Arabic-speaking, India, South Eastern & Southern Europe Breast cancer – higher rate of unknown/missing stage: Arabic-speaking, India, South Eastern Europe Colorectal cancer – stage variation: Vietnam – Lower likelihood of Stage 2 compared with Stage 1 Colorectal cancer – higher likelihood of Stage 4: South Eastern Europe Prostate cancer – higher tumour grade: Chinese-speaking countries – more Grade 3–4; India – more Grade 5.
OCP Step 4 – Treatment	
6	<p>CALD patients were statistically significantly less likely to have any treatment (surgery, systemic therapy, radiotherapy) within a year of diagnosis compared with patients from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer – Stage 2 and 3: Arabic-speaking, India Rectal cancer – Stage 2 and 3: Chinese-speaking Non-metastatic lung cancer: Vietnam.
7	<p>A statistically significant higher proportion of prostate cancer patients from Arabic-speaking countries had an emergency readmission to hospital within 30 days of discharge from surgery, compared with the average (18% vs 8%), in 2019–2023.</p>
8	<p>For stage 3 colorectal cancer, patients from English-speaking countries and Chinese-speaking countries had significantly higher use of adjuvant systemic therapy compared with the average.</p>
9	<p>CALD patients were statistically significantly more likely to have a longer time to first treatment, compared with the statewide average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer – Stage 1–3: Arabic-speaking, South Eastern Europe, Vietnam Colorectal cancer – Stage 1–3: South Eastern and Southern Europe Non-metastatic lung cancer: Arabic-speaking Prostate cancer – ISUP Grade 2–5: South Eastern Europe, Vietnam.
10	<p>Colorectal cancer patients (Stages 1, 2 and 3) from Southern European countries were less likely to receive surgery within 7 weeks of diagnosis at a private hospital, compared with the average.</p>
OCP Step 5 – Care after initial treatment and recovery	
11	<p>CALD patients were less likely to see a dietitian during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer: Chinese-speaking Colorectal cancer: Chinese-speaking, Vietnam, South Eastern Europe Lung cancer: Chinese-speaking, Vietnam.

12	<p>CALD patients were less likely to see a physiotherapist during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking, Vietnam, India • Colorectal cancer: Chinese-speaking, Vietnam, India • Lung cancer: Vietnam • Prostate cancer: Chinese-speaking.
13	<p>CALD patients were less likely to see a psychologist during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Colorectal cancer: Chinese-speaking, Vietnam, Southern Europe • Lung cancer: Chinese-speaking, Vietnam • Prostate cancer: Arabic-speaking, Vietnam.
14	<p>CALD patients were less likely to see a social worker during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking • Colorectal cancer: Chinese-speaking • Lung cancer: Chinese-speaking, India, Vietnam.
OCP Step 7 – End-of-life care	
15	<p>CALD patients were statistically significantly more likely to have an ED admission within 30 days of death, compared with patient from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern Europe, Southern Europe, Vietnam • Prostate cancer: Arabic-speaking.
16	<p>CALD patients were statistically significantly more likely to have 2 or more emergency presentations to public hospitals within 30 days of death, compared with patients from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Lung cancer: South Eastern Europe • Prostate cancer: Chinese-speaking, South Eastern Europe.

First Delphi survey

Fifteen participants responded to the first Delphi survey, which was sent to the 21 members of the expert advisory group (response rate = 76%). Table 3 shows the 16 unwarranted variations and highlights the top 13 unwarranted variations that were selected by the expert advisory group to be priorities in CALD cancer care. The score was generated by using a 5-point Likert scale with participants identifying unwarranted variations from not at all important to extremely important.

As seen in Table 3, a strong priority was identified for timeliness to treatment, hospital emergency department (ED) presentation following diagnosis, and again emergency presentation to public hospitals 30 days prior to death. Access to systemic therapy for stage 3 colorectal cancer patients and access to physiotherapy and dietetics were not seen as priorities.

