EVALUATION OF THE PARALLEL RURAL COMMUNITY CURRICULUM AT FLINDERS UNIVERSITY OF SOUTH AUSTRALIA, IN THE CONTEXT OF THE GEMP YEAR 3

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EXECUTIVE SUMMARY

Background

At the request of the Flinders University Rural Clinical School, an international external evaluation was conducted of the Parallel Rural Community Curriculum, a rural community-based medical education initiative, funded by the Australian Government's Department of Health and Aging. This initiative is now in its tenth year and this is the third such evaluation that has been undertaken. The evaluation was undertaken in the context of the entire Flinders Year 3 medical programme, which was thus reviewed as a whole.

The Year 3 of the Graduate Entry Medical Programme has students placed in 5 sites: Flinders Medical Centre, Northern Territory Clinical School and the three regions of the PRCC – Riverland, Greater Green Triangle and Hills Mallee Fleurieu. The evaluation focused on the educational and social advantages of the various sites, while also reviewing the Year 3 curriculum and related issues

Process

The data collection for the evaluation consisted of 3 components:

1. A student survey, using a specially developed questionnaire.
2. Focus group discussions with medical students
3. Individual interviews with a range of key role-players and stakeholders, within the School of Medicine, and in the various sites, including academics, specialists, other health professionals, administrators, health service managers, and local government representatives.

Results for the whole Year 3 Cohort

Student Surveys

- A response rate of 73.4% was achieved.
- 89% of students were satisfied with their choice of site

- 61% believed they received adequate clinical exposure to the core clinical conditions.
- 32.5% of students plan to practice outside of major metropolitan areas, a greater proportion of these being found in sites outside of Flinders Medical Centre
- Paediatrics and general practice were the most commonly preferred disciplines for future practice.
- Only 10.4% felt inadequately prepared for Year 3, but many felt there is insufficient clinical exposure in Years 1 and 2.
- Students do not find the Australian Medical Council handbook useful, preferring textbooks and web-based material.
- Students would like to see more progressive assessment in Year 3.

Focus groups

Focus group discussions involved 45 students in 6 groups. Students were pleased and proud to be at Flinders, but also raised many concerns, including:

- the issue of standardisation,
- the need for clarity regarding expected outcomes,
- the importance of fair and equal treatment in all sites,
- the number of assignments, and
- gaps in certain disciplines, varying according to site.

Interviews

Individual interviews were conducted with 87 people. They communicate clearly that:

- Year 3 achieves its aims;
- Year 3 provides a successful model of allowing students a range of possible pathways to achieve the same end result, with a common examination at the end of the year;
- Year 3 is overloaded;
- the outcomes required by faculty need to be clarified;
- students appreciate their experiences at all site;
- students always feel that others must be better off than them; and

- each site has its own strengths and weaknesses.

Site specific results

Flinders Medical Centre (FMC)

FMC is highly rated as an academic centre by students and staff. Students appreciate the access to specialists and to facilities, as well as being close to their support structures.

Common issues raised through the evaluation include:

- the tension between service load and teaching responsibilities;
- the need for better recognition of clinical teachers;
- lack of academic coordination;
- inadequate exposure to ambulatory care and undifferentiated patients
- insufficient mentoring of students, and
- the need for monitoring and evaluation.

Northern Territory Clinical School (NTCS)

The NTCS offers a blend of approaches, between the FMC and the PRCC, which will be further enhanced by the introduction of greater community-based training. While this component of the evaluation was incomplete, it was noted that there is a need for standardisation between Darwin and Adelaide, and for greater student input in programme development.

Parallel Rural Community Curriculum (PRCC)

The PRCC is recognised for its success as a model, nationally and internationally, for rural medical education. The depth and breadth of student experience is impressive, despite gaps which need to be addressed. This is made possible not only by the Commonwealth funding, which should be continued without doubt, but also by strong partnerships with a range of local stakeholders:

- general practitioners, who mentor and teach students in their practices, reporting great personal benefits resulting from this;
- local specialists, who are committed to teaching in and supporting the PRCC, because the need for rurally-based specialists is great;
- local hospitals, who ascribe to the programme the development of a whole new learning culture;
- local government, which see the programme as a bridgehead for academic progress and a nidus for development in the towns;
- community members, who appreciate the role they can play in educating a future generation of rural doctors.

These are indicators of the success of the programme.

In addition to the above, other outcomes were described:

- the common commitment of the health service and the academic institution;
- students have a profound educational experience which goes far beyond academic development; and are given a different perspective on rural practice, which will influence them regardless of where they choose to practice;
- students cope well academically, being at least on a par with their urban counterparts;
- training of other health professionals has been commenced as a result of the Flinders involvement;
- internship and postgraduate training is being opened up, particularly in the Greater Green Triangle region;
- improved staff satisfaction has led to retention of a range of health professionals; and
- GPs and specialists are being attracted into some regions.

Important issues need to be addressed by the PRCC.

- The question of what is success, in terms of educational versus workforce outcomes, remains a tension.
- The level of success in terms of recruitment of GPs back to rural areas may be difficult to measure; while it is clear the programme plays a vital role in

retention, not just of doctors but of a range of health professionals, it is likely to be judged by its success in recruiting GPs.

- Students need support, not just academically but also emotionally and socially.
- There are variations between practices in the way students work.
- Students identify clinical gaps, particularly in in-patient psychiatry and paediatrics.

An important issue which requires broader intervention is the need for postgraduate training opportunities, which may be the single most important factor in the success of the PRCC.

Conclusion

Recommendations are made for each aspect of the programme, related to the issues identified above. The key challenge is to continue to allow a diversity of possibilities while developing commonly-agreed outcomes for Year 3, and appropriately standardised approaches relevant to the various sites.

INTRODUCTION

In April 2005, Professor Paul Worley (Director, Flinders University Rural Clinical School), paid a visit to the University of the Witwatersrand, as the guest of the writer, in my position as the Chair of Rural Health. At that time, I was considering possibilities for a sabbatical in 2006. Professor Worley indicated the need for an evaluation to be done of the Flinders University Parallel Rural Community Curriculum (Rural Clinical School programme) and invited me to consider doing such an evaluation as part of my sabbatical. Subsequently I accepted this invitation.

In October 2005, I paid a visit to Adelaide. In discussions with Professors Paul Worley (PW) and David Prideaux (Director of Medical Education, Flinders University), it was agreed:

1. that I should spend 3 months of my sabbatical at Flinders University
2. that I should proceed with this evaluation
3. that the scope of the evaluation should be broadened to the whole of the Year 3 programme (see below)
4. that a formal research protocol be developed to cover the evaluation
5. that this proposal should be submitted to the Evaluation Sub-Committee of the Medical Curriculum Committee for their consideration and subsequent support

The scope was broadened for 2 main reasons. Firstly, to ensure that issues encountered in the PRCC were genuinely related to the PRCC rather than the Year 3 programme or the overall Graduate Entry Medical Programme (GEMP) curriculum at Flinders. Secondly, to enable us to understand better the issue of delivering the curriculum at multiple sites (not just rural sites), and the issues that were involved in this. Furthermore, it was felt that because there had been no previous formal evaluation of the year, except within the scope of the Australian Medical Council (AMC) accreditation process, it would be useful for this to be undertaken, particularly because it is a highly pressurised year. PW, as chair of the Year 3 committee, felt such information would be critical in terms of discussions needing to be held about possible changes to the year and the curriculum overall, amongst other things due to increasing student numbers.

We decided to develop a formal research protocol because we agreed on the principle of evaluation being seen to be credible research, but also because we believed it important to get formal ethical approval and support from Flinders University, and to allow for the possibility of further work to be done on any data collected with a view to possible publication. Furthermore, it would assist me in satisfying requirements for my sabbatical from my home institution.

BACKGROUND

The issue of access to health care for Australians living in rural and remote areas has been a major issue in Australian political life for much of the last decade. Resulting from this there have been a number of major initiatives to address recruitment and retention of rural doctors. As part of this there have been recommendations regarding the training of doctors including increasing the number of rural based students in medical schools, enhancing the rural component in these courses, the establishment of rural clinical schools, etc. Specific Commonwealth programmes, such as the Rural Undergraduate Support and Coordination (RUSC) and Rural Clinical School (RCS) programmes, have been established by the Australian Government to implement these.

The Flinders Parallel Rural Clinical Curriculum (PRCC) was initiated in the Riverland region of South Australia in 1997 by the Flinders University School of Medicine. This programme sought to expose students to rural practice through an entire clinical year spent in rural areas. Students spend the year in general practices and regional or district hospitals, being supervised by general practitioners and gaps being filled by local and visiting specialists. It has expanded from using one site at the outset to now using three sites. The PRCC is funded by a grant from the Australian Government's Department of Health and Aging through the Rural Clinical School programme.

In addition there have been a number of other initiatives that have been undertaken at Flinders to develop the curriculum and introduce alternative ways of training medical students including placement of students at regional centres such as Darwin and Alice Springs and rural sites in the Northern Territory such as Katherine.

As part of the curriculum reform that took place in most medical schools in Australia during the 1990's, Flinders introduced a 4-year Graduate Entry Medical Programme (GEMP) with its first intake in 1996. Students spend the first 2 years doing problem based learning with a systems focus in groups, together with clinical skills training. At the end of Year 2 there is a 12-week transition to clinical practice block to prepare students for Year 3. Year 3 is where the bulk of clinical learning takes place, with a

focus on the major clinical disciplines – medicine, surgery, paediatrics, obstetrics and gynaecology (O&G), psychiatry and general practice. Year 4 is largely comprised of selectives, during which students have a chance to round off their clinical skills and test future practice directions.

The PRCC was evaluated in its first two years by Professor David Newble, then Head of the Clinical Education Development Unit at the University of Adelaide. The findings were that students were doing well and were at no disadvantage compared to students in the standard programme. Then in 1999, towards the end of the first three years of funding, an interim external evaluation of the project was undertaken by Dr Walter Swentko, Assistant Professor of Medicine at the University of Minnesota, USA and the Director of the Physician Assistant Programme. This evaluation confirmed the significance of the PRCC and the important contribution it was making to training with potential positive impact on students' career choices while not having any negative effects. Indeed it was felt there were positive educational effects apart from the impact on rural recruitment and retention. Following this, the Riverland PRCC was incorporated into a rural clinical school programme as part of the Flinders University Rural Clinical School (FURCS), and was doubled in size by the addition of a new region in the South East of the State – the Greater Green Triangle (GGT).

In 2002, the first year of the GGT program, a further evaluation was done by Professor Nigel Oswald, Professor in Primary Health Care, University of Teesside in Newcastle upon Tyne in the UK. He recognised that the PRCC makes an important contribution to rural medical education, that it is innovative and distinctive, that it produces evidence of academic success and support from local communities and that it is sustainable.

The PRCC has now expanded further. Three regions, the Riverland, Greater Green Triangle, and Hills Mallee Fleurieu (HMF), now run this programme. The newest area, the HMF, only came on line in 2006. It was thus important that a further evaluation be done, and also that there should be reflection on the programme's influence within the broader educational context within the Flinders University medical course. In addition to informing continued improvement in the programme, it

is intended that the data will provide important feedback to the Australian Government on the implementation of their funded programme.

The three previous external evaluations were limited in their scope, each being conducted within one week's visit, and were limited to the PRCC. A deliberate approach was taken by the reviewer not to look at the previous recommendations until a draft of this report was completed.

The PRCC has become a model for other medical schools in Australia and internationally. It is hoped that this evaluation will also provide important data for schools wishing to imitate this program.

The aim, as noted above, was to evaluate the PRCC in the context of all Year 3 curriculum initiatives at Flinders University School of Medicine. The intention was to look at each element of the medical curriculum at Flinders University in terms of the perceived educational and social impact of the alternative options for Year 3 medical students at Flinders University from the perspective of academics, students, health care providers and the community.

In particular, the evaluation aimed to evaluate the educational and career impact on students of the PRCC after 10 years of operation. The evaluation will inform further development of the PRCC. It builds on previous evaluations, at the same time as understanding and reviewing the PRCC in the broader context of the medical curriculum.

As noted above, the overall Year 3 programme has previously only been externally evaluated in the context of AMC accreditation. The previous recommendations of the AMC were not reviewed prior to completing a draft of this report.

The overall evaluation considered the aims of the Flinders University medical programme, as stated publicly on the University's website, which are as follows:
"Our course aims to produce doctors who

- practice competently, with empathy for patients and with recognition of their own limitations, and who will integrate health promotion and disease prevention with the management of illness and injury;
- understand that modern medical practice is based upon an integrated body of knowledge derived from the physical, biological, behavioural and social sciences;
- practise with due regard to available resources and cost-effective measures in a manner which encourages patients to assume increasing responsibility for their own health and to participate in decisions about their health care;
- be able to undertake further training for any branch of medicine, including medical research, and who will maintain a lifelong commitment to continuing medical education."

METHODOLOGY

This evaluation followed a cross-sectional study design, using a questionnaire survey and both in-depth and focus group interviews. These 3 components of the evaluation are described below.

1. Student survey

A survey questionnaire was drawn up in a collaborative process. A draft questionnaire was drawn up by the evaluator (IC) in consultation with Paul Worley (PW). This draft was then circulated for input to the Medical Curriculum Committee, the Flinders University Rural Clinical School (FURCS), and the Northern Territory Clinical School (NTCS). Numerous modifications were made on the basis of suggestions obtained from these groups. Meetings were held with Professor Lindon Wing (Dean, Flinders University School of Medicine) and Associate Professor Ann Kupa (Assistant Dean, Curriculum, Flinders Graduate Entry Medical Programme) as a result of which further additions and alterations were made. In discussion with PW and David Prideaux (DP), a decision was made to align with and therefore incorporate questions from the national Rural Clinical School Evaluation Questionnaire 2005 (De Witt et al, 2005). A final draft questionnaire was then piloted with a group of 4th year student volunteers. The resulting survey tool covered issues of background and demographics, geographical origin, previous experience, career intentions, values, opinions regarding educational and social advantages and disadvantages of the different sites, and specific curriculum related questions (see Appendix A). This was then distributed by an administrator to all Year 3 medical students, through meetings with groups doing rotations in Flinders Medical Centre, through local administrators in PRCC sites and through Dr Anna Smedts of the NTCS. All students were invited to complete the survey forms. The forms were anonymous and confidentiality was maintained by students returning questionnaires in blank, sealed envelopes. A record of who returned envelopes was kept in order to follow up students who had not submitted returns, so as to maximise the response rate.

