

Providing socially accountable medical education: student perceptions from two Australian medical schools

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Abstract

Background: Flinders University (FU) and James Cook University (JCU) are founding members of the Training for Health Equity Network (THEnet), an international community of practice involving twelve socially accountable health professional schools that align their training, research and service with the needs of underserved populations.

Aims: This study aims to describe how medical students perceive and engage with the social mission of their school. Developing a robust understanding of learners' perceptions may inform curricular development.

Methods: This qualitative study draws on the results from two Australian medical schools that participated in the international study *Accounting for Learners' Perceptions of Social Accountability in THEnet Schools*. A mixed convenience and purposive sample of domestic, final year undergraduate medical students were recruited (n=14) to participate in semi-structured interviews. Interviews were transcribed in full and analysed using abductive coding in a grounded theory framework.

Relevance: An important strategy of THEnet schools involves integration of the social mission into medical education. However, there is an assumption that learners understand the social mission of their school and the intended social accountability curriculum. Currently, scientific evidence to substantiate this assumption is lacking. It is important for schools addressing the workforce shortage to understand student perceptions of this mission.

Results: Participants of JCU perceived the schools social mission to prepare graduates with an understanding of social justice, social inequity, health workforce shortages and health disparities in disadvantaged communities. While initially their career intention may not have been to practice rural medicine, over half the participants reported developing a genuine interest in rural, Indigenous and tropical medicine during their rural and remote clinical placements. Participants reported agreeing with and seeing the value of JCU's social mission.

Most FU participants studied medicine with intent to practice in rural or remote regions, which was reinforced by a curricular focus on cultural awareness, social accountability and diversity. Clinical placements reflected the schools' social mission by exposing interested students to rural and remote clinical contexts. Participants not interested in rural practice, while agreeing with and valuing the school mission, did not change their career intention.

Conclusions: Learners at both medical schools understood and valued the social mission of their schools, however clinical experiences in underserved settings did not necessarily change career intentions.

Background

Socially accountable schools training health professionals consider themselves responsible for the health of their underserved rural and remote communities (Charles Boelen & Woollard, 2011). These institutions focus education, research and service on improving health care. The Training for Health Equity Network (THEnet) is a global collaboration of 12 schools aspiring towards social accountability (see box 1). The first step in THEnet's research program was creation of a consensus-based 'Evaluation Framework for Socially Accountable Health Professional Education' across THEnet schools (Larkins et al., 2013; Ross et al., 2014). THEnet schools have undergone a self-assessment to document their social accountability activities using The Framework. The second step was to undertake a graduate outcomes study. This ongoing longitudinal study, explores graduates career pathways in relation to their expectations and experiences throughout their training (Larkins et al., 2015).

Box 1 Descriptions of core principles of socially accountable health professions schools

- Health and social needs of targeted communities guide education, research and service programs.
- Students are recruited from the communities with the greatest health care needs.
- Programs are located within or in close proximity to the communities they serve.
- Much of the learning takes place in the community instead of predominantly in university and tertiary hospital settings.
- Curriculum integrates basic and clinical sciences with population health and social sciences; and early clinical contact increases the relevance and value of theoretical learning.
- Pedagogical methodologies are: student, patient and population centred; service-based; and assisted by information communication technology.
- Community-based practitioners are recruited and trained as teachers and mentors.
- Embedded in the health system partnering with health system actors to produce locally relevant competencies.
- Faculty and programs emphasise and model commitment to public service.
- Whole school approach, across all departments, and commitment from the leadership.

(Ross et al., 2014)

James Cook University College of Medicine and Dentistry (JCUCMD) and Flinders University (FU) espouse the principles of social accountability in their mission statements (see box 2). JCUCMD was established in regional, tropical Queensland in 2000 and delivers a 6 year undergraduate program that focuses on Indigenous health, and rural, remote and tropical health. The program includes early and frequent clinical placements with a total of 20 weeks placement in rural settings.

Box 2 Social Mission of medical schools

JCU CMD Social Mission

The College aims to promote health and strengthen medical care for communities of tropical Australia and beyond through socially accountable medical education, discoveries, partnerships, advocacy and leadership.

Underpinning our work is a commitment to social justice, passion for innovation and dedication to excellence in all that we do.

We see a future where people of the tropics, our wider region, rural and remote communities and Aboriginal and Torres Strait Islanders can be confident of good health and access to quality healthcare for themselves, their families and future generations.

(James Cook University, 2016)

FU School Vision

Local wellbeing. Global influence.