Table 3. Round 1 Delphi results for CALD Cancer Summit unwarranted variations, 2026

Ranking	Variation	Score (n=16)
1	<p>OCP Step 4 – Treatment CALD patients were statistically significantly more likely to have a longer time to first treatment, compared with the statewide average, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – Stage 1–3: Arabic-speaking, South Eastern Europe, Vietnam • Colorectal cancer – Stage 1–3: South Eastern and Southern Europe • Non-metastatic lung cancer: Arabic-speaking • Prostate cancer – ISUP Grade 2–5: South Eastern Europe, Vietnam. 	74
2	<p>OCP Step 3 – Diagnosis, staging and treatment planning CALD patients had statistically significantly more public hospital ED presentations, in the first 3 months after diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, India, South Eastern Europe • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern & Southern Europe • Prostate cancer: South Eastern & Southern Europe. 	72
3	<p>OCP Step 7 – End-of-life care CALD patients were statistically significantly more likely to have 2 or more emergency presentations to public hospitals within 30 days of death, compared with patients from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Lung cancer: South Eastern Europe • Prostate cancer: Chinese-speaking and South Eastern Europe. 	71
4	<p>OCP Step 4 – Treatment CALD patients were statistically significantly less likely to have any treatment (surgery, systemic therapy, radiotherapy) within a year of diagnosis compared with patients from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – Stage 2 and 3: Arabic-speaking, India • Rectal cancer – Stage 2 and 3: Chinese-speaking • Non-metastatic lung cancer: Vietnam. 	70
5	<p>OCP Step 2 – Presentation, initial investigation and referral CALD patients were statistically significantly more likely to present to a public hospital ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, South Eastern Europe, India • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: Arabic-speaking, South Eastern & Southern Europe • Prostate cancer: South Eastern Europe, Southern Europe, Vietnam. 	69
6	<p>OCP Step 7 – End-of-life care CALD patients were statistically significantly more likely to have an ED admission within 30 days of death, compared with patient from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern Europe, Southern Europe, Vietnam • Prostate cancer: Arabic-speaking. 	69

7	<p>OCP Step 2 – Presentation, initial investigation and referral</p> <p>Patients from Arabic-speaking countries, Southeastern European and Southern European countries, and Vietnam had statistically significantly more presentations to an ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023.</p>	67
8	<p>OCP Step 3 – Diagnosis, staging and treatment planning</p> <p>CALD patients had statistically significant differences in stage at diagnosis, compared with those from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – higher likelihood of Stage 2 and 3: Arabic-speaking, India, South Eastern Europe • Breast cancer – higher likelihood of Stage 4: Arabic-speaking, India, South Eastern & Southern Europe • Breast cancer – higher rate of unknown/missing stage: Arabic-speaking, India, South Eastern Europe • Colorectal cancer – stage variation: Vietnam – Lower likelihood of Stage 2 compared with Stage 1 • Colorectal cancer – higher likelihood of Stage 4: South Eastern Europe • Prostate cancer – higher tumour grade: Chinese-speaking countries – more Grade 3–4; India – more Grade 5. 	67
9	<p>System issues</p> <p>22% of patients had multiple countries of birth documented in their medical record.</p>	62
10	<p>OCP Step 4 – Treatment</p> <p>A statistically significant higher proportion of prostate cancer patients from Arabic-speaking countries had an emergency readmission to hospital within 30 days of discharge from surgery, compared with the average (18% vs 8%), in 2019–2023.</p>	58
11	<p>OCP Step 5 – Care after initial treatment and recovery</p> <p>CALD patients were less likely to see a psychologist during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Colorectal cancer: Chinese-speaking, Vietnam, Southern Europe • Lung cancer: Chinese-speaking, Vietnam • Prostate cancer: Arabic-speaking, Vietnam. 	57
12	<p>OCP Step 4 – Treatment</p> <p>Colorectal cancer patients (Stages 1, 2 and 3) from Southern European countries were less likely to receive surgery within 7 weeks of diagnosis at a private hospital, compared with the average.</p>	56
13	<p>OCP Step 5 – Care after initial treatment and recovery</p> <p>CALD patients were less likely to see a social worker during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking • Colorectal cancer: Chinese-speaking • Lung cancer: Chinese-speaking, India, Vietnam. 	56
14	<p>OCP Step 4 – Treatment</p> <p>For stage 3 colorectal cancer, patients from English-speaking countries and Chinese-speaking countries had significantly higher use of adjuvant systemic therapy compared with the average.</p>	55