2. Student focus groups

Focus group discussions were held with students in all 5 sites, viz. Flinders Medical Centre (FMC), Darwin and the 3 PRCC sites (Riverland, Greater Green Triangle and Hills Mallee Fleurieu). In the PRCC sites, these were organised by the PRCC administrator in each site, in 2 cases coinciding with a teaching session. In Darwin, the newly appointed Project Officer – Research and Evaluation, Dr Anna Smedts, invited students to the discussion over lunch, with refreshments being offered. In the case of Flinders Medical Centre, students in Year 3, listed as doing rotations locally, were invited via email by a FURCS administrator to attend a focus group discussion over lunchtime, with the offer of sandwiches and juice. A similar invitation was also extended separately to Year 4 students, as it was decided that their perspective would also be useful. The focus groups were facilitated by the evaluator, whose independence from the faculty assisted with the anonymity and confidentiality of which students were assured – issues of great concern to them. The same exploratory question was posed to each focus group, viz. What is your experience of Year 3 in this site? In all cases, discussion flowed freely, and facilitation was required mainly to ensure focus and for clarification where necessary. Where not fully explored, the following additional questions were asked:

- What do you think are the educational advantages of this site?
- What do you think are the educational disadvantages of this site?
- What do you think are the social advantages of this site?
- What do you think are the social disadvantages of this site?
- How could the program be improved?

The focus group discussions were recorded using a digital voice recorder and transcribed verbatim by an external transcriber.

3. Individual interviews

Individual in-depth interviews were conducted with key staff at each of these sites and with faculty leadership, as well as with key informants in terms of the health service in the different sites and with community members. The exception to this was the NTCS where the management of the School withheld permission for the individual

interviews to be conducted. The process for this was that each of the PRCC sites was sent a list of the sorts of people who should be interviewed, viz. the academic coordinator, faculty (key GP in most practices), some practice managers, CEO of the local h ospital/s, Director of Nursing of a hospital, some regional specialists, community representatives (advisory committee members), local government leaders, and regional health managers. The local academic coordinator and administrator then created a programme for the evaluation visit depending on the availability of the key informants. In the case of Flinders Medical Centre, PW and IC drew up a list of key informants, with whom appointments were then made by an administrator. In each case the interview was conducted by the evaluator. Respondents were usually alone but in some cases, on the request of interviewees, they were in pairs (where colleagues wished to be interviewed together). Interviewees were asked the following questions (with minor adaptations to suit the context and the individual being interviewed):

a. What is your experience of the Flinders Year 3 medical programme?

b. What do you see to be the educational advantages or strengths of the Flinders Year 3 medical programme?

c. What do you see to be the disadvantages or weaknesses of the Flinders Year 3 medical programme?

d. What do you see to be the social advantages or strengths of the Flinders Year 3 medical programme?

e. What do you see to be the social disadvantages or weaknesses of the Flinders Year 3 medical programme?

f. What outcomes or achievements, if any, are you aware of arising from the Flinders Year 3 medical programme?

g. What for you are the key elements of the programme?

h. What would you change about the programme if you could do so?

The questions posed to the heath service managers, local government bureaucrats and community members were similar, viz.

a. What is your experience of the Flinders medical students being involved in the health service at this site?

b. What do you see to be the advantages or strengths of the Flinders medical programme from a health service/local government/community perspective?

c. What do you see to be the disadvantages or weaknesses of the Flinders medical programme from a health service/local government/community perspective?
d. What outcomes or achievements, if any, are you aware of arising from the Flinders Year 3 medical programme?
e. What for you are the key elements of the programme?
e. Are there ways in which the program could be improved?

Techniques of facilitation, reflection and clarification were used to explore each of these in depth. Most of the interviews were recorded using a digital voice recorder and transcribed verbatim by an external transcriber; in a few cases where recording was difficult, or potentially problematic, extensive notes were made by the interviewer, which we typed up as notes of the interview, and used as the basis of analysis.

Analysis

The quantitative data was entered into an Excel spreadsheet and analysed manually. The qualitative data was transcribed by transcribers who were independent of the FURCS and the faculty, and who could therefore not identify respondents. Thereafter transcriptions were checked by the interviewer, and returned to interviewees for checking where this had been requested, prior to anonymising them. After anonymisation, transcriptions were imported into N-VIVO 7 and analysed by coding data according to emerging themes.

Reporting

This evaluation report represents a broad summary of the findings of the evaluation. A presentation of the preliminary findings was made at Flinders Medical Centre, with videoconferencing to Darwin, Renmark and Mount Gambier; this was well received, indicating the findings are true to reality. Of particular significance, a student representative expressed the opinion that their voice had been heard. Feedback from this presentation has been incorporated into this report.

A meeting was subsequently held to discuss these preliminary findings with Mr David Meredyth, Acting Director: Undergraduate Initiatives Section, Education and Training Branch, Workforce Division, Commonwealth Department of Health and Ageing.

A draft report was circulated to key stakeholders in the FURCS and School of Medicine for comment and feedback. This led to a significant amount of interchange and discussion. Thereafter this final report will be produced.

It is intended that this final report should be made available to all participants, to the FURCS, the School of Medicine, to the State and Commonwealth Departments of Health and Ageing, and, very importantly, to Flinders medical students.

Further work, led by IC and PW, in collaboration with other interested faculty members, will be undertaken over the next year, and separate reports or articles will be produced as appropriate.

Ethics

The research protocol was submitted to and approved by the Human Research Ethics Committee of the University of the Witwatersrand (Protocol No. M060456) and the Social and Behavioural Ethics Committee of Flinders University (Project No. 3599). Participation of all respondents was voluntary and informed consent was taken, with the assurance of anonymity and confidentiality. All but one respondent agreed to the anonymised transcription being made available for further study and analysis.

CHALLENGES

There were a number of important challenges faced in conducting this evaluation. The logistics were taken somewhat for granted prior to my arrival and then necessitated extensive hard work on the part of many people for the objectives to be achieved. While perhaps not everyone was reached, I am confident that saturation was achieved, in fact surpassed, in terms of the qualitative data. Transcription was an issue – finding a suitable, appropriate, competent and available person (in the end, persons) to do the massive amount of transcribing was a major challenge. None of us anticipated the sheer weight of data that would be collected! Making contact with faculty members and students and arranging the interviews and focus groups was a more challenging task than we considered at the outset and I am grateful to the administrators in the FURCS, especially Ms Bettina Downing, for their hard work in achieving this.

Getting student participation in the focus groups at FMC was difficult. While I believe that good representation was achieved in terms of views and opinions, corroborated by the surveys, I was disappointed by how few students turned up in response to the invitations. These students themselves expressed the belief that this was due to a sense of powerlessness: they feel they cannot impact on curriculum change in year 3 in the way that they can in years 1 and 2 with the repeated evaluations that are conducted in those years, and that their concerns about year 3 have not been heard in the past, so they are sceptical about new attempts at soliciting their opinions.

The two biggest challenges however can be summarised under the headings of communication issues and the question of bias.

Communication issues

An unexpected issue that I confronted on arrival at Flinders was suspicion towards the evaluation, apparently related to communication issues within the faculty. As an external person, I endeavoured to stay clear of it as much as possible, but I could not avoid being affected by it. Being based within FURCS, I was possibly seen to be

representing that school, which may have influenced the attitudes of some faculty members.

Everyone I spoke to was courteous and friendly, but I was surprised by the depth of concern raised by many people – students and staff – about the kinds of questions I would be asking, what would be done with the information, how identities would be protected, etc. While it can certainly be seen as a positive thing that interviewees, and students in particular, know their rights as subjects of research and question any researcher thoroughly, I encountered distrust and, in some cases, a reluctance to speak out, especially if there was any possibility of being identified.

These responses may have arisen simply because of the communication problems. It is certainly disappointing that, despite mapping out the planned evaluation in 2005 and submitting the formal protocol for the evaluation in March 2006, it was not discussed broadly in advance of my arrival and many senior people seemed unaware of the process, so that the evaluation was not sufficiently owned by the whole faculty.

A casualty of this situation was the partial exclusion of the Darwin component of the course from the evaluation. While I am grateful that a compromise was reached with the Northern Territory Clinical School to allow me to interview students there at least, and to speak to key people in leadership, I do believe that my inability to get a complete picture of Darwin limits the overall evaluation and compromised it.

What I found interesting is the impressive degree of commonalty and shared understanding that exists about issues amongst almost everyone I spoke to, in spite of the communication issues mentioned above.

Bias

One of the things that was queried in the process of my embarking on this evaluation was my possible or probable bias, being in an academic position in rural health, and being mandated by the Flinders University Rural Clinical School. I think it is important to note that anyone coming in externally could be regarded as having pre-existing bias by virtue of their professional and academic background, or their

particular areas of expertise and research, by one or other grouping in faculty. On the one hand, I believe my depth of expertise in rural health added strength and rigour to the process of the evaluation, and I was able to engage with rural participants and get to the heart of complex issues that are unique to the experience of studying medicine in rural communities. On the other hand, the evaluation might have been more acceptable to faculty members if there had been a team representing a broader group of interests.

I do believe that the issue is more about perception of bias, and the resulting responses that might be forthcoming on the basis of that. However, I will state clearly my assumptions.

I hold to the following pre-existing conceptions:

1. Academic institutions have a responsibility to address rural workforce needs through the way that students are trained, attempting to address the urban drift with a clear rural focus during training.
2. Flinders University has established an international reputation through the PRCC programme, which is seen as an innovative model for addressing workforce issues through education.
3. Every student should have the right to decide where s/he will practice in the future, and to have the opportunities to explore these possibilities during medical school training.
4. Because the university specifically offers a medical programme which will enable students to "undertake further training for any branch of medicine", it is incumbent on the medical school to ensure that students who have chosen particular pathways early on (not unusual in a graduate entry programme) are not discriminated against, and do not feel discriminated against, but are instead supported in these choices.
5. No student should be forced or pressurised into working in a rural area, beyond a basic exposure to it in order to test the waters. Rural communities do not need doctors who do not want to be there, and unhappy, unwilling students are problematic for everyone.
6. While certain components of a course may be marketed highly for strategic reasons (such as the rural or Darwin programmes), all components should receive the same level of faculty commitment to academic excellence and student support.

Caveat

It is in the nature of evaluation that problems and difficulties inevitably rise to the surface. I have sought to present a balanced view of both strengths and weaknesses. I trust that the overall positive impression that I formed through my interviews and encounters is communicated through this report.

A short report such as this one cannot do justice to the volume of data collected and the range of information accumulated; thus there is inevitably some selection bias in what is presented, although I have endeavoured to be faithful to the major issues which arose repeatedly in the data.

QUANTITATIVE RESULTS

Survey responses were received from 80 students out of the 109 registered in Year 3, thus the **response rate** was **73.4%**. This was sufficient to make conclusions on the basis of the findings. It is especially significant that responses in the survey and the student focus groups complemented and corroborated each other.

Of these 80 students, 52 were based at Flinders Medical Centre (FMC), 10 at the Northern territory Clinical School (NTCS) and 19 in Parallel Rural Community Curriculum (PRCC) sites (the three PRCC regions were not distinguished for the sake of anonymity), giving a good distribution. Gender was evenly distributed with 41 female and 38 male respondents (1 respondent from NTCS left the questionnaire blank).

Selected specific results are presented below; other relevant results, especially responses to more open-ended questions, are incorporated in the qualitative results. The latter include a number of the tables presented in Appendix B, which summarise educational benefits of different sites (table X), educational disadvantages of sites (table XI), social advantages of sites (table XII), social disadvantages of sites (table XIII), perceived impact on the health service (table XIV), perceived impact on the community (table XV), and recommended improvements (table XVI).

Note: In some cases a Likert scale response was used, with the option being: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly Disagree (SD)

Demographic Profile

In terms of distribution across the 3 sites, out of the students who responded to the survey, there were somewhat more males from FMC and more females from the other sites, but this difference was not significant. (Diagram 1)

Unsurprisingly, overseas students were concentrated at FMC. (Diagram 2)

Perhaps more surprising is that married students were distributed across all sites in relatively similar proportions to their single counterparts. (Diagram 3)

Students who indicated that they had a rural background (on a simple yes or no question) made up a greater proportion of students in the PRCC than in FMC (42% vs. 17%), compared to 24.4% overall. (Diagram 4) Further detailed analysis still needs to be done looking at issues of place of birth, place of schooling, state of origin, etc.

Diagram 1: Gender of survey respondents versus site

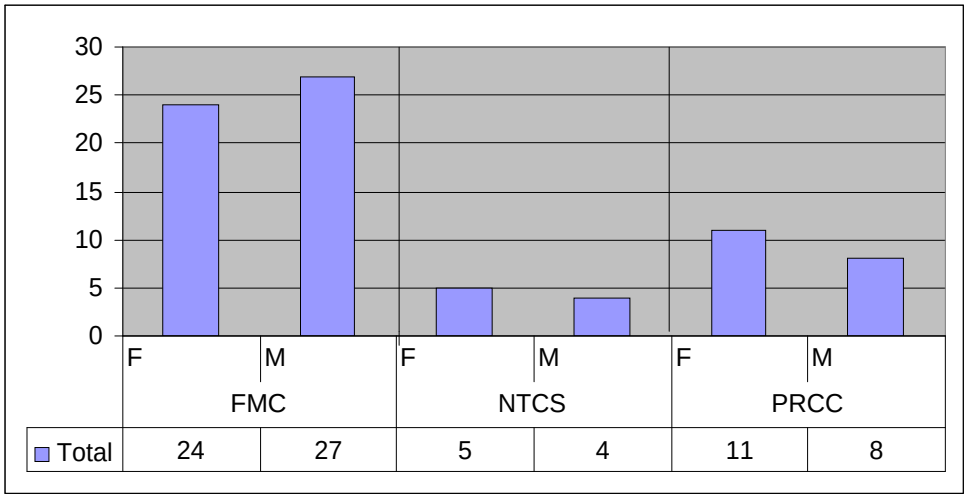
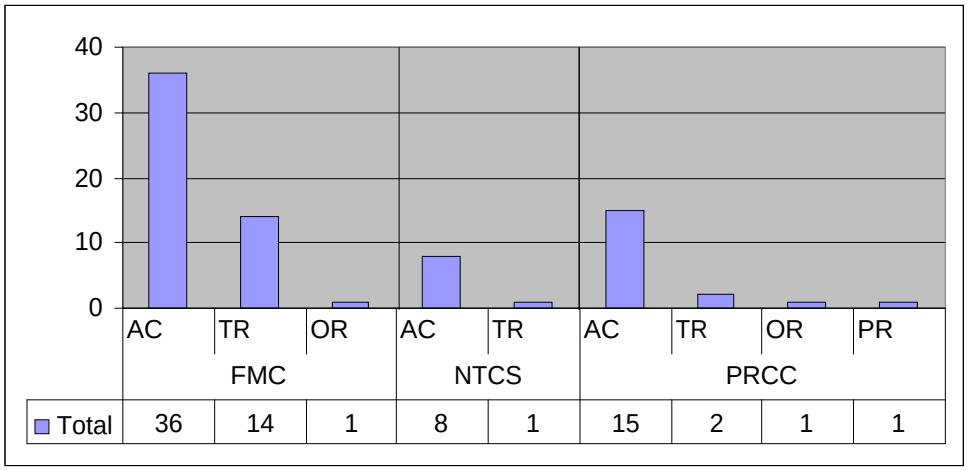


