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<b>Title</b>	Medical students as interpreters in health care situations: "... it's a grey area"
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**Authors:**

	Title	First name	Mid initials	Last name	Postnom (eg, PhD)	Position1	Address1	Position2	Address2	Tel	Email
1	Assoc. Prof.	Anna	Therese	Ryan	PhD, MBBS, B.App.Sc/B. Chiro.Sc., Grad Cert Uni Teaching, Grad Dip V.E.T	Director of Assessment	1				annatr@unimelb.edu.au
2	Dr.	Caleb		Fisher			2				Caleb.Fisher@austin.org.au
3	Mr.	Neville		Chiavaroli			1				n.chiavaroli@unimelb.edu.au

Number of corresponding author:	1
Number of alternative corresponding author:	

**Addresses:**

	Institution	Postal address	City	State	Post Code	Nation
1	University of Melbourne	Level 7, Medical Building	Melbourne	VIC	3010	
2	Austin Health	145 Studley Road	Melbourne	VIC	3084	
3						
4						
5						

Postal address of first corresponding author (if different from the institutional address given above)	
--	--

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# Medical students as interpreters in health care situations: “... it’s a grey area”

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## Abstract

**Objective:** To examine the extent to which medical students in Australia are acting as interpreters in medical settings, and their perceptions of this activity.

**Design, setting, participants:** Anonymous online survey of final year students in the graduate medical program of the University of Melbourne, undertaken in 2014.

**Main outcome measures:** Numbers of students who had acted or who had been asked to act as ad hoc interpreters in health care situations during their clinical rotations and outside the medical education context.

**Results:** 146 of 319 final year medical students completed the survey (46% response). 106 students (73%) reported they could speak at least one language in addition to English; none had formal interpreting qualifications, but 40 (36%) had been asked to interpret during clinical rotations, and 36 (34%) had done so. The students described a diverse range of experiences, including complex interactions regarding informed consent and the breaking of bad news.

**Conclusion:** Medical students frequently acted as interpreters during their clinical training. Most did not feel appropriately qualified to interpret in clinical situations, and some felt pressured to do so, but many found the experience positive. Our study highlights the lack of clear guidelines regarding medical student interpreters in Australian health care settings.

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## Summary box

**The known:** Outcomes for patients not fluent in English are improved by mediated communication by accredited interpreters. Anecdotal evidence suggests that convenient bystanders (including medical students) are frequently used as ad hoc interpreters in health care settings.

**The new:** One-third of final year medical students responding to a survey had acted as ad hoc interpreters during their training. They often did not feel qualified to interpret in clinical situations, but many found the experience positive.

**The implications:** Our findings highlight the tensions between practice and policy, student learning and patient safety, and the challenge of legitimate student participation in health care contexts.

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Australia is a linguistically and culturally diverse country. According to 2016 census

data, 21% of people speak a language other than English at home, 26% were born overseas, and 11% of those who arrived in the past 25 years have difficulty speaking English.<sup>1</sup> In addition, about 300 000 overseas students are enrolled in Australian higher education programs.<sup>2</sup>

Communication is a key element of safe and effective health care<sup>3</sup> and language barriers are associated with reluctance to present for care, poor quality of care, poor adherence to treatment, and medical errors.<sup>4</sup> Interactions mediated by professional interpreters and provision of care by bilingual practitioners can improve communication, patient satisfaction, and clinical outcomes, and reduces error.<sup>5</sup> Many studies of the effectiveness of mediated communication have not distinguished between trained and untrained interpreters, but the use of ad hoc interpreters (including family, friends and staff) instead of professional interpreters has been associated with greater risk of clinical error.<sup>6</sup> Government policy in Victoria and most other Australian jurisdictions requires that patients have access to professional interpreting services in situations of high risk (such as providing informed consent), and that bilingual staff should only be called upon to interpret in low risk situations. The use of family and friends in this role is explicitly discouraged in Victoria, but using medical students as interpreters is not explicitly mentioned.<sup>7</sup>