15	<p>OCP Step 5 – Care after initial treatment and recovery CALD patients were less likely to see a dietitian during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking • Colorectal cancer: Chinese-speaking, Vietnam, South Eastern Europe • Lung cancer: Chinese-speaking, Vietnam. 	55
16	<p>OCP Step 5 – Care after initial treatment and recovery CALD patients were less likely to see a physiotherapist during their admission within 6 months of diagnosis, compared with the average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking, Vietnam, India • Colorectal cancer: Chinese-speaking, Vietnam, India • Lung cancer: Vietnam • Prostate cancer: Chinese-speaking. 	54

Note: Unwarranted variations highlighted in yellow were prioritised for the round and for consideration at the next Delphi stage.

Second Delphi survey

Eighty-four participants responded to the second Delphi survey which was sent to the 217 CALD cancer stakeholders across Victoria (response rate=39%). The 13 variations sent in the Delphi survey and the top 7 prioritised are shown in Table 4.

Similar trends to the first Delphi survey were seen, where timely access to treatment and emergency department presentation were prioritised. Access to psychology, private services, social workers and documentation of country birth were not seen as priorities.

Table 4. Round 2 Delphi results for CALD Cancer Summit unwarranted variations, 2026.

Ranking	Previous ranking	Variation	Score (n=87)
1	1	<p>OCP Step 4 – Treatment CALD patients were statistically significantly more likely to have a longer time to first treatment, compared with the statewide average, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – Stage 1–3: Arabic-speaking, South Eastern Europe, Vietnam • Colorectal cancer – Stage 1–3: South Eastern and Southern Europe • Non-metastatic lung cancer: Arabic-speaking • Prostate cancer – ISUP Grade 2–5: South Eastern Europe, Vietnam. 	371
2	8 ⁽⁺⁶⁾	<p>OCP Step 3 – Diagnosis, staging and treatment planning CALD patients had statistically significant differences in stage at diagnosis, compared with those from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – higher likelihood of Stage 2 and 3: Arabic-speaking, India, South Eastern Europe • Breast cancer – higher likelihood of Stage 4: Arabic-speaking, India, South Eastern & Southern Europe 	365

		<ul style="list-style-type: none"> Breast cancer – higher rate of unknown/missing stage: Arabic-speaking, India, South Eastern Europe Colorectal cancer – stage variation: Vietnam – Lower likelihood of Stage 2 compared with Stage 1 Colorectal cancer – higher likelihood of Stage 4: South Eastern Europe Prostate cancer – higher tumour grade: Chinese-speaking countries – more Grade 3–4; India – more Grade 5. 	
3	4 ⁽⁺¹⁾	<p>OCP Step 4 – Treatment</p> <p>CALD patients were statistically significantly less likely to have any treatment (surgery, systemic therapy, radiotherapy) within a year of diagnosis compared with patients from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer – Stage 2 and 3: Arabic-speaking, India Rectal cancer – Stage 2 and 3: Chinese-speaking Non-metastatic lung cancer: Vietnam. 	361
4	3 ⁽⁻¹⁾	<p>OCP Step 7 – End-of-life care</p> <p>CALD patients were statistically significantly more likely to have 2 or more emergency presentations to public hospitals within 30 days of death, compared with patients from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Lung cancer: South Eastern Europe Prostate cancer: Chinese-speaking, South Eastern Europe. 	346
5	6 ⁽⁺¹⁾	<p>OCP Step 7 – End-of-life care</p> <p>CALD patients were statistically significantly more likely to have an ED admission within 30 days of death, compared with patient from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer: Arabic-speaking Colorectal cancer: Arabic-speaking, South Eastern Europe Lung cancer: South Eastern Europe, Southern Europe, Vietnam Prostate cancer: Arabic-speaking. 	338
6	5 ⁽⁻¹⁾	<p>OCP Step 2 – Presentation, initial investigation and referral</p> <p>CALD patients were statistically significantly more likely to present to a public hospital ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> Breast cancer: Arabic-speaking, South Eastern Europe, India Colorectal cancer: Arabic-speaking, South Eastern Europe Lung cancer: Arabic-speaking, South Eastern and Southern Europe Prostate cancer: South Eastern Europe, Southern Europe, Vietnam. 	330