Diagram 2: Nationality of respondents versus site



AC = Australian Citizen, TR = Temporary resident, PR = Permanent resident, OR = Other (both were New Zealand citizens)

Diagram 3: Marital status of respondents versus site

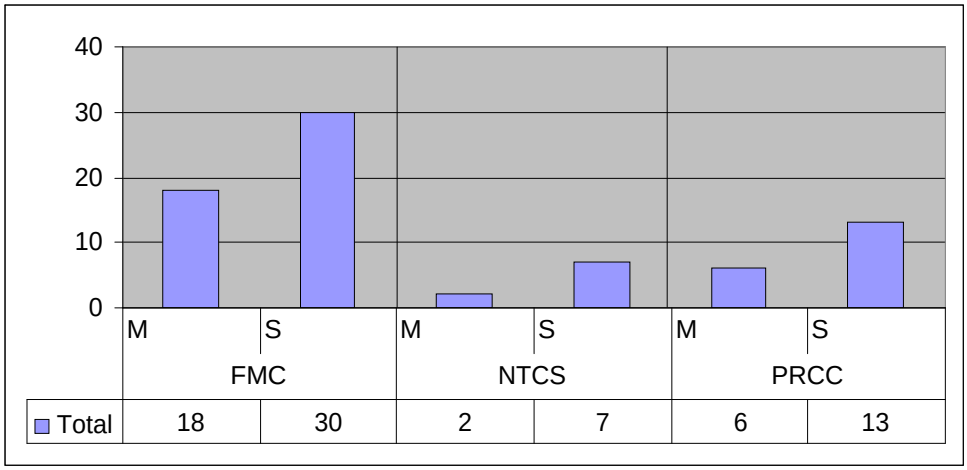
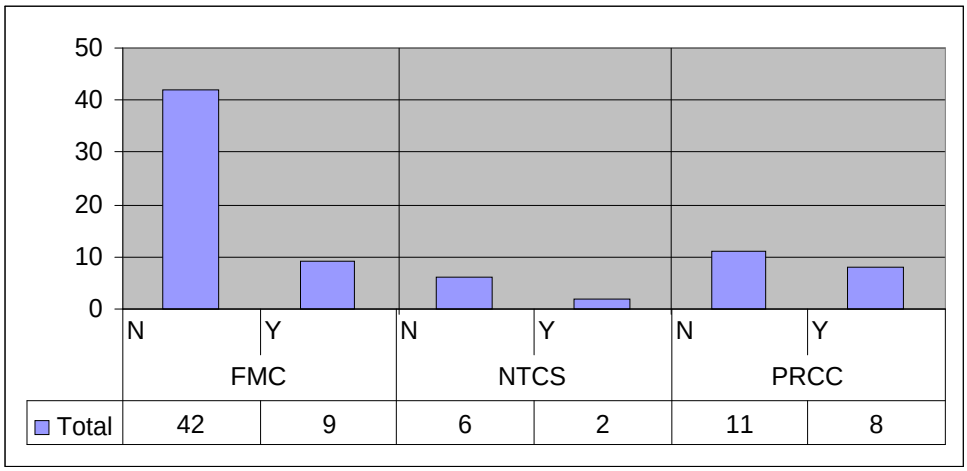


Diagram 4: Rural origin of respondents versus site



Future career preferences

Students were asked to indicate future practice site in terms of nature of their practice, with the choices being based on the Rural Remote and Metropolitan Areas (RRMA) classification:

- Capital city
- Major urban centre (>100,000)
- Regional city or large town (25,000 – 100,000)
- Smaller town (10,000 – 24,999)
- Small rural community (<10,000)

(These correspond to RRMA's 1-5)

In analysis, because of small numbers in the second category, the first 2 were combined as capital cities and major urban centres (urban), with the others remaining as regional cities and large towns (regional), small towns (town) and rural communities (rural). (See Table I) Taking the latter two together (RRMA 4 and 5), 14.3% of students indicated an interest in a rural career. Using the definition of rural used by the Commonwealth Rural Clinical Schools programme (RRMA 3 and higher), 32.5% indicated interest in a career outside of major urban centres.

When this is related to site, students at both the NTCS and PRCC sites have a greater likelihood of choosing to practice outside of state capitals and urban centres (see Table II) – but whether this is due to selection or educational experience requires further analysis.

The range of student preferences for future practice choice, in terms of discipline (see diagram 5) is surprising only perhaps in the fact that paediatrics is the most commonly preferred discipline. This may be the result of the fact that most of those students indicating this preference are from FMC (see table III) where students consistently rate the paediatrics rotation very positively. However, if sub-specialties are aggregated into a general speciality, internal medicine and surgery come out higher. The 16.8% of respondents wanting to do general practice are unevenly distributed, with a greater proportion coming from outside of FMC. What is clear though is that choosing a rural or regional location does not in any way preclude an inclination to specialise.

Table I: Intended place of future practice

Future practice - geographical location	**Total**
Urban	52 (67.5%)
Regional	14 (18.2%)
Town	8 (10.4%)
Rural	3 (3.9%)
Total	77

Cap = RRMA 1&2; City = RRMA 3; Town = RRMA 4; Rural = RRMA 5

Table II: Intended place of future practice versus site

Site	Future practice - geographical location	Total
FMC	Urban	42
	Regional	4
	Town	2
	Rural	2
	Total outside of urban centres (RRMA 3 and higher)	8 (16.0%)
FMC Total		50
NTCS	Urban	2
	Regional	5
	Town	0
	Rural	1
	Total outside of urban centres (RRMA 3 and higher)	6 (75.0%)
NTCS Total		8
PRCC	Urban	8
	Regional	5
	Town	6
	Rural	0
	Total outside of urban centres (RRMA 3 and higher)	11 (57.9%)
PRCC Total		19
Grand Total		77
	Total outside of urban centres (RRMA 3 and higher)	25 (32.5%)

Diagram 5: Choice of future practice discipline

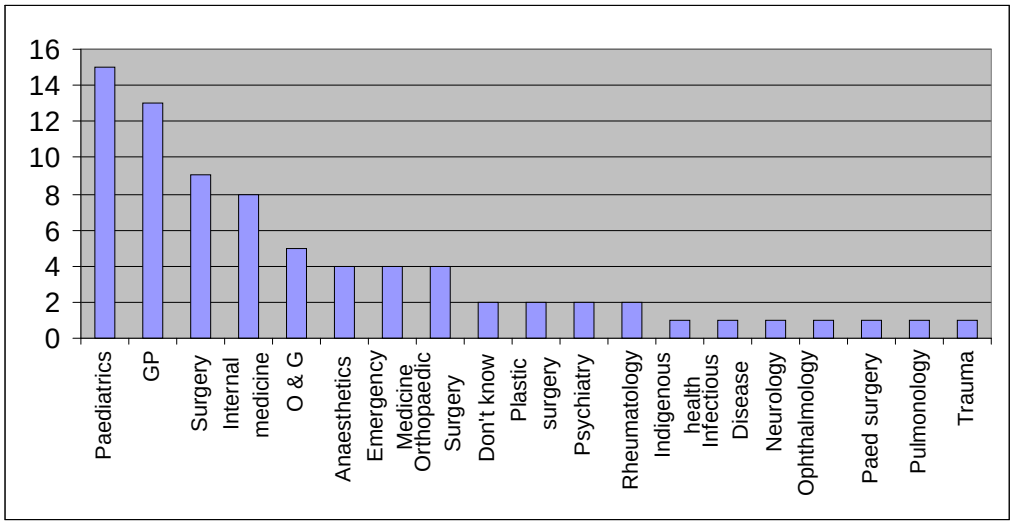


Table III: Common practice choices versus site

Future practice - first preference aggregated	Site	Total
GP	FMC	5
	NTCS	3
	PRCC	5
Internal medicine	FMC	7
	PRCC	1
O & G	FMC	3
	PRCC	2
Paediatrics	FMC	11
	NTCS	2
	PRCC	2
Surgery	FMC	5
	PRCC	4

Stability of Year 3 site selection

Students were asked if they would make the same choice of Year 3 site again if they had the option. Of the 74 who responded to this question, 66 (89.2%) indicated they would, with 8 (10.8%) saying they would not. (See table IV.) When this is broken down per site, the spread is quite even, with only a few students indicating that they would now choose differently.

Table IV: Choice of same site again versus site.

Site	Same choice of site	Total
FMC	Y	44
	N	3
	Total	47
NTCS	Y	7
	N	2
	Total	9
PRCC	Y	15
	N	3
	Total	18
Total	Y	66
	N	8
	Total	74

The reasons, however, for choosing the same site were not uniformly distributed. While at every site there were academic reasons given, at FMC the reasons given were more frequently social – related to families, partners, jobs, etc - while the reasons at the other sites were predominantly educational. (See table XVII in appendix B). This suggests that students may prefer the PRCC and NTCS for educational reasons, but stay at FMC for social reasons.

Motivation for studying medicine

A series of questions were asked about students' motivations for studying medicine, which will be analysed in relation to choice of site, future practice, etc. For the purposes of this report, only 2 sets of aggregated data are presented, related to personal values and influencing factors. Firstly, students were asked to state the 3 personal values most important to them; table V indicates that the most significant values held by students were centred on honesty and integrity, with hard work, compassion, respect and humour also being important. This should be encouraging for the profession and the faculty.

Secondly, students were asked to rate a list of influences on their decision to study medicine, on a scale of 0 (no influence) to 5 (major influence). Table VI presents the average for each of the influences, with interesting work being the most significant factor, followed by issues of location, family and personal values. It may be that educational interventions can have minimal impact in the light of such motivations, but they need to be considered in designing programmes.

Table V: Personal values influencing student choice of medicine as a career

Personal values – aggregated (Unless otherwise indicted, only 1 respondent mentioned the value; values were free text, not chosen from a list)			
Ability to compromise		Intelligence	
Approachable		Involvement with my family	
Balance between home and work		Kindness	8
Balance	4	Knowledge	5
Beneficence		Liberty	
Broad-mindedness		Loyalty	6
Caring	3	Meticulousness	
Commitment	2	Moral	
Compassion	10	Openness	
Competence		Optimism	
Concern for others		Partner and family priority	
Consistency		Patient	
Contribution to the community		People person	
Cooperation	3	Persistence	3
Dedication	2	Personal values	
Determination		Personality	2
Diligence		Polite	
Egalitarianism		Professional	2
Empathy	6	Proud	
Ethical		Reliability	5
Fairness		Remaining positive	
Family and friends		Respect	7
Family Relationships	2	Safety	
Flexibility		Selflessness	2
Following Christ		Social Justice	
Forgiveness		Spiritual/ Mental Health	
Fulfilling career		Staying true to myself	
Generosity	2	Straight talking and honest	
Good work ethic	6	Successful	
Hard work	7	Sympathy	
Helping others		Thoughtful	
Honesty	31	Time for self	
Humility	2	Trust	2
Humour	7	Trustworthiness	3
Integrity	20	Truth	

Table VI: Average of scores on factors influencing decision to study medicine (0-5)

Influencing factors: Averages (ranked)	
Interesting work	4.42
Location	3.66
Family	3.58
Personal values	3.53
Workload	3.40
Partner	3.22
Travel	3.15
Income	2.89
Role models	2.71
Colleagues	2.46
Religious beliefs	1.41

Clinical exposure in Year 3

Students were asked to respond to the statement, "There is adequate exposure to a range of clinical conditions in each of the core disciplines in Year 3." While 61.0% answered positively, 21% were negative. (See diagram 6) Adequate exposure is fundamental to students' ability to apply the theoretical knowledge and understanding gained through reading and in the classroom, and is the basis of clinical training. Students are thus more likely to choose sites where they perceive there is greater clinical exposure.

These attitudes were distributed across sites, although 8 out of the 9 respondents at the NTCS felt they were getting adequate exposure (See diagram 7 and table VII).

Diagram 6: Adequate exposure to clinical conditions in Year 3
(Responses on a Likert scale)

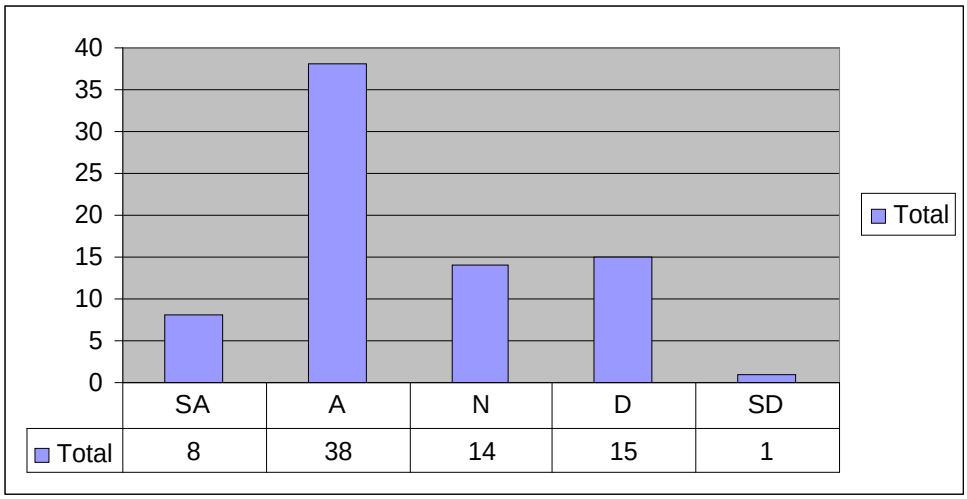


Diagram 7: Adequate exposure to clinical conditions in Year 3 versus site
(Responses on a Likert scale)

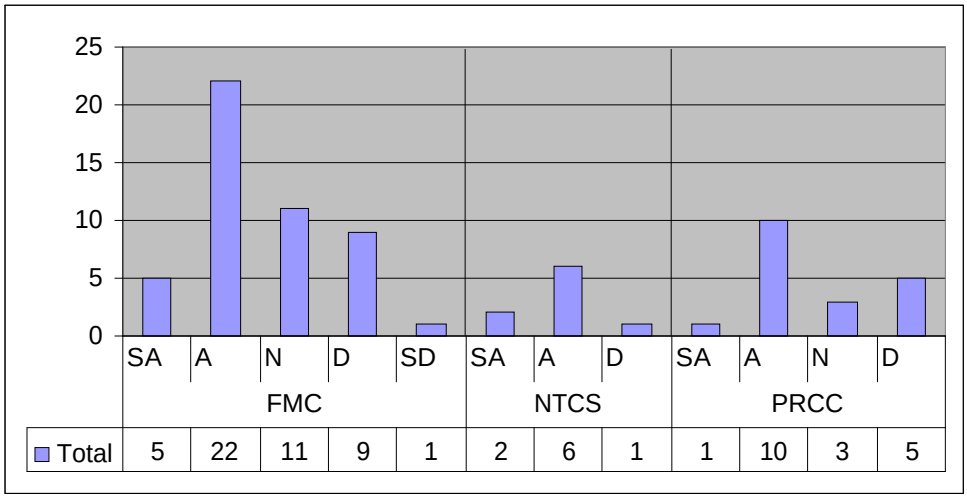


Table VII: Summary of level of clinical exposure versus site

Site	Adequate exposure	Neutral	Inadequate exposure
FMC	27 (56%)	11 (23%)	10 (21%)
NTCS	8 (89%)	-	1 (11%)
PRCC	11 (58%)	3 (16%)	5 (26%)

Students were asked to identify the particular areas in which they felt there was inadequate exposure. (See Table XVIII in Appendix B) The most commonly mentioned areas were psychiatry (16 mentions) and paediatrics (15 mentions), particularly found amongst PRCC students. General medicine in various forms and

expressed in different ways (14 mentions) was also highlighted, but this was quite evenly distributed across all sites. Other recurring gaps, in various forms, were in obstetrics and gynaecology (6 mentions), surgery (5 mentions), general practice/undifferentiated patients (4 mentions, with none from the PRCC), and emergency medicine (4 mentions). One student's comment, from FMC, in this regard is very interesting: "Flinders lacks clinical practice opportunities, while rural areas lack teaching opportunities." This contrasts with a colleague at FMC who stated, "There are patients but many doctors aren't willing to teach or explain what to look for in different conditions."