Clinical environments are an important educational setting for medical students, and student–patient interactions and graduated care responsibilities provide significant benefits for all involved.<sup>8-10</sup> The need to ensure patient safety while providing student learning opportunities is recognised,<sup>8</sup> and supervisors frequently need to make judgements about the competence of the learners they supervise.<sup>11,12</sup>

Given their increasing inclusion in health care teams, it is unsurprising that medical students sometimes act as ad hoc interpreters. A New Zealand study found that half the bilingual fourth and fifth year students had interpreted for clinicians; the students generally found the experience positive, but professional interpreters, policy staff, and clinicians who use interpreters were concerned that students were not familiar with the ethical principles of professional interpreting.<sup>13</sup> In an American study, 84% of bilingual medical students had been asked to interpret, of whom 12% had been uncomfortable in this role; more than one-third of the discomfiting instances involved critical care situations, informed consent, or medical procedures.<sup>14</sup> The aim of our study was to examine the extent to which medical students in Australia are acting as interpreters in medical settings, and their perceptions of this activity.

## **Methods**

The University of Melbourne medical program is a postgraduate Doctor of Medicine degree (MD) program consisting of one year of university-based learning, two years of clinical training, a final year research semester, and a capstone clinical experience. Students undertake their clinical experience in university-affiliated health services in inner metropolitan, outer metropolitan and rural settings.

We developed a questionnaire, informed by the relevant literature, for exploring ad hoc interpreting in health care settings by students. The final questionnaire (Supporting Information) included 28 multiple choice and short answer items and a free response question; it was pilot-tested prior to our study.

All final year medical students were invited via the curriculum database to participate in the online survey (Qualtrics Research Suite). Their perceptions of their interpreting experiences were explored in three situations:

- ad hoc interpreting requests in health care settings;
- ad hoc interpreting in health care settings;
- ad hoc interpreting in health care settings, but outside a medical education context (that is, not during clinical rotations).

We undertook descriptive and frequency analysis and cross-tabulation of data. As many respondents could speak more than one language at differing levels of proficiency, an upper level language ability was determined for each participant. Free text responses were examined for common themes.

### **Ethics approval**

The study was approved by the University of Melbourne Department of Medical Education Human Ethics Research Group (reference, 1441598.1).

### **Results**

The questionnaire was completed by 146 of 319 final year medical students (46% response); 106 (73%) reported speaking languages other than English and were included in our analysis (Box 1). Fifty-one of the 106 respondents (48%) were born in Australia; seven were born in China, and four each in Malaysia and Singapore. Fifty-two students (49%) spoke one language in addition to English, 41 (39%) spoke two, nine (8%) spoke three, and four (4%) spoke four.

Most respondents, (97 of 105; 92%) had completed some formal instruction in the languages they spoke; of the 80 participants who provided more detail about language education, five had received it in primary school and 52 in secondary school (including native speakers of a language), 14 during tertiary education, and nine in short courses. No respondents possessed a current interpreting qualification; one respondent had earlier possessed a qualification, but it had lapsed.

In all three interpreting situations, the self-reported level of language ability of most of the students involved was high: 24 of 40 students asked to interpret (60%), 24 of 36 students who interpreted during their rotations (67%), and 28 of 36 students who interpreted outside their medical student role (77%) reported a bilingual or native speaker level of language proficiency (Box 2, Box 3, Box 5).

### **Ad hoc interpreting requests in a health care setting**

Forty respondents (38%) had been asked to act as ad hoc interpreters; all 40 had been asked to interpret by medical practitioners, while six had been asked by nurses, two by

social workers, one by a physiotherapist, and two by administrative staff. One student received an interpreting request from the family of a patient, and another from a professional interpreter (presumably because of a specific language variant or other consideration, such as patient sex). Most students (27 of 40) had been asked to interpret on five or fewer occasions, but two had been asked to interpret on more than 20 occasions (Box 2).