7	2 ⁽⁻⁵⁾	<p>OCP Step 3 – Diagnosis, staging and treatment planning CALD patients had statistically significantly more public hospital ED presentations, in the first 3 months after diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, India, South Eastern Europe • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern and Southern Europe • Prostate cancer: South Eastern and Southern Europe. 	330
8	7 ⁽⁻¹⁾	<p>OCP Step 2 – Presentation, initial investigation and referral Patients from Arabic-speaking countries, Southeastern European and Southern European countries, and Vietnam had statistically significantly more presentations to an ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023.</p>	322
9	10 ⁽⁺¹⁾	<p>OCP Step 4 – Treatment A statistically significant higher proportion of prostate cancer patients from Arabic-speaking countries had an emergency readmission to hospital within 30 days of discharge from surgery, compared with the average (18% vs 8%), in 2019–2023.</p>	313
10	13 ⁽⁺³⁾	<p>OCP Step 5 – Care after initial treatment and recovery CALD patients were less likely to see a social worker during their admission within 6 months of diagnosis, compared with the average, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Chinese-speaking • Colorectal cancer: Chinese-speaking • Lung cancer: Chinese-speaking, India, Vietnam. 	301
11	9 ⁽⁻²⁾	<p>System issues 22% of patients had multiple countries of birth documented in their medical record.</p>	292
12	12	<p>OCP Step 4 – Treatment Colorectal cancer patients (Stages 1, 2 and 3) from Southern European countries were less likely to receive surgery within 7 weeks of diagnosis at a private hospital, compared with the average.</p>	284
13	11 ⁽⁻²⁾	<p>OCP Step 5 – Care after initial treatment and recovery CALD patients were less likely to see a psychologist during their admission within 6 months of diagnosis, compared with the average, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Colorectal cancer: Chinese-speaking, Vietnam, Southern Europe • Lung cancer: Chinese-speaking, Vietnam • Prostate cancer: Arabic-speaking, Vietnam. 	283

Note: Unwarranted variations highlighted in yellow were prioritised for the round and for consideration at the next Delphi stage.

Third Delphi survey

Table 5 summarises the top 7 unwarranted variations that were included in the Delphi survey and indicates the top 3 selected by the expert advisory group to be prioritised and discussed at the VICS CALD Cancer Summit (response rate = 90%). Variations selected related to a range of topics including time to treatment, access to any treatment, and public hospital emergency department access following diagnosis.

Table 5. Round 3 Delphi results for CALD Cancer Summit unwarranted variations, 2026.