Personal student study resources

One of the questions of concern to the curriculum committee was to ascertain the main personal study resource used by the students, especially in light of the introduction of the Australian Medical Council handbook a few years ago. Students were thus asked to indicate what resource they used most often for their learning, being required to tick the best answer out of the options AMC anthology (AMC), Year 3 booklets for each discipline (BKL), web-based resources (WEB), personal textbooks (TXT) and other (OR). (See table VIII) While some students made more than one choice, the results are clear, with only one student indicating the AMC book as the preferred option, and only 3 choosing it as one of the options. Textbooks and web-based material were the most preferred options, with the discipline-based booklets also not being rated highly. No students used the web as their primary resource. A number of students made spontaneous comments that indicated the depth of feeling around the AMC book:

> "AMC anthology absolute … waste of paper"
>
> "The AMC anthology is an utterly overrated book, it should not be recommended"
>
> "AMC anthology - never - this is a complete waste of money."

While these results may not be surprising to faculty, in view of the different purposes of the course booklets and the AMC anthology, they do indicate an issue that needs to be addressed.

Table VIII: Primary resource used by students in Year 3
(Students were requested to choose the best out of the 5 options)

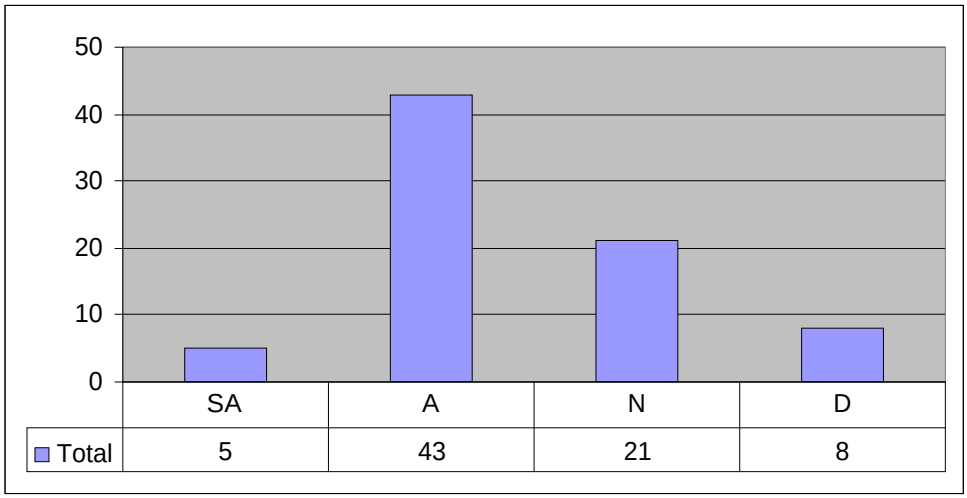
AMC	1
AMC, BKL, WEB, TXT	1
AMC, TXT	1
BKL	6
BKL, TXT	2
BKL, WEB	2
BKL, WEB, TXT	5
OR	2
TXT	37
WEB	14
WEB, TXT	5
Grand Total	76

Preparedness for Year 3

Another important issue was to assess the role of Years 1 and 2 in preparation for Year 3. These years provide the theoretical basis for clinical training and are the foundation on which clinical experience and skills are built.

In responding to the statement, “Years 1 and 2 prepared me adequately for Year 3”, 62.3% of students were positive (agree or strongly agree). (See diagram 8.) The 27.3% of students who were unsure are of concern.

Diagram 8: Adequate preparation in Year 1 and 2
(Responses on a Likert scale)

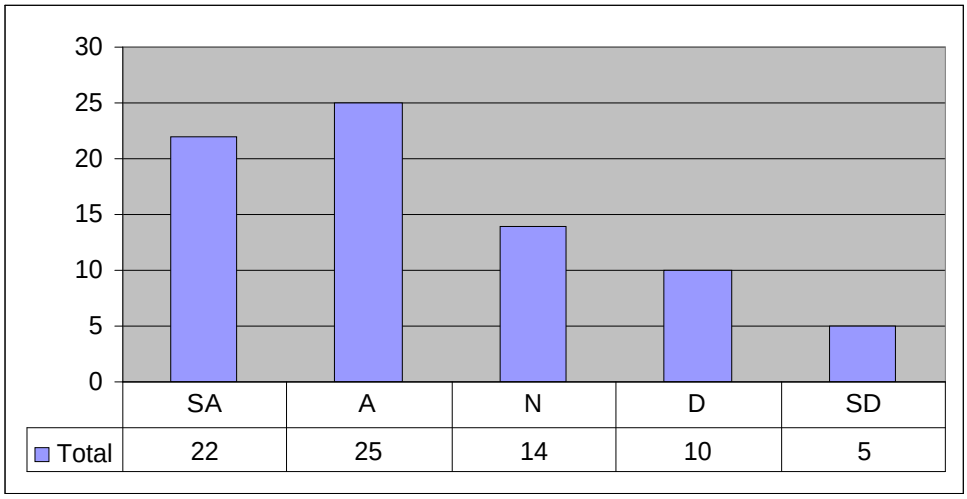


A range of gaps were identified by students in Years 1 and 2 (See table XIX in appendix B); by far the most common gap identified by students is for more clinical exposure and experience, with more and better clinical skills training. Linked to that, 5 students indicated a need for more exposure to paediatrics. At the same time anatomy came through as an important gap (mentioned by 8 students), together with pharmacology (5 students).

Progressive assessment in Year 3

The survey form indicated that, to reduce the stress of the Year 3 exams, the Curriculum Committee is considering a progressive assessment, whereby, for example, students might complete 6 observed consultation assessments (mini-CEX) during the year, which would count towards the mark in Doctor and Patient 3. The majority of students (61.8%) agreed that the introduction of such a mini-CEX would reduce stress. (Diagram 9)

Diagram 9: Progressive assessment should be introduced in Year 3
(Responses on a Likert scale)



Students made a number of other suggestions to improve assessment in Year 3 in response to an open-ended question in this regard (see table XX in Appendix B). These were particularly focussed around the number and weighting of assignments, such as DPS assignments and case commentaries.

QUALITATIVE RESULTS

Interviews were conducted with 87 people. These represented a range of stakeholders in the Year 3 endeavour. They collectively formed a good, representative sample that covered all aspects of the Year 3 experience. (See table IX)

Table IX: Summary of interviewees

Group	**Category**	**Total**
University-based staff	Faculty leadership	6
	Academics (non-clinical)	9
Clinicians	Academic coordinators (departmental or site based)	8
	GPs	19
	Other specialists	6
	Other hospital staff e.g. clinical nurses	5
Managers	Health service bureaucrats	8
	Practice managers	5
	Hospital managers (CEOs, DONs, etc.)	7
Academic support staff	Administrators	10
Community/local government representatives		4
Total		**87**

Approximately 45 students contributed to 6 focus group discussions, and in addition 2 individual student interviews were done (which were analysed with the focus group data).

Major themes that arose out of these interviews and focus group discussions are presented below. This will deliberately not be a purist presentation of results because it synthesizes the key findings of the interviews, the focus group discussions, the open-ended questions in the surveys, document review (course materials, etc) and observation. Illustrative quotes are provided where these add to the findings; respondents are only identified by category where this is of relevance.

KEY FINDINGS

General issues

The "**Flinders model**" in Year 3 of **many roads leading to one destination** is innovative and successful.

> "What the different sites have shown us is there is no one way necessarily, one natural pathway to achieving what we want."

It offers the possibility of exploring a range of different options.

> "And I think that principle if you like having many roads to the one goal has been really good. It also by having those many smaller areas it gives you the opportunity to try new things, with small numbers of students rather than having to say well if we try something new it's got to be for everyone at the same time."

In this, it provides a healthy counter to the conveyor belt model of medical education.

Students are generally very **positive**.

> "We believe we are getting the best education here at Flinders"

There is great strength in the student body and in individual students, arising from the maturity of experienced graduates entering the programme. This is reinforced by the values of integrity and honesty they consider most important. Strong partnerships have been forged with the health service and with other stakeholders, which enhance the reputation of Flinders University. There is within this a common understanding of the workforce imperatives and the need for educational and service components within health care to work together in order to address these. As a senior bureaucrat stated:

> "Service delivery cannot be independent of education."

Within this, however, it is important that teachers are recognised and valued for the service they provide to the university and the community.

> "Ways need to be found to do it [teaching] without grinding people into the ground, both locally and at the PRCC sites."

As alluded to, there are **communication problems** amongst students generally and also faculty at FMC and NTCS, despite a seeming unity of vision and purpose. FURCS, too, suffers problems of communication, largely because of the tyranny of distance, but these are compensated by a high level of trust amongst staff in that school.

International students are an important area of debate within the broader university community. They clearly enrich the faculty through their presence, not just financially, but also by providing important cultural diversity, and their contribution is appreciated by students and staff alike.

> "International students are worth their weight in gold. They add to the cultural diversity and enrich the programme."

International students themselves feel well accepted and enjoy being at Flinders. However, there were tensions that cropped up repeatedly in interviews, with respondents raising questions about the role of international students.

> "There is quite an emphasis on training and fee for service, fee paying students so that there's a lot of students who come here, we train, they go back to the US or elsewhere … there is sense that we desire to train our own to be able to provide our future workforce and I think there's a feeling of disconnect there." (FMC)
>
> "If it was completely voluntary, people would have qualms about teaching overseas students. If it was all overseas, it would be an issue in terms of people coming back, but it's not." (PRCC)

This has to be seen in the light of the **tension between the service load and teaching**, where faculty who are under pressure wish to feel they are not "wasting their time" in any way when they are teaching, related to the drive to provide a future workforce. Throughout, education and workforce demands are held in tension.

The latter tension played out in what interviewees saw as the key elements or outcomes of the Flinders programme, particularly in PRCC sites. For some, providing an appropriate high quality education to medical students is the highest goal. For others it is the workforce outcome that is the most important issue – but this may be defined in a limited parochial way (e.g. providing doctors for my practice or

my hospital in the future), or in a broader way (e.g. providing doctors for South Australia or for country Australia) or with a global perspective (e.g. providing doctors for rural areas anywhere in the world).

Year 3

Year 3 is generally seen in a very positive light. It provides excellent clinical grounding and is considered a key strength of the GEMP. At the same time there is consensus amongst students and staff that it is **overloaded**.

> "There is a downside to Year 3 with crowding of the curriculum."
>
> "Year three is so hard you just can't add anything to it, that's impossible. It's very hard work. I'm surprised there's so few who collapse under the load of it you know because it's heavy, it really is heavy."

There is too much packed in, leading to an imbalance with Year 4, while recognising that, in consequence, Year 4 is "wonderful", providing "the icing on the cake". Years 3 and 4 are seen together as a package.

> "We like to think that you know they are just about ready to be fully functioning medical interns at the end of Year 3 but they need Year 4 to get finished off."

The end of year **examination** in Year 3 is a high stakes, high stress one, which colours everything students do during the year.

> "The big exam at the end of Year 3 really concentrates the mind and the stress level."

As a result of this, there is a tension between the stated learner-centred approach and the exam-focussed approach arising from assessment driving learning. The difficulty in this is that everyone does not always understand the purpose of the year in the same way, and students often feel they can achieve better success by book learning than by developing clinical knowledge and experience.

> "To do well on the exams one has to spend most of the time in the library." (Student)

It is certainly true that, in some disciplines at least, faculty feel they give a very clear message to students about what the aim of the year is.

> "We keep stressing that we want them to learn: how to communicate medically, to learn how to process a patient, take a history, do an examination, formulate a list of diagnoses or a list of things and an action plan and be able to document that in the most reasonable way possible, to be able to communicate with their colleagues about that and to learn things about common medical conditions. And we keep stressing the common medical problems."

It was noted, and notable, that a public or **community health focus** is largely **absent**, with a concentration on individual and disease-centred care.

Many questions were raised about the **PBL sessions** and other tutorials. There was lack of clarity in terms of what their purpose is e.g. for specialists to discourse on their pet topics or to address student needs and concerns; to provide relevant information to prepare students for the examinations or to fill in gaps in clinical exposure for students. It seems there is uncertainty around the appropriate methodology to be used for clinical PBLs, with different departments and sites taking different approaches to these. The content of some of the PBL cases were described as being overloaded with too many issues, losing their value in complexity, and complaints were also raised that some cases have not been updated – and others are full of errors.

> "Sometimes I get the feeling that the faculty departments feel a certain anxiety of covering their bit of curriculum and so the PBL cases contain such a broad spectrum of their chunk of curriculum that one case is almost overwhelming."

Another question raised was about the problem-solving ability of students, who come out of their first two years having some difficulty in sorting out the wood and the trees. Then in Year 3 students do not necessarily learn to make decisions by themselves, as opposed to in a group, especially at FMC and NTCS.

The **GEMP website** is used extensively in Years 1 and 2, but then fades into insignificance in Year 3. It is underused both by staff and students (no students use it as a primary resource, which is not surprising given how little material is placed on it in GEMP 3), and thus its role needs to be clarified.

Students' opinions about Year 3, all corroborated by many interviewees, were unequivocal.

- Firstly the focus of year is not clear. As alluded to above, is the focus intended to be on developing clinical ability and experience or on developing theoretical knowledge?

> "There is a danger that they will become very clinically oriented and just focus on management without also focusing on underpinning pathophysiology and we hope they will continue to explore those parts of understanding of clinical medicine." (Specialist)

While faculty may understand this to be a "both – and" rather than an "either – or" issue, students receive mixed messages in terms of where they should concentrate their efforts: on clinical practice or on preparing for the examination. This suggests that good overlap between the two, which is no doubt the goal, has not yet been achieved.