Eight of the 40 respondents asked to interpret had felt pressured to do so. Some described urgent and serious clinical situations, including a patient in the emergency department with a pulmonary embolus and a woman with first trimester bleeding.

Some respondents regarded the request to interpret as a matter of convenience for the treating team; that is, they were present when the need arose and they could speak the language required. Others reported that they were asked only because other interpreting services were unavailable. On some occasions, respondents had a feeling of responsibility to the patient or team; for example, "... I wasn't pressured, but I felt obliged to try" (respondent 106).

#### **Ad hoc interpreting in health care settings during medical training**

Thirty-six medical students (34%) had acted as ad hoc interpreters; 27 had done so on fewer than five occasions, but two had acted as interpreters on more than 20 occasions (Box 3). Six students who had acted as interpreters had not been asked to interpret, suggesting that they had volunteered.

#### **Context and content of ad hoc interpreting by medical students during medical training**

Most medical student interpreting activity occurred during years 2 or 3 of the program, during which general medical and surgical and subspecialty rotation occurred. Most students (23 of 36) acted as interpreters while based at inner metropolitan locations; six reported interpreting at outer metropolitan sites, one at rural sites, and three students at several site types (three students did not answer this question). Most students (26 of 36) acted as interpreters between 8 am and 6 pm; three reported interpreting between 6 pm and 8 am, and six reported interpreting during both time periods (one student did not answer this question). Twenty-three students had interpreted on hospital wards, 19 in outpatient clinics, 17 in the emergency department, and nine in general practice settings; 20 students had interpreted in several health care settings.

Most students were involved in interpreting exchanges regarding information about medical history (32 of 36 students); other topics included clinical management (19) or examination (17), medications (15), diagnosis (8), and laboratory or radiological investigations (6). Three students interpreted requests for and provision of informed consent for procedures or operations, and one had interpreted during the breaking of bad news.

### **Awareness of policy**

Most respondents (88 of 106, 83%) were unaware of policies and procedures regarding interpreting by medical students. Sixteen students provided an outline of the information they had received from the university or health service, including the directive they should not act as interpreters under any circumstances, while others understood the policy as situational (ie, interpreting was appropriate if there were no better options) or inapplicable if they were qualified or suitably proficient in the language. Of the 36 students who had acted as interpreters during training, four stated they were aware and 32 that they were unaware of policies and procedures regarding interpreting by medical students.

### **Perceptions by medical students of ad hoc interpreting during medical training**

Eighteen of the 36 students who had acted as ad hoc interpreters had felt comfortable with doing so; 27 found the overall experience positive, but 20 did not feel appropriately qualified, and 13 found it stressful (Box 4).

Fifteen students (14%) provided free form comments about requests to interpret. They were more willing to interpret if they found the task relatively easy, if their involvement was limited to minor matters, or if they felt they could make a valuable contribution:

Just to translate a few words or help the patient come up with the right word...  
(respondent 5).

In contrast, others had reservations about their proficiency:

... I'm not sure whether I was using correct medical terminology (respondent 106).

Some questioned the quality of the available interpreting services:

I have certainly seen interpreters with much poorer skills that even I [have]  
(respondent 19).

One student highlighted the ethical ambiguity, but potential benefit, of the situation:

It is a grey area, and sometimes it's hard to say no to senior doctors to interpret, especially if you are afraid of judgement or the senior doctor thinking poorly of you and perhaps bias in your assessment. Other times it can feel empowering for us as medical students to have a role and be able to contribute to the consultation, rather than sitting back and doing nothing (respondent 94).

### **Ad hoc interpreting in a health care setting, but outside clinical rotations**

Thirty-six of 106 respondents (34%) had acted as interpreters in health care contexts not directly related to their roles as medical students and outside of clinical rotations (for example, if interpreting for a family member or friend during a health care consultation); 19 did so on fewer than five occasions, and 21 felt comfortable in these situations (Box 5). Twenty-six survey participants had acted as interpreters both during and outside clinical rotations.