By 2018 we aim to be the medical school of first choice in Australia's central economic corridor, and connected via Asia to the world. We will be:

- recognised globally for our socially accountable work with the underserved, particularly in rural, remote and Indigenous communities
- vibrantly embedded in high quality health services, utilising advanced internet-based connectivity, across a 3,500km north-south span
- organised into inspiring translational research and teaching teams of distinguished scholars and students actively contributing to the current and future knowledge and technology explosion, and leveraging the links from theoretical to basic science through clinical to community and population health, influencing education, then driving change in practice and policy
- enhancing the lives of our staff and students, and building sustainable social, economic, and intellectual capital of the communities we serve. Perhaps the formatting isn't quite right—Should there be dot points?

(Flinders University, 2013)

FU School of Medicine established the Rural Clinical School in 1997, pioneering 40 week longitudinal integrated rural clinical placements. The Rural Clinical School and Northern Territory Medical program offer all medical students opportunities to immerse themselves in some of the most underserved communities in rural and remote Australia.

Students are expected to embrace or value the mission throughout their education. However, discourse around social accountability in medical schools has been largely defined at the strategic and institutional level. Even the Framework is an institutional tool. Whilst the Framework has built commitment and consensus, we know little about how learners perceive the social accountability

mission of our schools. Given that THEnet schools want our students to be transformative agents of change in communities we need to account for their engagement with our mission and vision.

Aim

The aim of this study was to describe how learners at two Australian medical schools perceive and engage with the social mission of their school. Developing a robust understanding of learners' perceptions may inform curricular development, particularly for underserved rural and remote areas.

Methodology

This qualitative study draws on the results from two Australian medical schools that participated in the international THEnet study "Accounting for Learners' Perceptions of Social Accountability in THEnet Schools (ALPSATS)".

Researchers presented the study to final year medical students (FU year 4 and JCU year 6). A Participant Information Sheet and Consent Form were emailed to the entire cohort inviting them to participate. This pool of final year students ensured participants would have a good appreciation of their school's program career trajectories. Based on likely theoretical saturation (Saldana, 2009) and available resources each school conducted between 7 and 11 semi-structured interviews. A local team recruited participants, conducted interviews and transcribed audio recordings.

The interview proforma was developed using the seven Engeström activity theory components (subject, object, outcome, mediating objects, rules, community, and division of labour) and associated concepts (Engeström, Mietinen, & Punamäki, 1999). The script was piloted and modified according to feedback. The final interview script is provided in Appendix 1.

Flinders University Social and Behavioural Ethics Committee and James Cook University Human Research Ethics Committee gave ethical approval.

Data analysis based on grounded theory included deductive and inductive coding, memo-ing, and provisional theory building (Kennedy & Lingard, 2006). Data was analysed deductively according to factors derived from the study hypotheses and questions, termed ALPSATS factors herein:

- student knows/understands social mission
- student agrees or disagrees with social mission
- students' perceptions of their peers' response to the social mission
- students' perceptions of their teachers' response to the social mission
- training influenced by the social mission
- career choice influenced by the social mission.

Results

Characteristics of students

Participant demographic data and each schools mission statement were collected to provide background information. Each school conducted 7 interviews (n=14) which were between 22 to 51 minutes in duration. The characteristics of students are described in Table 1 below.

Most participants grew up locally in North Queensland or South Australia or a rural region interstate. Four students were immigrants. Most of the participants had parents who were professionals and were the first in family to study medicine. Five participants had a parent who was a doctor and one said this influenced their interest in rural medicine. The majority of participants chose to study medicine because of their enjoyment of maths and science or appreciating the opportunity to be of service to others. School choice was influenced by proximity to home, easier entry option, a strong clinical component and the rural focus.

Table 1 Participant demographics

	Flinders University	James Cook University
Age		
20-25	2	6
26-30	2	1
31-35	2	
>35	1	
Gender		
Female	4	5
Male	3	2
Aboriginal/Torres Strait Islander	1	0
LOTE* at Home	1	Not asked
Official Representation on school committees and interest groups		
Yes	4	1
No	3	6

*Language other than English

Demonstration of ALPSATS Factors

Student knows/understands social mission

Students from both schools understood their institutions' missions. They reported being taught about "looking at the bigger pictures and being aware of leaving your preconceived ideas when entering the clinical environment" (FU_02). They described a diverse medical education encompassing "urban as well as rural health, but also looking at indigenous health, gay and lesbian health, international health as well" (FU_01) and being taught to think critically as reflected in the following quote:

I think the mission of the school is to provide medical graduates who are capable of and interested in working in you know, the more rural and remote areas of Australia who don't just want to go to the metropolitan part and be super specialists, so they really want to get out and help the people who don't have access to medical care. (JCU-02)

Students agrees or disagrees with social mission

Most participants agreed with the social missions of their institution and perceived the value of practising medicine with social awareness. FU students focussed on their own career goals "I like to think that I am working towards being a professional with social accountability". (FU02) However one urban based student questioned their ability to make an impact: "...as an individual I don't think you really can have a global impact. And then the local connections I guess depend on where you are...but perhaps if I was in a more rural place then it would be more important". (FU_03)

Some JCU students did not necessarily enrol with a rural, remote and tropical medicine focus but developed a genuine interest influenced by their rural placements. This mission was seen to admirable and unique beyond the focus of "the south east corner of Australia" and an understanding

that a school that focused on these underserved populations was needed as... if we weren't to look after them, then who would?" (JCU-07). There was a certain pride about being able to have insight into tropical issues (JCU4) and valuable learning experiences with Indigenous people (JCU 7).