- Secondly, the content is not clear in terms of what should be covered.

Students are faced with large textbooks in some disciplines or the long AMC list and feel there is no direction in terms of what they should cover.

> "They use the AMC curriculum but then each of the handbooks has a curriculum in it which is different to what's in the AMC curriculum. The way it's set out is different. The curriculum says what they should have an awareness of but doesn't really have a strategy behind it." (GP)

Where individual mentoring happens, such as in the PRCC sites, this is less of an issue perhaps, but it remains a major concern of students everywhere.

- Thirdly, the level expected in relation to the content is not clear. Some disciplines do indicate the amount of depth or detail expected, especially in relation to sub-specialties, but in many cases there is little guidance, so that students rely on previous students for guidance.
- Fourthly, there is a common view that there are too many assignments that take too much time, in return for too few marks.
- Fifthly, too much rides on the final examination, with little in-course assessment, variable preparation for the examination (dependent on the site a student is in) and no past examination papers to provide guidance.

One of the consequences of these is unnecessary stress in students – it was strongly argued that much of the stress is unnecessary and simply dismissing it with comments such as "Year 3 is always a stressful year" or "medicine is a stressful course" is unhelpful. Students need to be helped to understand the approach of faculty and the level expected.

> "Year 3 is definitely the biggest year of the course in terms of the students' workload and their perception of the workload. I emphasize the perception because I think because there's a high stakes exam at the end there's a level of anxiety associated with Year 3 which is almost over the top, because we know that they can only achieve a certain amount in a certain length of time." (Academic)

There is a **lack of standardisation**, which is a risk inherent in the "many roads" model. Because there is no clear outline for students, and teachers, there is a risk of gaps and distortions. This can be aggravated when students are informed (or misinformed) largely by previous students. A danger in this is that student focus is often shifted from clinical practice to library bookwork, militating against the major strength of Year 3, which is providing "excellent clinical grounding".

Site-specific issues

A commonly held belief is that students at other sites must be better off:

> "Students, they all think the others are getting better or more or different to what they are getting, the grass is always greener no matter where you are"

This highlights the fact that all sites have their **strengths and weaknesses**, and are **suited to different students**, depending on their goals, personal situations and learning styles. It is vital to hold to the bottom line that students deserve a good education regardless of the site they are in – which is not always perceived to be the case by students – in order for the aims of GEMP to be met, including that students are enabled "to undertake further training for any branch of medicine."

I encountered different perspectives on which site is best for whom: some argued that more self-directed students should go to the PRCC, while others stated that the lack of mentoring and supervision at FMC requires greater self-direction.

> "I think it [FMC] probably suits the majority of students but it doesn't suit the students who are less confident I think or who are a little bit anxious about their knowledge or who have an unpleasant experience with a clinician early in term one. I think for them it becomes, the year becomes a real challenge whereas in the PRCCs they get some, they get such good care I mean it's, it's boutique medicine in terms of the amount of attention each student gets and the resources they get."

Similarly, the PRCC appears to have less structure, because it is not formalised around discipline-based blocks, but it was argued that structure is seriously missing at FMC, particularly in certain disciplines. It is true that students can easily go unnoticed at FMC, but not at the other sites:

> "It's very easy for a student at Finders to just slip between the cracks and just disappear. You couldn't disappear in the Riverland."
>
> "The PRCC and Darwin are able to create quite small group team-like environments quite easily so the student knows where they are supposed to be and who's there and who their teachers are, all that kind of thing."

The **selection process** for sites was raised as an area of concern, indicating a need for transparency about the process that is used, amongst faculty and students.

The **issue of standardisation** came up again and again: there is tension between standardising outcomes versus approaches, and between autonomy and conformity.

> "One of the things that is a bit tricky from an academic perspective is just trying to tune the curriculum and the program most appropriately to the context and I think that's something which Universities haven't generally had to deal with before. You know a University that has its site in one place or within one context that deals with those contextual issues and its plans and infrastructure is set up to adjust to that certain context but when you have a university like Flinders where the contexts that the students are learning in are quite varied there's a real challenge for the academic world of the university and the organisation to understand the pressures and the contextual issues in

> different sites and I think that the balance between how much autonomy is given to the areas and the regions is quite a tricky one and probably is dynamic and needs to be adjusted according to the changing environment."

Generally there was great appreciation of the diversity of experience, and the richness it brings, while recognising a need to standardise better within that. It was also noted that diversity requires good communication, which is often not found.

As indicated above, the great majority of students would make same choice of site again, which was confirmed in the focus groups. Even in this, however, the perceptions of what is occurring at other sites count more than the reality.

Significant **student unhappiness** was only encountered in 2 places. While students recognise the value of what FMC can give them, many students at FMC feel neglected. One expressed it thus,

> "The school wants us all to be GPs or rural doctors"

In the Hills Mallee Fleurieu (HMF) region students raised concerns around the preparation for a new programme (which were similar for Katherine), feeling that this was inadequate and there was too much of a rush to start. While this could be written off as the "guinea pig" phenomenon, important questions were raised around what had been learnt from starting previous programmes and whether these lessons had been applied in HMF.

Flinders Medical Centre (FMC)

FMC is **highly rated** as an academic and clinical centre. Respondents spoke of a strong commitment to service and quality, and of a specialised, high technology focus. It provides a good range of complex pathology as a basis for learning and teaching. Students have access to the library and all the faculty's resources, while still being in touch with their local support networks.

> "Learning in a tertiary hospital allows access to a wide range of medical specialties and services, along with the opportunity to explore those in the metropolitan and rural community settings, varied clinical experiences, my teachers are leaders in their field and are keen to share knowledge, access to library, being well supported by many peers and friends." (Student)

> "At FMC it is the opportunity to see the current state of the art in diagnosis, in investigation, in management across each of the major disciplines with sub specialists in each of those areas of expertise."
>
> "One thing that FMC has is that everything happens all in one site and so there aren't travel issues and there is an amazing richness of clinical experience to be had."

The service load at FMC has grown steadily so that there are **significant service pressures**, which compete with the teaching function.

> "It is true that they are massively overloaded. As soon as there is pressure in the system, any hospital responds by cutting back on non-core issues, which are non-clinical non-service related. Teaching is one of those things."

This leads to difficulties in getting teachers for student sessions in almost every discipline and clinical staff not always being interested in students.

> "When I got teaching it was very good, but they [the consultants] were usually too pressurised." (Student)

One faculty member described "the biggest logjam" as having "to cajole" senior clinician colleagues to do some teaching.

> "The full timers do more teaching and more organization and the visitings have got more and more clinical work and less time for teaching."
>
> "In fact since the 1990's clinicians I've spoken to say there has been a deliberate effort to isolate teaching out of the hospital's budget lines and there isn't the support for teaching as an activity."

There are of course a range of teachers, with **many excellent teachers** who deserve greater recognition from the faculty. However, not all teachers are in touch with the new curriculum, and some old style teachers still exist, who believe teaching by humiliation is acceptable.

In similar vein concerns were raised about some of the **role modelling** that occurs, and whether enough emphasis is placed on team work and functioning cooperatively in a health care system.

> "Are we producing doctors who actually consider themselves to be integral parts of teams rather than independent practitioners? Are we producing

> doctors that are respectful of all the people they work with so that you can work effectively in a team? Are we producing doctors that are thinking about the processes that happen around patient movements so that they're contributing to the flow of patients and to efficient and safe practice?"

Along with the increasing service load, current practice leads to rapid turnover of patients and **difficulties in finding suitable patients** for students. Disciplines are adapting to this in various ways, with varying degree of success.

> "The high turnover of redesigned care, patients coming in on the morning of surgery, patients in and out very quickly on any of the medical or surgical wards, means to actually capture those patients is quite challenging and difficult so there have been attempts to get students to outpatients, to get students to preadmissions to overcome these."

A number of respondents argued that the key problem is **lack of support for teachers**, whether from the hospital management or faculty, arising directly from department of health policies.

> "It's not so much that people aren't willing to teach, I think they are, but they haven't felt supported in that role through the health system"
>
> "I see the actual root of some of the problems we experience here at Flinders is going right off into Department of Health policies."

This threatens the sustainability of teaching at FMC.

> "The sustainability issue at FMC is that all the teaching, most of the teaching is done by people who actually are not faculty and don't have any reporting or accountability to the university. So what the student gets is varied. And that is a big issue. Also it depend a lot on registrars and junior doctors for teaching, the quality there again is variable so in terms of sustainability of quality teaching I think that there is a threat to that as the consultants disengage from the process through either the disconcord or more often the pressures of work and their practice or funding arrangements."

However, others argued that this is a cyclical issue that will be resolved over time.

> "I mean there are, the sort of issues that they've raised really are more around sort of relationship issues and I think this is cyclical but you know there are people who feel at the moment you know, maybe in the relationship there is

> not the level of respect of the clinicians that are providing training and perhaps not the acknowledgements of the role of the clinicians here at Flinders."

It seems clear that there needs to be a process of reviewing, and re-focussing on, the original intention in establishing the medical school and medical centre together, and what this means in terms of the education-service partnership.

> "Flinders is a best practice model in terms of conjoining a medical school and a teaching hospital, which has been copied elsewhere, but is not the norm in Australia. It is sad when tension comes into this relationship."

It would be unfair to see FMC as monolithic. **Rotations** are very **variable** and student (and staff) experiences differ between departments, in terms of organisation, supervision and teaching, and even within departments, where there is excellent input and involvement in some units or firms, but other units where students are seemingly considered a nuisance. Students rate highly those organised rotations where both they and the clinicians know who is supposed to be where on what days and at what times; this is contrasted with the experience of students being asked by consultants, "what year are you? Oh, are you with us now?" They also highly appreciate the opportunity to experience a range of units, clinics and sections, rather than being "stuck" on one ward for the entire rotation. Also, they preferred specific clinical teaching as opposed to general "academic" ward rounds, where they felt their needs were often not addressed. Paediatrics and O & G were consistently praised.

With respect to the range of patients there was some question about the appropriateness of patients for the outcomes required, in terms of being complex patients largely being treated by sub-specialists in a high technology tertiary care environment. Concerns were raised about the **lack of ambulatory exposure, exposure to common conditions and exposure to undifferentiated patients**.

> "They are in a big hospital where they are seeing the major conditions getting a fairly skewed distribution"
>
> "So the other thing is that the case mix at FMC means that a significant number of common conditions students are going to have to learn from either tutorials or their own learning, because they won't see them in the tertiary setting. There is a general practice term, but it is quite limited. There's quite

> limited experience in general practice at the moment. In fact we were criticized by the AMC."

Related to this, FMC is relatively small as a hospital so that the **numbers of students** easily becomes imbalanced compared to the numbers of patients. Faculty expressed difficulties in finding appropriate places for students and grave concerns regarding plans to take on more students; there was a strong feeling that FMC has reached capacity in terms of student numbers.

> "[The limitation] is enough space and enough time and enough consultants and registrars who know what they are doing to teach these people during a ward round environment. I view that as a significant issue."

Faculty voiced major misgivings about the increasing student numbers.

> "We couldn't cope, there just wouldn't be enough patients for students around the bed"

There is the possibility of other hospitals being used, as is already being done, for example, in surgery and psychiatry, but issues of adequate supervision and teaching are concerns in this regard.

The role of ward rounds and their value to students is an issue; why, it should be asked, do students prefer to go to the library than participate in many of the ward rounds?

An important issue at FMC is **lack of coordination** – while academic coordination happens (to varying degrees) in the different disciplines, no-one takes overall responsibility, so that students get lost and problematic students are not picked up early. This is not surprising given the numbers of students involved.

> "I have at any one time 14 students and then I only have that group of students for 8 weeks and I don't have much time to develop close relationships with students so over the year there is 5 lots of approximately 12-14 students so it is a large number of students to get one's head around."
>
> "No one actually has sort of overall role to encourage that group of 14 students as they progress through their rotations or another group of 14 students, no one is actually watching over, it gets passed from one to another. … I think that

> lack of continuity also, if you don't establish the relationship you don't get the depth of understanding on the part of the faculty to pick up problems."

Students expressed the **need for mentoring**, indicating that the existing process - the reflective portfolio - was helpful in some cases, not as an assignment but because of the mentoring contact, but depended totally on the mentor's attitude, which might be unhelpful or even negative.

> "Some people are fantastic and like students and understand them and put in time and effort in doing them, and others aren't very good."
>
> "Many students only speak to their mentor by phone for a couple of minutes."

Mentoring is important because FMC was reported by some as an unfriendly, unsupportive environment.

> "The large amount of postgraduate teaching that occurs there means that the students are often at the lower end of a large group that is quite hierarchical as they go on ward rounds with a consultant, two registrars, interns and perhaps a 4th year and 3rd year student, so it is far more intimidating, the students feel it is intimidating"

Students also indicate that, after intense evaluation in Years 1 and 2, there is **no clear feedback process** for students or staff.

Northern Territory Clinical School (NTCS)

At the outset it must be recognised that the **evaluation** of the NTCS component was much more **limited** than at other sites, at the request of the management of the NTCS. However, key role-players in the School were interviewed, a focus group was held with students, and students completed the survey forms.

The NTCS appears to offer the "**best of both worlds**" i.e. many of the advantages of both the FMC and the PRCC.

> "I reckon it's here's a really good compromise between Adelaide and the PRCC's."

> "Great teachers, big enough hospital to get great patients, small enough to find them, good student: patient numbers"
>
> "I think the Darwin experience has been fantastic. Really people want to teach here and they do, they really, the majority of teams appreciate having the students there."
>
> "[There are] more generalist specialists so you tend to see a generalist approach to medicine in the whole. And because it is a smaller institution there is more cross discipline contact with the students. Just because you've left the surgical team it doesn't mean you won't see the surgeons anymore, doesn't mean you won't see the paediatricians or anything like that so there is that sort of group sense."

Darwin offers important **unique elements**, such as cross-cultural experience, tropical medicine, and exposure to late presentations of diseases. It is small enough that students feel supported and have the chance to engage actively in clinical practice, while large enough to give excellent practical, clinical exposure, and teaching from frontline general specialists.

> "They have a richness of clinical experience because the hospital patients have lots of really interesting relatively common conditions both infective and lifestyle related, so they certainly get a wealth of clinical material and because there are fewer of them I think again there is a sense that they belong to a team and so on."

Key features of the NTCS are a commitment to experimentation and innovation, a low student-teacher ratio (in most cases there is only one third year per team), and a history of good results at the end of year 3.

The NTCS is seen to have had a very positive effect on **recruitment and retention** of staff in Darwin. This was certainly a major part of the aim in establishing the school.

> "I think in the NT we have to a large extent solved their workforce problem in terms of junior doctors by having medical students up their staying on. We've also done a huge amount for their specialist workforce because the university connection, the perception of quality and status and all that attracts people and

> so we are drawing positions in that whole area, its just changed the whole area from the backwater to 'this is top quality stuff'."