## Discussion

Our findings suggest that Australian medical students who speak another language are often invited to act as interpreters during their clinical placements. Many students accept this invitation and some even volunteer. Our findings may be subject to participation bias, as students who speak other languages or who have experience in interpreting would be more likely to have responded to our survey. However, while the absolute number of students acting as interpreters may be relatively small (36 of 146 respondents), this number is 11% of the entire final year cohort (319 students). Consistent with studies in New Zealand<sup>13</sup> and the United States,<sup>14</sup> this suggests the practice is relatively common in Australia. Our data highlight a range of risk in the contexts involved, from interpreting a few words to obtaining consent and breaking bad news.

A key finding of our study, not explored in other studies, was that many students had interpreted in health care settings not directly related to their being medical students. This may have a bearing on their readiness to interpret in clinical situations. This contrasts with the fact that most students who had interpreted during clinical rotations (20 of 36) did not feel appropriately qualified to interpret in clinical situations, and eight of 40 students asked to interpret during training felt under pressure to do so; these findings are consistent with other reports.<sup>14</sup> It may therefore be surprising that a large proportion of students who agreed to interpret in a clinical situation (27 of 36) said they found it a positive experience; this discrepancy can be understood in the context of the clinical rotation and the professional identity formation process.

The clinical learning environment presents medical students with several transition challenges.<sup>15</sup> While contributing to patient care has significant benefits for clinical learning,<sup>8,9</sup> there remain relational and intrapersonal barriers that prevent medical students feeling they are legitimate members of the health team. Being able to interpret offers the student a relatively unusual opportunity to connect with patients in a meaningful way and to make a valued contribution to patient care. From a student perspective, such an opportunity can provide a strong sense of legitimisation of their presence in the clinic, especially as they often feel uncertain about their role and in the way.<sup>16,17</sup> Meaningful contributions such as these can be important in facilitating professional identity formation.<sup>18,19</sup> Even the professional and ethical dilemma posed by an interpreting request can help shape the professional identity.<sup>20</sup>

On the other hand, a negative effect on learning is possible (students focusing on interpreting rather than clinical learning), and ad hoc interpreters may conceal inadequacies in formal health interpreting services.

Most participants were unaware of specific policies and procedures regarding interpreting by medical students. While official policy permits bilingual staff to interpret in low risk situations, medical students are not specifically mentioned. Additionally, when bilingual staff members are widely regarded as convenient alternatives to professional interpreters,<sup>21</sup> an opportunity for students to practise these skills in a supervised environment could be highly valued. In America, a number of medical schools

provide students language and interpreting training,<sup>22,23</sup> but whether this is feasible in a country as linguistically diverse as Australia is uncertain.

If a student is proficient in the same language as a patient with restricted English abilities, or there is a clear patient or situational need, the pressure on students to act as interpreters may be strong. For supervisors, the challenges involved in determining the risk level of a situation, dealing with inadequate interpreting services, and working in an environment in which students are expected to assume supervised patient care responsibilities cannot be underestimated. Supervisors need to recognise suitably low risk situations and to facilitate learner self-assessment (in a language that the supervisor does not speak), and also to allow students to decline requests to interpret.

### **Limitations**

We conducted our research in a single medical school, although the number of school sites (rural, inner and outer metropolitan) with students from various cultural and linguistic backgrounds mitigates this limitation.

We adopted an intuitive self-report scale for categorising language proficiency; future investigations should employ a clearly defined, validated language proficiency standard.

We did not specifically explore the potential benefits of ad hoc interpreting for students beyond assessing reported self-perceptions. A more in depth qualitative approach could provide further insights into students' understanding and motivations, their ethical considerations, and the potential educational impact.

We did not assess the experience of patients regarding interpreting in clinical situations, and this is a particularly important area for future research.