Ranking	Variation
1	<p>OCP Step 4 – Treatment CALD patients were statistically significantly more likely to have a longer time to first treatment, compared with the statewide average, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – Stage 1–3: Arabic-speaking, South Eastern Europe, Vietnam • Colorectal cancer – Stage 1–3: South Eastern and Southern Europe • Non-metastatic lung cancer: Arabic-speaking • Prostate cancer – ISUP Grade 2–5: South Eastern Europe, Vietnam.
2	<p>OCP Step 4 – Treatment CALD patients were statistically significantly less likely to have any treatment (surgery, systemic therapy, radiotherapy) within a year of diagnosis compared with patients from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – Stage 2 and 3: Arabic-speaking, India • Rectal cancer – Stage 2 and 3: Chinese-speaking • Non-metastatic lung cancer: Vietnam.
3	<p>OCP Step 3 – Diagnosis, staging and treatment planning CALD patients had statistically significantly more public hospital ED presentations, in the first 3 months after diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, India, South Eastern Europe • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern and Southern Europe • Prostate cancer: South Eastern and Southern Europe.
4	<p>OCP Step 2 – Presentation, initial investigation and referral CALD patients were statistically significantly more likely to present to a public hospital ED 28 days before their cancer diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking, South Eastern Europe, India • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: Arabic-speaking, South Eastern and Southern Europe • Prostate cancer: South Eastern Europe, Southern Europe, Vietnam.
5	<p>OCP Step 3 – Diagnosis, staging and treatment planning CALD patients had statistically significant differences in stage at diagnosis, compared with those from English-speaking countries, in 2019–2023. Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer – higher likelihood of Stage 2 and 3: Arabic-speaking, India, South Eastern Europe • Breast cancer – higher likelihood of Stage 4: Arabic-speaking, India, South Eastern & Southern Europe • Breast cancer – higher rate of unknown/missing stage: Arabic-speaking, India, South Eastern Europe

	<ul style="list-style-type: none"> • Colorectal cancer – stage variation: Vietnam – Lower likelihood of Stage 2 compared with Stage 1 • Colorectal cancer – higher likelihood of Stage 4: South Eastern Europe • Prostate cancer – higher tumour grade: Chinese-speaking countries – more Grade 3–4; India – more Grade 5.
6	<p>OCP Step 7 – End-of-life care CALD patients were statistically significantly more likely to have an ED admission within 30 days of death, compared with patient from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Breast cancer: Arabic-speaking • Colorectal cancer: Arabic-speaking, South Eastern Europe • Lung cancer: South Eastern Europe, Southern Europe, Vietnam • Prostate cancer: Arabic-speaking.
7	<p>OCP Step 7 – End-of-life care CALD patients were statistically significantly more likely to have 2 or more emergency presentations to public hospitals within 30 days of death, compared with patients from English-speaking countries, in 2019–2023.</p> <p>Details by tumour stream and specific CALD populations:</p> <ul style="list-style-type: none"> • Lung cancer: South Eastern Europe • Prostate cancer: Chinese-speaking and South Eastern Europe.

Recommendations

Results highlight that a 3-round, anonymous, online Delphi survey process can be successful in prioritising unwarranted variations in CALD cancer care. The Delphi process identified 3 priority unwarranted variations in CALD cancer care for action:

- (1) CALD patients were statistically significantly more likely to have a longer time to first treatment, compared with the statewide average, in 2019–2023.
- (2) CALD patients were statistically significantly less likely to have any treatment (surgery, systemic therapy, radiotherapy) within a year of diagnosis, compared with patients from English speaking countries, in 2019– 2023.
- (3) CALD patients had statistically significantly more public hospital emergency department presentations in the first 3 months following diagnosis, compared with those from English-speaking countries, in 2019–2023.

These priorities will form the basis for discussion and action planning at the upcoming VICS CALD Cancer Summit. Addressing them will require both coordinated statewide initiatives and targeted local strategies to reduce variation, improve equity, and strengthen outcomes for CALD people affected by cancer. The summit will provide an opportunity for clinicians, services, and consumers to codesign practical solutions and agree on next steps for implementation.

Conclusion

The identification and reporting of unwarranted variations in CALD cancer care and outcomes promotes understanding of performance against the OCPs and targeted cancer services improvement by the VICS.

This Delphi survey of the unwarranted variations in CALD cancer care has identified important findings to inform improvements that can be made in CALD cancer care in Victoria. A 3-round Delphi survey process was successfully used engaging both CALD cancer expert advisory group members and CALD cancer stakeholders to prioritise the top 3 unwarranted variations for discussion at the VICS CALD Cancer Summit. There was clear preference for unwarranted

variations that addressed access, treatment and use of the ED. While there were only 3 unwarranted variations prioritised for the summit event, a statewide Action Register will aim to address all unwarranted variations.

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