There is a concern about the level of **exposure to ambulatory patients and to general practice**.

> "The students, the main current disadvantage is that it is focused almost entirely on acute inpatient medicine, you don't get much exposure to ambulatory outpatient stuff, nor emergency stuff … you don't get much community."

The hospital-centred focus, based on the FMC model, is continued through the Royal Darwin Hospital, while the NT provides many opportunities for greater community exposure.

> "Students still have a more medical model, acute care focused approach to understanding health and illness and I think that the learning that they do there is essential in terms of the medical knowledge and the understanding of treatments of all those different areas but the contextual understanding of community is really important to being able to transfer that information most relevantly to people and communities, so the balance hasn't felt particularly right and a bit more community, general focus would be good."

While there were some questions raised about the new structure, implemented in 2006, whereby the year is divided into two 6 month periods and students repeat all 5 rotations in each 6 month period, it is too early to tell whether this will fulfil its objectives; students find the rapid changes a bit unsettling but appreciate the chance to revisit the disciplines.

> "It maybe makes the first half be a little more stressful in that you sort of finish four weeks of medicine and you sort of think oh I don't know any of it but I mean it makes the second half maybe a little easier you know to sort of come back to it and yes you need to refresh yourself again but it's sort of a familiar topic in some sort of degree your covering."
>
> "There's a down side to that as well, I feel like within four weeks you just get used to an area and then you leave it and I've forgotten most of it by the time you get round to it again and then you spend the next few weeks trying to get

> into that area again and so I sort of feel like you're taking a sort of shallow scoop of each specialty each time."

Plans are being made to restructure the training in the NTCS to give all students 6 months of community-based experience, which will possibly make it even more attractive as a combination of the other two models.

The issue of **standards** arises again, in terms of whose are being followed and whether there should be consistency across faculty.

> "I think with that as well that each consultant has a different idea of what is expected from the students."

While it is argued that the unique conditions in the Northern Territory require unique approaches, students are often left confused by different approaches and expectations.

> "It seems like the NT clinical school and Flinders are kind of quite separated but we still have to obey by Flinders rules and they're not very transparent." (Student)

Darwin **students** are very **positive**. They feel their practical exposure is great. Registrars are highly valued as teachers, as is clinical teaching, whereas "outside" tutorials (either delivered by specialists outside of the hospital context on theoretical issues, or delivered by people from outside the NTCS) are, with some exceptions, not seen to be helpful, particularly because students' needs and questions are often not addressed for the sake of following a schedule. As in FMC, students raised the issue of the role of ward rounds, questioning their academic purpose when these are simply functional 'business' rounds.

> "I just feel like the mentality of third year is based around like show up on the ward round everyday and just make a presence on the ward without any justification for its benefit."

Students feel that **communication issues** in the broader school impact on them.

> "The issue here is about communication between the university and the people in the hospital and I think that might be a systemic problem that might occur in lots of different places."

One solution is to equip students better in terms of expectations and outcomes, as mentioned before; in this case it would allow students to assist in developing their own programmes.

> "I think really one solution in third year may be to equip students with the skills to arrange [their own programme] and you know to tell the students well these are your expectations you need to actually tell the consultants and the registrars. You need to actively negotiate with them what your program, what you want to do and I think that would sort of put some of the onus back onto the students and would give them almost permission to say to talk to their supervisors because I don't think we actually get that permission to negotiate with them."

There is a **need for flexibility**, thus, in terms of student centred learning, responding to the gaps students are aware of and avoiding the risk of repetition and low turnout.

Parallel Rural Community Curriculum (PRCC)

There is obvious shared **pride** in the university in the PRCC.

> "The programme is a big win for Flinders and provides great branding opportunities."

There are **important strengths** of the PRCC. The buy-in from partners (faculty, GPs, health service, local government, politicians) is impressive. There is a clear recognition of a common vision, to address workforce shortages in country Australia and to provide a good educational experience for students. It was clear in the interviews that stakeholders outside of the university have bought into the vision, adopted it as their own, support it – even financially in the case of some local governments – and are ready to defend it against threat. As a result, Flinders University is highly regarded in the rural communities I visited.

The **educational advantages**, mentioned repeatedly by the range of interviewees, focussed around the following:

- *Relationship*:

  Students develop personal relationships with GPs, practice staff and patients, thus reinforcing the importance of relationships in health care.

- *Mentoring*:

  Because the PRCC essentially uses an apprenticeship model of training, students are individually mentored, guided and coached through the year, providing them with opportunities for personal growth in addition to educational development, and ensures that they acquire good clinical skills.

  > "And it is a great opportunity as well to actually have a mentor. Like I've a good relationship with my principal supervisor and it is a phenomenal opportunity to actually have this doctor to be my mentor; I'm his only student, he's there to coach me and that's a tremendous privilege really to be exposed to that."

- *Context*:

  Students live and work in the context of their patients, and of their teachers, thus having the chance to see and experience the influence of this on professional practice, on illness and on health care.

- *Continuity*:

  This is important in 2 ways. Most significantly, the chance to see the same patient over time, and to follow the course of his/her illness, whether this involves recovery or deterioration, and health care experience – over time, and from home to practice to hospital, is invaluable. (It is not surprising that the continuity of care assignment is not an issue for PRCC students.) Also, however, the continuity of relationship with faculty members (GPs and academic coordinators) means that the student can be assured that the curriculum will be covered over the year, despite any apparent lack of structure.

- *Comprehensiveness*:

  Through exposure to GPs, specialists, hospital and community-based care, other health workers, etc, and exposure to the range of patient presentations and needs, from minor to major, curative to preventive, rehabilitative or palliative, students experience and come to understand comprehensiveness at a deep level.

  > "Getting how the whole community works, and the different way you deal with medicine in a community, and the continuity of care, actually getting to see the first presentation through to the final outcome, being involved with

preventative health instead of end stage care for the presentation you'd be exposed to." (Student)

- *Team work*:

  Students have the opportunity to work with a range of people in practices and the hospital, especially nursing and ambulance paramedical colleagues, with less of the competitiveness that often occurs in these relationships, thus developing an appreciation for the value of team work.

  "You are actually a member of the team both of the clinic and of the hospital which is great, it's so nice."

- *Responsibility*:

  Students are not just observers, but contribute directly to patient care

  "The students feel more a part of the team, they feel like they are actually helping the patient as opposed to just going in and standing around a bed with a whole lot of other students. They learn better that way because they are more responsible for the patients care and that gives them a good feeling about their learning."

- *Integration*:

  A key element is obviously the focus around the undifferentiated patient as the basis for learning and the integration that happens through this process.

  "The physician says go see this patient. We don't know if that's going to involve a cardio type problem, a respiratory type problem or a neurological type problem so we have to be ready for anything. And then when he questions us we're not just in a medicine block, or just in an O & G block, we have to consider the whole range, and so we're constantly being prompted by those things and we're constantly being quizzed over medicine as a spectrum rather than specifically on paediatrics or O & G."

It is recognised by students and faculty alike that the PRCC model offers a **different learning process** that students take some time to adjust to, and which provokes anxiety.

"And the broad theme we are alluding to one of the anxieties we have had this year has been around the scatter gun approach of our learning that we have in this area, whereas our perception is the guys at Flinders have a much more controlled environment, but we don't know that for sure you know whereas

> down here we just turn up to the practice on Tuesday and Friday morning and hopefully you'll get to see some good pathology." (Student)
>
> "Students are living and working in the community, living and working in their medical practices and the hospitals. Basically everything that walks through the door of a medical practice they are seeing first hand and that complements their curriculum needs and educational needs right across the board. So certainly educationally they see so much more than they might see, the way the program is set up is that it is integrated, it's not to everyone's taste, in that it's not structured into bits and pieces and blocks of learning, its over a whole year and you have to be adaptable enough in your mind, I think to cope with things all over the place, especially to start with and the students do have difficulty coming to grips with that and all they see in front of them at the beginning is a list of things they need to know by the end of the year, they get in a panic when it doesn't happen in that order because it is, it is all over the place. Halfway through the year they get to the point they think hey I'm starting to see, make some sense, so it's not the block learning, but it's a different way of thinking and it is just an integrated way of learning."

General practitioners spoke of the **stimulation** offered by their role as teachers, which has given "new meaning" to their practice. The depth of strong, positive feelings in this regard was unexpected.

> "It actually makes it a little bit more enjoyable having to try and teach somebody and seeing the results of them gradually learning how to do it, it's quite rewarding, I've enjoyed that."
>
> "I've noticed when the student is due to be with me, I think that's going to be a nice day, a bit more relaxed."
>
> "I enjoy the fact that we have to try and keep up to date with certain topics if we have to keep the student up to date and informed about what's going on. So it's useful learning for me as well as the student."
>
> "I was thinking it might even be a way of trying to prevent burnout and stress in doctors just doing something slightly different."

While time was raised as an issue – it can be difficult to fit in student teaching when practices are overstretched and short-staffed – it is compensated financially and

students become an asset over time. This is the advantage of the long term placement of one student as opposed to repeated short rotations over the year. While different models are used in different practices, it became clear that parallel consulting is the best model, where a student, once orientated to the practice and once the GP is confident in his/her abilities, sees his/her own patient in a separate consulting room, presenting them to the GP at the end of each consultation, while the GP continues with his/her patients, calling in the student to demonstrate particular aspects of importance. This is described as

> "… a method of teaching medical students which is not terribly intrusive on the doctor-patient relationship - students see patients themselves, who are booked in for them, and then present to the GP, rather than sitting observing the GP."

Also, while it is good to have a range of teachers, making use of the skills and experience of different GPs in a practice and sharing the load, **one mentor** is needed for each student; this person must be clearly identified and meet regularly with the student.

> "So that you have a clearly identified person who is responsible to make sure you do have all your required experiences." (Student)

GPs did express the need to be trained to be teachers, and to be more closely affiliated with the university.

> "I probably would say a little bit **more Flinders academic support**. Having a little bit more contact with some practice visits, and some input into tutorials and things from the Flinders academics. More contact."

(It was noted that there has been a low uptake amongst GPs to do the Graduate Certificate in Clinical Education, which was specifically designed for them, but may not be meeting their needs.)

Students also indicated that some of the GPs need better orientation to the programme.

> "I think they should have an induction program for all supervisors, mandatory. I know it that is very difficult to do that because GPs are very busy people and

> it is really hard to pin them down but it would improve the quality of the delivery if they did that."

General practices more broadly provide the opportunity for developing **a range of relationships**.

> "There is some evidence that the staff adopt these people. You know they take them out for tea and they bring them casseroles to feed them and organise for them to be funded by having baby sitting jobs sorted out for them and things like that. There does seem to be an increase in the team camaraderie of the practice as a whole as a consequence of having somebody to nurse."

The practices appreciate their relationship with the university and with the students, taking great pride in being part of the academic endeavour and helping to train the future generation of doctors. There is a sense of purpose in being an "academic practice" which is felt by the broad staff of the practices.

> "The students bring in a sort of fresh attitude to the practice."

There is a need for careful planning of student allocations and rotation of students, usually done by practice managers, to ensure students and GPs are kept happy; this also requires regular and open communication with the local PRCC administration.

While patients were not interviewed, for ethical reasons, practice managers and GPs alike reported that **patients enjoy students**, take pleasure in being able to be part of teaching them, and appreciate the great attention and longer consultations that students offer.

> "A lot of the community feel they are participating in the curriculum because they say that yeah it would be good to have a student involved in my care and that's the contribution that they feel they can make."

Very few patients request not to have a student present or not to see a student; in contrast, I was given many examples of patients who come particularly to see the student and who develop strong relationships with their student-carers.

> "And I've found that a lot of patients will actually follow that student for the whole year, so they'll purposely make appointments with that student regardless of which doctor the student is working with on that day to follow up their problems."

Two community representatives also described to me their experience of being patients of students with great enthusiasm.

The **hospitals** too were **highly appreciative** of the programme.

> "So the hospital as a community really embrace them, and for me I don't see any downsides at all of this program."
>
> "The hospital staff are very happy to have us around as well, very happy to have us around. It has been fantastic."

Although where the students were from mixed years (i.e. 3rd and 4th) they could not always identify the differences, the presence of students offered a sense of ownership in developing staff for the future.

> "I don't think they see students as being a burden. They see it as our future."

A strong benefit of having students is seen to be the **learning culture** which has developed in these hospitals, and which has both invigorated staff and extended to other disciplines.

> "It's nothing to talk about education with the doctors now, whereas probably 10 years to discuss education was, even with our staff, nursing or medical, it was sort of like not as engaging as it is now. So it's been a huge transformation I think in the last 10 years."

The response of **health service** bureaucrats was similar, in terms of developing a **future workforce and** creating a **learning culture**.

> "It's really been beneficial for the region in regards to education. Bringing education into the region. Making the region more of a learning culture. It also been beneficial to look at the allied health side of things. So it's looking at our recruitment and retention program for all aspects of health care."
>
> "If it was under threat then the benefits of those other disciplines may be lost and we may then have recruitment and retention issues across the whole board."

There is a developing concept of a **common vision**, which unifies service and education, and ensures a mutually beneficial relationship. On the part of the health service, retention factors need to be addressed, related to further training

opportunities, service conditions, facilities, etc. On the part of the PRCC programme, there are broader opportunities for involvement in the health service that need to be exploited.

At the same time it became clear that results are not just something for the future, but a present reality in the sense that the programme already is **impacting retention** – perhaps even recruitment, in the sense that practices described the "wonderful problem" of not having enough rooms for students because of having more doctors, and a hospital indicated that they have no nursing posts vacant, as a direct result of the academic programmes arising out of the PRCC. In terms of retention, the learning culture of the health service and the practices, the sense of fulfilment and purpose of staff, and the feeling of being recognised all contribute to job satisfaction and general well-being of health workers – GPs, specialists and other cadres – and thus improve retention.

> "I certainly have the belief that there is probably not a recruitment value in having a practice or a hospital have a relationship with the University, but I think there is a retention value."

The positive influence has even **broader implications**, in terms of influencing the thinking of a range of people in the community.

> "There is an energy that comes out of creating a critical mass of learners and that energy has the knock on effects of helping to support and inspire and envigour our clinicians and also to support and inspire and envigour other people that might be sitting on the threshold of deciding whether a career in medicine is a good plan or not. So I do see that there is a workforce outcome for this but I don't see that in the specific picture of we're creating the sausages in the sausage factory to feed the masses. But much more that there is a broader effect that the program has that will result in this being considered as an option."

Local government and community representatives expressed great respect for the work that Flinders is doing. FURCS is seen as a **nidus for development** of academic links, of expanded health professional training and of broader infrastructure.

> "And I think just bringing the culture of the University into the rural areas is actually good for the economy and the town … I think it also potentially is the catalyst to bring other university programs into the rural area."