Finally, it has been reported that using ad hoc rather than professional interpreters is associated with higher rates of clinical error.<sup>6</sup> Investigating risk to patients must examine both the precision of interpreting and the effects of delays in providing care.

### **Conclusions**

Medical students who can speak languages other than English frequently act as interpreters during training. Students describe a diverse range of experiences from simple translation of a few words through to complex and high stakes interactions involving informed consent and breaking of bad news. Our study highlights student uncertainty about guidelines and the ethical and professional ambiguity of ad hoc interpreting, producing a situation aptly described by one participant as “a grey area”. Our findings support calls in other countries to establish clear policies<sup>14</sup> or at least publish information about the questions involved.<sup>13</sup> Our study highlights the challenge of legitimate student participation in health care teams, and the tensions between dealing with urgent clinical situations, the real or perceived inadequacies of hospital interpreter services, and time pressures when attempting to provide effective and efficient communication for patients and their families.

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## Author details

Anna Therese Ryan<sup>1</sup>

Caleb Fisher<sup>2</sup>

Neville Chiavaroli<sup>1</sup>

<sup>1</sup> University of Melbourne, Melbourne, VIC.

<sup>2</sup> Austin Health, Melbourne, VIC.

[annatr@unimelb.edu.au](mailto:annatr@unimelb.edu.au)

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**Box 1. Languages other than English spoken to some degree by the 146 respondents to the survey**

Language	Frequency
French	31
Mandarin	22
Spanish	21
German	12
Italian	10
Japanese	10
Cantonese	8
Malay	6
Hebrew, Hindi	5
Greek, Indonesian, Tagalog, Vietnamese	4
Arabic, Hokkien, Polish	3
Auslan, Farsi, Russian, Tamil	2
Afrikaans, Chinese, Dutch, Māori, Nepali, Persian, Romanian, Serbo-Croatian, Shanghai dialect, Sinhalese, Telugu, Thai, Taiwanese, Turkish	1
None	173

**Box 2. Self-assessed language proficiency of 40 medical students who had been requested to act as ad hoc interpreters in health care settings during training, and the frequency of requests**

Characteristic	Number of students
Language proficiency	
Basic	3
Conversant	6
Proficient	6
Fluent	1
Bilingual	14
Native speaker	10
Occasions of interpreting	
1–5 occasions	27
6–10 occasions	8
11–15 occasions	2
16–20 occasions	1
> 20 occasions	2

**Box 3. Self-assessed language proficiency of 36 medical students who had acted as ad hoc interpreters in health care settings during training, and the frequency of interpreting**

Characteristic	Number of students
Language proficiency	
Basic	2
Conversant	6
Proficient	3
Fluent	1
Bilingual	14
Native speaker	10
Occasions of interpreting	
1–5 occasions	27
6–10 occasions	4
11–15 occasions	1
16–20 occasions	2
> 20 occasions	2

**Box 4. Perceptions of 36 medical students of their acting as ad hoc interpreters in health care situations during training**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I felt comfortable acting as an interpreter	6	12	13	5	0
The experience of interpreting is stressful	0	13	12	8	3
It is difficult to act as an interpreter for a patient	0	14	9	9	14
I feel appropriate qualified	1	5	10	14	6
Overall my experience has been positive	5	22	8	1	0

**Box 5. Self-assessed language proficiency of 36 medical students who acted as ad hoc interpreters in health care settings outside medical education settings, and the frequency of interpreting**

Characteristic	Number of students
Language proficiency	
Basic	2
Conversant	3
Proficient	2
Fluent	1
Bilingual	15
Native speaker	13
Requests for interpreting	
1–5 requests	19
6–10 requests	4
11–15 requests	7
16–20 requests	1
> 20 requests	5
Felt comfortable being asked to interpret	
Strongly agree	4
Agree	17
Neither	10
Disagree	3
Strongly disagree	2