Students' perceptions of their peers' response to the school's social mission

Students perceived their peers' response to the social mission as variable with the majority agreeing with the missions of the schools.

FU students learn in either the South Australian or Northern Territory (NT) medical programs and may choose from urban, rural or remote placement options during their first clinical year (3rd year). The NT program offers greater exposure to indigenous medicine in the remote context. The students select their learning program according to personal preference which may preselect students with a greater level of social accountability into given programs. Participants recognised that within their peer group were pockets of people who are more in tune with it [social mission] and active in groups such as the health and human rights groups (FU04) or learning in the Northern Territory Program:

“...going to the NT automatically selects for a cohort with similar social mission to me. The vast majority of my colleagues have similar missions. (FU_02)

Similarly, JCU students believed that their peers were generally on board (JCU-02) with the mission, however some of their peers were not. There was a feeling that the social mission was part of the school culture and made very explicit: “...If you have an issue with it, you shouldn't have come really and I don't know of anyone who's particularly upset with it.” (JCU_06). One student commented that, while it was “very rare” a few students disengaged and “marginalised themselves...because they have such a negative attitude towards a rural focus...” (JCU-02).

Students' perceptions of their teachers' response to the school's social mission

Students from both schools described the diversity of their teachers and the varied commitment to the missions. Some participants from both schools noted particular clinical teachers who were committed to rural or Indigenous health and role modelled this in their teaching practice.

They were described as dedicated, caring, and motivated to teach with experience in rural and tropical medicine. Students commented that clinicians in rural areas were on board with the social mission, while in regional areas, the focus was on clinical medicine, especially in Townsville where there were “super specialists” (JCU 4). Students noted an increase in JCU graduates as teachers but locums were “not quite sure what we're meant to do in every single year, and...not really aware of JCU's general purpose” (JCU 2).

FU participants described their teachers as a variety of ages, cultures, backgrounds, teaching styles and perspectives. Those teaching in the rotational curriculum were appreciated for their specialty specific focus, whereas the rural clinical teachers were described as passionate and invested academically, socially and personally. Teachers were considered supportive of the schools social mission and brought different strengths:

“...people that you really admire because of their knowledge. People that you really admire because of their willingness to teach. People that you really admire other than for their values, who are strong advocates for their interests, their passions, so different people for different things”. (FU-04)

Training influenced by the social mission

The majority of participants undertook the FU course with the intention to work in rural or remote regions and this goal was reinforced during training. The clinical placements reflected the schools social mission by exposing them to rural and remote contexts and a diversity of patients.

JCU students recognised that the curriculum was aligned with the mission, although during early years of the course some did not comprehend the importance of some topics:

“... in younger years I, we would complain about...the Rural Remote Indigenous and Tropical [module in 2nd year], like why are we learning this? It's so stupid, I just want to learn about cardiovascular medicine, and go do anatomy. But I do think it's really important now, I'm glad we were taught it...” (JCU_02)

Career choice influenced by social mission

There was “a mix” (JCU-04) in career choices: Two JCU students were on the rural generalist pathway, one wanted to be a GP; and one wanted to specialise in internal medicine. The other three students were unsure, although one was interested in Indigenous health, influenced by a placement. Career choice was also about location. Four students were moving to southern Queensland as they wanted a change while three were staying in north Queensland as rural practice was of interest: “... communities have just always been so welcoming and, I really enjoyed my time there so...”(JCU-02). However for those seeking urban based specialty training

“...it's impossible to go do your training in any of these things without going to a massive tertiary centre in Brisbane.... (JCU-01) While many were unsure about their return to rural areas, they had learnt to appreciate rural disparities “...it's important to be aware of that (rheumatic heart disease) because not everyone lives in a metropolitan centre and your patients will be from different areas of the country...” JCU-02)

FU students said that while some of their peers wanted to be GPs or rural anaesthetists despite being constrained by the lack of rural junior doctor posts, others wanted to do speciality training:

“I think in terms of wanting to go through the hospital system with the junior doctor posts and then just trying to get onto a training program, that's probably what the majority of people are hoping to do. So in that sense I'm very much the same as the rest of my year”. (FU_03)

Discussion

The concept of social accountability in medicine is not new, in fact the World Health Organization's (1995) formal definition of the social accountability of medical schools is: ...the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region they have a mandate to serve. The priority health concerns are to be identified jointly by governments, healthcare organisations, health professionals and the public.