An area that is impossible to measure, but was expressed by a number of GPs, was the potential of the programme to **impact on doctors** who never return to work in rural areas. In other words, students as a result of doing the PRCC may realise that they are not suited to rural practice and then become specialists in an urban centre; here they will receive referrals from rural practitioners and it is hoped that they will have a different understanding of the context and needs of these patients as well as the scope and abilities of their GPs, who will continue to manage them.

> "If the only outcome is the student one day as a specialist understands the context of the GP from the country who is sending in a patient, referring a patient, and deals with that patient differently, we feel that this program has achieved enough just by doing that."

Already some of the interviewees report experiences of junior doctors in FMC whose attitudes are completely different as a result of a PRCC experience.

There is a feeling too that within the Flinders and broader community the PRCC has had a very positive effect in terms of **improving attitudes towards rural practice**.

> "In the PRCCs I think likewise we've changed the status of rural medicine from being a place where doctors go because they can't make it in the city to where doctors go who have got exceptional qualities, are good teachers, are practicing a good standard of medicine with a wide variety of important patients so I think we have changed that perception around within the university and within the medical profession to a large extent."

Students were very **positive** about their experience, highlighting the advantages given above.

> "I think it's just the exposure to all of the different components of medicine all at once. All of the one on one teaching that we experience here. You get a really good sense of what medicine is like not only in a rural sense but just all different facets of it and I think it gives us a well rounded perspective of medicine at the end of the year."

"My experience [here] …has been a very positive one. Doctors here are very motivated towards teaching students in the program, they are providing us with lots of diverse opportunities to get involved in various medical procedures and managing of chronic patients and acute patients. The hospital staff are very happy to have us around as well, very happy to have us around. It has been fantastic so far."

"You are actually a member of the team both of the clinic and of the hospital which is great, it's so nice."

"I've learnt an incredible amount about interactions with people, hearing people on the ground, seeing people day to day and the continuity of seeing people over time and having relationships grow and you know understanding that relationship, not just from a medical perspective, but from a sort of life perspective as well."

At the same time, students raised a number of important issues. **Social issues** are clearly very significant. The **isolation** from their peers, and other support structures, is more significant than students anticipate.

> "And I think that my clinical experiences have been excellent and I couldn't fault any side of it but I find the year quite isolated and it was much more difficult to move to a rural area and not have colleagues to ask questions, more than I expected it to be."

It is not clear whether more can be done to prepare students.

> "I'm not sure how it would have been better to inform us. I've heard other people say, like I would say yes I had a great experience but I had no idea it would be as hard as it is, but I don't think that anyone could have explained to me how hard it was, even having talked to students in the Riverland and GGT in other years, I don't think that I quite got that it was hard."

Peers may help.

> "The most useful source of information was previous students. I think that's the most up to date the most accurate information."

Many students enjoy **being involved in a small community**.

> "It is like a taste of community and I feel that same [sense of connection], I haven't become a local, but it's like the program gives you a taste of what life could be like if you lived in the community like this and it is a positive taste."

Others find this learning experience rather intimidating and feel claustrophobic.

> "I mean I must admit from that whole lack of anonymity point of view I've actually chosen to do my shopping down at [another town] … rather than doing my weekly shopping down at the local store, it is just is too close, every person you see you've seen up at the clinic."

While apparently negative, this is just the kind of broader learning experience that students need in order to decide where they want to practice in the future. The programme must however be able to deal with students who cannot cope with such situations.

They also raised concerns regarding the **variations between practices** in the way they work and variation in standards.

> "A sense that I have that's missing I guess is the degree of standardization … There are some things that you know I know other students here in this group have been exposed to that I just haven't been and won't be exposed to, I don't think, in my setting."
>
> "That comes back again to an issue of standardization and the supervisors really knowing what do they have to give us and they also being really held accountable by the school to actually provide that."

Gaps were identified especially in paediatrics and psychiatry, confirming the survey results. But it was also recognised that the gaps may balance out:

> "I have got less understanding of acute care than the others, but more understanding of ongoing care of people and their families, and many other things."

Students do feel they miss out on specialist contact.

> "We don't have access to like the registrars and the RMOs and the consultants like they do at Flinders just on a regular basis, I'm finding that difficult in that we, the GPs are all very helpful obviously but we do get the GP slant on everything which is obviously very different to a tertiary level hospitals."
>
> "But there are potential holes in our knowledge that we don't know we've got. For example, there's been no cardiologist coming down here."

At the same time, students acknowledge the benefits of specialist visits to the PRCC sties.

> "When we do get somebody down here which is a professor we have them to ourselves for a whole day which is really great."

They also acknowledge there are downsides to lots of specialist exposure:

> "There are advantages in that too in that there are lots of tutorials they have [at FMC] but only maybe a quarter of them may be useful, whereas we can seek out exactly what we need."

Students do feel the **distance from resources**, the library in particular, is an issue from them. There is recognition of the significant effort made to minimise this issue, but different experiences of the successfulness of this.

> "I think that I feel very well resourced here. I find that I'm well resourced IT wise, I feel that my practice library is very adequate. In fact you know it is probably the biggest personal library … that you could wish for and the other thing with the central library now you can actually make delivery requests. You can make your request today and have it delivered express and they pay for postage back so they give you a reply paid envelope."
>
> "I've found it sometimes difficult, like I've made a couple of requests from the library and they've lost me in the system a couple of times, I've had to remind them and ask them where my order is etc and … some books have come up to a month or two after I've requested them."

The issue of **road safety** and the distances driven, for those not used to it, also came up a number of times.

> "I think with the driving we do need to be made more aware of the driving we have to do and possibly if we could have some country driving lessons, especially driving on dirt roads … Oh and university insurance for students' cars would be good. *(Louder, for the recorder)* University insurance for student cars, that would be good thank you. So if you put that in your report."
>
> "I found the driving to be quite taxing … you've had a long day in the theatre or whatever it is you have been doing and drive home and this an extra hour and half that has gone in your day… it does have an impact on your studying."

Some important issues for the PRCC emerged through the interviews and discussions. The **education versus workforce tension** is again important. While supporting the

importance of education, local stakeholders want to see workforce results, as does the government at all levels – municipal, state and commonwealth.

> "Our investment is related to the general responsibility to education as part of the public health system. We need to work collaboratively towards one vision. But we expect workforce results; if there are not these, we need to know why."

While there might be different understandings about what success is in terms of numbers and localities (specific general practice or hospital vs. region vs. country SA vs. country Australia), there is agreement that results are needed, and, in some cases (such as the Riverland) new GPs are needed urgently. Again, however, it was recognised that there needs to be a balance between simply looking at new GPs coming in compared to the broader issue of the impact on the workforce, which is significant.

The **lack of postgraduate training opportunities** are a significant risk to the programme, and are likely to be the major cause of any failure to attract students back into the regions. South Australia suffers from having a limited number of internship opportunities. Where this problem has been addressed to some extent, as in Mount Gambier, there is already evidence of success. It is the responsibility of the State government and of the postgraduate medical councils to facilitate ongoing training opportunities in these regions.

There are **dangers** in the perceived success of the PRCC, whereby students may choose the programme for the purposes of academic advancement only; whereas academics are comfortable with this, local role-players are less happy with supporting and teaching students who have no interest in working with them afterwards, which carries a threat of soured relationships. Similar attitudes were encountered in relation to international students, with people in some regions saying quite definitely that they do not want international students (while one GP complained about only getting Anglo-Saxon students). Again and again, I heard the comment from GPs and practice managers: "Our student has been great – it might be different if we had another kind of student." This is of course an ongoing element of risk in the programme.

Linked to that, some respondents raised concerns about the ability of the PRCC to deal with **problematic students** – either students who are not coping academically or

students with personality or mental health problems, which are more likely to be unmasked in that environment.

> "There are some students who really need some remedial action, I think that's poorly done in the PRCC, we just don't have those resources and I think we need to be very, very careful in our selection of students"

Students experience difficult things – life and death – in a context where they may not have the support structures they had in Adelaide

> "This is new and someone needs to work through it with you and go, you will not be able to sleep tonight, and go home and have a drink or hug your wife or whatever you have to do and I think that's poorly done." (Student)

GPs who have "seen it all before" need to be sensitized to this.

> "I know when I've sort of had confronting experiences and I've said something to my doctors they've finally gone 'yep', they've dealt with that 20 years ago and so for them that's run of the mill. Whereas for myself I might need to actually talk about it and there are no other students in my town."

There is a need, clearly expressed in different ways, for **succession planning**, both in FURCS and in the regions, to ensure the vision, commitment and enthusiasm continue, because so much of the programme is dependent on the relationships that have been forged between people at local level.

> "The other you know significant factor is the leadership, the academic coordinators the amount of knowledge, corporate knowledge that they have and the importance of the networks they build up, the goodwill, the personal goodwill they build up and I guess and the understanding of the course that they build up."
>
> "I guess I look at [the academic coordinator] … and I'm just absolutely gob smacked at the things that [s/he] does."

Lastly it was pointed out that, despite being community based, a **community focus** and public health understanding is largely **missing**.

Riverland PRCC

The Riverland has celebrated **10 years of achievement**. Its impact in terms of partnership with local structures and role-players is exemplary. There is obvious pride in what has been achieved in terms of putting the area on the educational map and establishing a learning culture in the region, and the local government and health service structures are very supportive of the programme.

> "We have a very close relationship with Flinders here where we have functions together so we try and build that partnership and make sure the students are supported."
>
> "The links with the University and the metropolitan area has been very beneficial as well for the region."

The dilemma is that, measured by GPs or other doctors returning to the area, the **results** are **limited** at this stage; interviewees spoke of 15 years as being a reasonable time period before one can judge success, but the question was asked, how much longer will grace be given to the PRCC before real returns are expected?

> "I'm a little bit unhappy about what I'd call the success rate. The number of people who have been through the rural clinical school who are actually heading to clinical practice. As far as I'm aware there is only 1 person who has come back to the Riverland on a permanent or semi permanent basis out of all the students who have been through and I think that's a disappointing return, frankly. Initially it looked good because we had one quite quickly but that's where it stayed so it would be nice to see what I would call a better return on the investment than there is at the moment."
>
> "I guess if … we're losing doctors and we're not getting people back, people would start to ask why but I think we haven't got that far yet and … you know we are starting to get results."

The pressure for this return on investment will increase as the current workforce threats in the area become an increasing reality as GPs and specialists retire or move away. Two **critical factors** in the limited success are the lack of internship posts, and vocational and specialty training positions, and the practice models followed in the local general practices, which are not attractive to a new generation of doctors.

> "The issue is that one needs to create an environment and incentives that will make students want to come back and work; when you have different choices and different possibilities why would you chose a place when there are problems, and that is a challenge that is facing the Riverland."

These problems may not be of the PRCC's making but have the potential to be its undoing.

Greater Green Triangle (GGT) PRCC

Again in the GGT I was impressed by the great **support from other stakeholders**, who it seems could not sing the praises of the programme loudly enough. It was here I first became accustomed to respondents not being able to think of a single disadvantage to the programme or a weakness they could point out to me. Partly this is because they are already seeing outcomes, despite having only started 5 years ago, largely because of the training pipeline that has rapidly been established around Mount Gambier Hospital. Local people could point out to me the 4th year students, the interns and the locum doctors who have come back to work in the hospital, which not long ago was in crisis.

> "We quite often see the students coming back later. … a lot of these students are city students, they're quite happy to return and spend more time in the country after they've had that initial time here. We've seen students come back and forth after being here. … almost without exception the students have come back the next year to spend some time at the hospital doing electives and various other things and that sort of implies that they are a lot more comfortable coming out again than they were before."
>
> "And we know that we've got two students from our Year 3 PRCC group from last year who are going to apply to do their internship down here next year. So we're seeing them at that level. We've had PRCC students that are now in city based emergency medicine training programs who have come back and worked at locums here and not only that they've brought their friends."

GGT is different because it has a **regional hospital focus**, around the Mount Gambier Hospital, which has enormous potential, and this focus is increasingly happening too at Hamilton Base hospital.

> "So we think that people are getting the best of both worlds here, they are actually working in a rural setting but having access to a whole range of services which they wouldn't get anywhere else in rural South Australia."

This is aided by enthusiastic specialists. The hospital focus carries the danger however of drawing students away from general practices with all they have to offer in making the PRCC unique. The two hospitals do seem to be strongly community based.

There are different models used in the different practices in the region, which is of some concern. Students are given differing degrees of responsibility and autonomy.

Hills Mallee Fleurieu (HMF) PRCC

This is the first year of the HMF programme and so it is somewhat unfair to be evaluating it alongside its more established counterparts. There have certainly been **teething problems**, with some GPs not toeing the line in terms of what they are required to do with and for students, and lots of insecurity on the part of both GPs and students.

> "I know it's just not been myself anxious about how I'm meeting the goals of the program but my supervisors also simply because they have never been through this program before they don't know what level we need to be at."

However, there is already evidence of success because other practices are wanting to join in, and there is good integration with the local hospitals.

> "The word is getting out there, they are starting to see what is going on."

HMF also offers evidence of the success of the Riverland PRCC.

> "We have got at least one registrar, so we've got a couple of doctors working in our region that actually went through the PRCC program."

One of the tensions picked up here – though it exists to some extent in all 3 regions – is the importance of maintaining a balance between **facilitating community engagement** for students and allowing them to maintain their distance and privacy. Students feel aggrieved when they are forced into interactions, rather than having possibilities created for them.

Student accommodation has been a major issue, being mentioned by administration, faculty and students alike. In this light, the question was raised as to why students do not pay for their own accommodation like the NTCS students.

HMF does have the advantage of being close to Adelaide, making it more attractive to students.

> "We're lucky in a sense that we are so close to town, we can shoot up there and see people, I see that being more a difficulty of being at some of the other sites like the Riverland or Mount Gambier"

At the same time it has **particular challenges** such as the big distances between towns in which students are located, and the absence of specialists who actually live in the region, the hospitals being dependent on visiting specialists from Adelaide.

Underlying any problems, though, is the **excitement of launching a new programme**, developing something in the region from the ground up.

> "It has been wonderful working from scratch on something and not having to pick up the pieces from somebody else, sort of started and that has been wonderful, a real clean slate at the start which I really liked. A way to establish our own systems and get ourselves running and to fine tune those as we go too, taking into account student feedback and doctors feedback and everything else."

DISCUSSION AND RECOMMENDATIONS

The **Flinders model** needs to be applauded and celebrated. While there have been articles in the literature about the PRCC, the overall Year 3 model (and probably Year 4) deserves to be written up as an example of how students doing many different things at many different sites can still achieve an equivalent endpoint. This is essentially what happens on a national scale in many countries with single exit examinations, so it is logical that is should happen within an institution, but Flinders has demonstrated that it can be done successfully in the most critical year of study. Educationalists are increasingly recognising that a uniform set of rotations does not provide uniform experience because of different teachers, different patients, different clinics and units, different seasons, etc.