Both schools are leaders in rural health and strong advocates for socially accountable medical education internationally. This study revealed students are attracted to these schools because of their explicit focus of rural workforce and commitment to improving health in rural and remote communities. The analysis revealed three types of students were evident at these schools:

Type A Committed: These students were already committed to rural practice. They had a pre-existing vocational interest in rural health, which was reinforced by the social mission of the medical school. The social mission provided an opportunity to deepen and to express a sensitivity that already existed.

Type B Converted: These students were persuaded to become clinicians working in underserved communities. Influenced by clinical placements and teachers as role models, they developed an interest in working in rural medicine or Indigenous health. Their experience of the social mission was an 'eye-opener', especially when clinical placements were positive yet confronting experiences that changed their career choices and attitudes.

Type C Consigned: Some students were uncommitted, neither persuaded nor constrained by their choice of vocational training. Several expressed values aligned with the medical school social mission however few were neither sensitive nor interested in social accountability.

This research produced key lessons for rural health policy and emphasises the need to attract more health professionals to work in rural areas. In these universities, recruitment of students focuses on a range of backgrounds with emphasis on rural, remote and Indigenous students. Most importantly, there is a need to attract students with a social conscience to work in rural and remote communities. As Woollard (2006, p. 310) says, "social accountability of medical schools is initiated and driven by the students themselves."

JCU and FU aim to meet high academic standards and developed curricula oriented towards rural, remote, Indigenous and tropical health. Both are explicit about having a social mission and provide rural campuses whereby students are immersed in rural and remote communities. Social accountability is promoted through clinical placements, research and community engagement and capacity building. The ways that such strategies are perceived by learners and incorporated into their practice intentions and social and professional values is complex. These mechanisms and their implications for future social accountability strategies are beyond the scope of this manuscript however will be described in future manuscripts. This study, together with other research in THEnet's program such as the Graduate Outcomes Study (a study that tracks practice intentions from entry to medicine up to ten years post-graduation; Larkins et al., 2015) seeks to inform global discourse around effective strategies that promote principles of social accountability in graduates of health profession education.

Conclusion

This research produced lessons in practice for health professional schools making the mission more than a hollow mantra. Medical schools have an obligation to ensure learning environments respond to the ever-increasing clinical knowledge base, but equally to ensure that they produce well-rounded socially accountable clinicians. This study demonstrated that the mission of socially accountable medical schools is interpreted by students in theory and practice in diverse ways. Medical schools need to develop strategies to engage all "types" of students in their missions and ensure a future workforce committed to the underserved, including rural and remote communities.

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Appendix 1 ALPSATS interview script (Accounting for Learners' Perceptions of Social Accountability)

About you

1. Can you describe your background? [may just give professional and training—probe for socioeconomic background, parents occupation/s, schooling, previous studies, are they first in their family to go to university and/ study medicine,]
2. Why did you want to study medicine?
3. Can you describe your plans for post-graduation practice?
4. Are your practice intentions similar to your classmates? How do they differ?
5. Why did you choose this medical school? [probe for non-stock answers—allow them to dissent or be otherwise honest]

About your school

6. What are your school's values?
7. Are your school's values reflected in your options for clinical learning?
8. How is your school different from other schools in your region (country, state)?
9. What kinds of learners come to your school?
10. What kinds of teachers do you have in your school?
11. Which communities do you serve as a school and what are their health needs?
12. How is the school's program perceived in the communities that it serves?
13. What is the role of your communities in the organisation of your school's medical training?
14. What is the social mission of your institution? [If students are not aware of the social mission, let them read it]

Prompt: do they know y/n and how do they understand it? (if they do not know, explain the social mission, in order to be able to answer question 15)

15. Can you describe how the social mission of your program/institution is expressed in and aligned with:
 - a. Your curriculum (what you are taught and how you are taught it)
 - b. The resources you are provided with (buildings, libraries, technology etc.)
 - c. Your program objectives and outcomes;
 - d. The program's rules, regulations and codes of conduct;
 - e. The communities in which you learn

You and your school

16. Are there differences between what you believe and the social mission of your school or program?
17. To what extent and in what ways do you agree or disagree with the social mission of your school or program? [PROBE—what would you change and why?]
18. Is your school's social mission consistent with your career intentions?
19. To what extent and in what ways do your peers and tutors agree or disagree with the social mission of your school or program?
20. Have you ever felt marginalised, disadvantaged or discouraged by your school's social mission?
21. Have there been particular turning points during your medical education that have changed the way you think about yourself or your school or that have changed your practice intentions? [PROBE—role of mentors, teachers, or role models]
22. Do you have any other comments before we close?