> "So I think it is a realistic understanding of clinical training that you won't have identical experiences, that you need to allow students to learn through experience through their own learning and each student is going to have a different mix of those things and a valuable ways of learning."

I believe Flinders is world-leader in this regard.

The **lesson** that is offered can be summarised thus:

> "Provided you're clear about what your curriculum goals are and you have a common assessment system you can have different pathways to a goal."

However, it seems **students are not always clear** about the curriculum goals. The importance of this is recognised by many faculty members.

> "[One improvement] would be to define the Year 3 model to make the core competencies, the core material more evident to the students, I think we still haven't got that right and I think that would lessen the anxiety.

This still needs to be addressed.

The **communication difficulties** within the institution need to be addressed, for the sake of innovation and curriculum development. These difficulties are exacerbated by the challenge of distances between sites, which has the propensity to potentiate such problems.

Year 3 recommendations

The overloading of Year 3, together with the difficulties related to assessment, could be addressed in a number of ways.

1. Reduce the number of assignments by moving some into 2nd or 4th year, and give greater weighting to the remainder
2. Increase the use of formative evaluation tools or in-course assessment, such as through the introduction of the mini-Clinical Evaluation Exercise (mini-CEX). Students favour this highly, not apparently because they particularly know and support this model, but because they welcome anything which would increase ongoing assessment and reduce the weight placed on the final examination.
3. Define the learning outcomes, both in terms of content and levels. This will assist in making students feel the year is more manageable, at the same time as providing a clear blueprint for students and staff of the expectations, and, not insignificantly, force the School into a process of agreeing on what those outcomes are. The AMC book was introduced for this purpose but has obviously failed and a new tool is needed. One such example is the so-called Dutch blueprint (Metz et al, 1994), which provides a good basis, although it would require major modification in a collaborative process. Defining outcomes will also help to address the question of standardisation that regularly arises.
4. Move part of the exam. As a number of interviewees mentioned to me, there have been discussions, about moving the OSCE into 4th year. Certainly there are both advantages and disadvantages of this, and strong protagonists in either direction. While I see the value in doing this, I also see what would be lost in 4th year, and I am not convinced that it is necessary if the issues above are addressed. However I believe it would be feasible.
5. Strive to ensure that the examination drives students towards spending more time with patients, rewarding clinical ability and application more than theoretical book knowledge. Some of this may be about properly informing students more than changing the examination. Two Year 4 students told me that at the end of the year in the exam they realised that it is the clinical experience that counts, one saying that everything she learnt in the last month was useless for the exam. However another said that he had concentrated on clinical work, because he thought that

was the focus of Year 3, but had found the exam to be on completely different things, indicating the issue may be a real one.

There is a need, as part of curriculum review, to re-look at PBLs and tutorials – their purpose and content – and at the role and function of the GEMP website vis-à-vis GEMP 3. Also a decision should be taken whether to continue to focus on individual health.

In all arms of the programme, it seems that there is a need for improved, formalised feedback mechanisms – for students at all sites to give feedback to the schools and to teachers, and the faculty to give feedback to teachers, both at FMC and in the PRCC.

FMC recommendations

In terms of FMC, the following recommendations are made:

1. Clarify the expectations and requirements of clinical teachers. Ensure that they are properly recognised for fulfilling their obligations.
2. Appoint an academic coordinator for Year 3 at FMC, who can provide overall support for students and ensure that problems are addressed and information is shared between departments.
3. Ensure students move around within the different rotations, so they are not stuck on one unit for the entire 8 weeks.
4. Establish a functional, coordinated mentoring system. While students appreciate the reflective portfolios, mainly for the opportunity they provide for mentoring, there is great variation in the approach taken by faculty responsible for marking these, with some dealing with students in this regard over the phone. I suggest a more formal mentoring system be established with enthusiastic faculty, who may be put off by having to mark a portfolio but would probably be happy simply to meet with a student a few times a year.
5. Increase general practice time to ensure exposure to common conditions, undifferentiated patients and ambulatory care. If this was done as an "integrated clerkship", where students could do it, for example, as an afternoon a week over an extended period, the element of continuity of care would also be dealt with, and

complaints about the continuity assignment may disappear. If GPs are included, they could also take on the mentoring role suggested above.

6. Build in ongoing monitoring and evaluation in the same way as this is done in GEMP 1 and 2.

NTCS recommendations

In terms of the NTCS, because of the limited evaluation of the NTCS, few specific recommendations are offered. Much of what is presented for both FMC and PRCC is applicable to different components of the NTCS programme. However the following are recommended.

1. The planned development of a community-based component should be actively supported and encouraged by faculty and should be implemented as soon as possible.
2. Students should be given greater opportunity to input into their tutorial programme. Tutorials should be arranged in response to student needs, as befits a learner-centred model of education, and regular feedback obtained from students regarding the value of external teaching sessions.
3. The role of ward rounds needs to be discussed with students, so as to ensure they see the benefit and are structured to maximise learning opportunities, rather than simply making them compulsory.
4. The issue of standardisation between Darwin and Adelaide needs to be addressed directly, and students should be given clear, consistent information about the requirements – regardless of whether there is uniformity or not between the centres (it is assumed there will not be) – by both central faculty and NTCS.

PRCC recommendations for FURCS

In terms of the PRCC, the following recommendations are offered:

1. Expand with care: proper preparation is needed before any further expansion occurs. While it is understood that funding cycles put pressure on the programme to deliver immediately after approval, it is unfair on students and staff not to ensure that practices and local preceptors are fully prepared.

2. Consider increasing numbers per practice as a way of expanding the programme. In certain towns with larger practices, there seems to be ample scope for increasing the numbers of students in a practice. This is the model used by the Spencer Gulf Rural Clinical School, which I also visited, with up to 5 students in a practice at any one time. It does require greater administrative organisation in terms of scheduling so that all the students are not on duty together, but will assist with economies of scale as well as decreasing the sense of isolation from peers that is a major issue for students. It will of course change the social dynamics and could perhaps therefore be tested in a couple of sites initially. However, it is important to consider ways of achieving sustainable expansion in existing sites.
3. There should be careful selection of students if possible, not on an academic basis, but rather on issues such as their aspirations, goals, motivation, etc. While this is notoriously difficult, the WWAMI programme of the University of Washington attributes student selection to be one of the key factors in its success (Dr John Coombs, Associate Vice President for Medical Affairs, Clinical Systems and Community Relations, UW Medicine, personal communication). This should not be done to exclude those who are simply testing the waters of rural practice, and certainly should maintain a balance of students interested in general versus specialist practice.
4. Consideration should be given to how more careful preparation of students going to PRCC sites can be done. One option would be to set up links to current students to allow for some kind of handover process.
5. Avoid overselling the academic results; not only does it have the potential to create animosity amongst colleagues, but more importantly it seems that this puts the focus of the programme in the wrong place. The critical issue, in terms of academic outcomes, is that students are in no way disadvantaged academically by choosing to go to the PRCC, and in some areas may be advantaged.
6. Continue to take a lead in change and innovation, for the sake of the programme and for the broader community. While it may be true that success breeds success, becoming an acceptable norm in Australian medical education brings its own threats, with students becoming more critical, and external demands increasing. Professor Nigel Oswald, in his evaluation, alluded to the threat of success in a different but no less important way, stating, “the rising expectations which inevitably accompany success are a challenge to sustainability and are ignored or

resented at peril." This may mean defining more clearly with all role-players a common understanding of what the outcomes of the programme should be, tackling head on the education versus workforce and recruitment versus retention issues.

7. Some standardisation is needed; while this should be addressed as part of Year 3 as a whole, as mentioned above, there also needs to be some consistency around how students are expected to function in practices, and what they can expect of their GP. The parallel consultation method should be widely adopted.
8. A specific supervisor is required for each student. The apprenticeship model is a major strength of the PRCC, and this depends on students having a clearly identified mentor, rather than relying on "group mentorship". Both the responsible GP and the student must know who that person is and what their respective roles are.
9. Consider a formal induction as requirement for GP teachers. It seems the programme is at the point where GPs see it as a major advantage to be part of the programme, which brings significant benefits to them, apart from the additional income they receive. It is time therefore to expect certain standards from them in terms of the way they teach, when they teach and their role as preceptors for students. Formal induction into the programme, and some continuing professional development as a teacher, could be considered as part of this. GPs should have expectations clearly spelled out to them.
10. Explore the great potential for students to engage in some kind of community-based, public health activity, to integrate clinical practice and community health, possibly through local community health services, who seem very willing to engage further with PRCC students. While bearing in mind the issue of overload, this would round off the existing programme very well.
11. Similarly, opportunities for inter-disciplinary learning should be explored – the PRCC (and the NTCS) provide a conducive environment for such activities. This could be incorporated in a public health activity.
12. The gaps identified by students, particularly in the area of paediatrics and psychiatry, need to be addressed. This may largely be a matter of perceived gaps, with students comparing themselves to their FMC counterparts, which would be addressed by having a clear set of common outcomes, as highlighted above, but it is apparent that some of the current measures that have been put in place for these

disciplines are not working. It is clear, too, however, that any activity which takes students out of the context and out of the practice for any significant period of time will undermine much of what has been achieved, so innovative models will need to be developed – something the FURCS has shown itself to be adept at doing!

13. Provision must be made for personal and emotional support for students. The model used in the Riverland of having a particular GP, who is not a supervisor or academic coordinator, available as an additional sounding board could be explored further, or, alternatively, a non-medical community member with pastoral experience could be considered. Particularly during the first few months, greater social support and academic guidance should be given to students.
14. Address issues of road safety. Insurance for students and preparation for rural roads – perhaps through a defensive driving course – are options to consider.

PRCC recommendations for external stakeholders

While this report is primarily intended for FURCS (and Flinders University) purposes, there are important issues in relation to the PRCC, which can only be addressed by external authorities. In this regard I offer the following broader recommendations.

1. At the risk of stating the obvious, the programme is clearly an ongoing success and deserves further funding.
2. Because the success of this programme (and similar programmes) in terms of workforce outcomes is not only dependent on the training of medical students but also, very importantly, only the pipeline of training thereafter, it is vital that the State government of South Australia and the relevant training bodies establish and support posts for internships, postgraduate hospital training and GP registrar training in the 3 regions in South Australia where students are located, as has already begun in the Greater Green Triangle region. This recommendation obviously can be extended to other States and to any areas where rural clinical schools are active; it is clear that simply funding rural clinics schools without paying attention to the ongoing training of graduates of these schools is short-sighted. Ideally this training should be coordinated by the Rural Clinical School in order to gain the maximum added value and efficiency and minimise the potential for duplication and disorganisation.

3. The impact of the PRCC on retention of health professionals and on their satisfaction in the regions in which it operates should be investigated as a critical outcome. While recruitment of doctors is important, the broader impact in terms of retention of medical staff and retention of other health professional staff may be even more significant, and simply looking at numbers of GPs will not demonstrate this success.
4. In evaluating and assessing the PRCC, or similar programmes, there is a need to canvass the opinions and perspectives of the local health services, hospital managements and community representatives. If the programme is only evaluated from an educational perspective or a workforce perspective, the broader impact will be lost, and the level of buy-in and commitment, which translates to political clout, will be under-estimated.
5. In funding new programmes or extension of existing programmes, responsible officials need to allow for adequate preparation prior to commencing student placements. While funding cycles make this a challenge, there should be at least 6 months, preferably a year, of lead-in time during which locally appointed coordinators can prepare the ground, establish partnerships, and provide the necessary orientation and training to local faculty.

Previous PRCC recommendations

Many of the recommendations made in previous evaluations appear to have been addressed by the FURCS; it is however recommended that FURCS management review these again. I do wish to highlight 3 recommendations made by Professor Nigel Oswald in his final report on the 2002 evaluation, because they echo a number of the recommendations made above and suggest that more needs to be done to address these:

1. Professional development for local faculty

"Perceptions that they [local faculty] are performing well come from feedback from students and from central faculty, but can tend in one of two directions. If associated with continuing professional development it can lead to ever-higher levels of enthusiasm and quality. If perfunctory it tends to a perception that the supervisor's actions are little noticed, or that the supervisor is there to provide access to facilities, without genuine responsibility for educational

content and quality. Avoiding these negative perceptions is a key issue for sustainability and for the Education Co-ordinator, and any slackening of enthusiasm needs to be recognised and managed."

2. Training and education for supervising professionals

"All professionals within the health system need further training and development. This is because there is always more to learn but also because satisfaction is maintained by increasing competence and skill. It is part of sustainability. …

A large number of those (rural educators) who expressed an opinion wished for further development, particularly in understanding and responding to students' needs in the curriculum. Many also wished to know more about the skills of teaching, believing that they were probably doing an adequate job but without the foundation to be sure."

3. Quality control

"Quality control is an issue in any dispersed academic site, and particularly in the multiple sites involved in community based education. Ensuring quality and reasonable equity is a key role for academic co-ordinators….

It is important that minimum requirements of the style and experience offered to students is formalised in some way. The requirements should be set by the Rural Clinical School and overseen by the Academic Co-ordinator."

CONCLUSION

It can be concluded that the Year 3 programme within the Flinders GEMP is innovative and is successful in meeting the aims of the School of Medicine for this vital clinical year. Curriculum review is however required to addresses issues of overload, standardisation, increasing student numbers, and clearly defined and well disseminated outcomes relevant to community and population perspectives as much as treatment of individual patients.

All 5 sites in which students may complete their third year function well and provide a rich and useful clinical experience to students. The diversity is to be commended as world-leading. It is important to ensure that students perceive that equal attention is given to and value placed on each of these sites.

The PRCC programme continues to be an important flag bearer for community-based, rural-focussed medical education. Students, faculty and external stakeholders recognise its value. Continuing innovation is required to strengthen the programme, addressing standardisation, educational gaps, training of GP Supervisors, pastoral care of students, and the meaning of success. In particular, the University, in partnership with all levels of government, needs to develop significant high-quality rural training options at the intern, junior doctor and registrar levels in all PRCC regions to maximise the workforce impact of the current undergraduate programs.

The value of the partnerships that have been established with external stakeholders makes it worth the time and effort put into them, and these should be maintained as a critical aspect of the programme.

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APPENDIX A

2006 Evaluation of GEMP Year 3 at Flinders University

QUESTIONNAIRE FOR YEAR 3 STUDENTS

A. Voluntary Consent Concerning Questionnaire:

This questionnaire forms part of an evaluation of the Year 3 medical programme at Flinders University.
Your contribution is important and will assist us to improve the delivery of Year 3 in the future.
Please note that completing this questionnaire implies that informed consent has been obtained from you. If you are uncomfortable with any aspect of the questionnaire simply return this form uncompleted, or you may choose to only fill in certain sections of the form.
As all information and data are anonymous you will not be able to retract any consent given after submission of this survey form, as it will not be traceable.
Any information derived from this form may be used, for example, in publications by the research team.

B. Questionnaire:

Today's date: ……

Where applicable, please tick appropriate choice(s)

Location in which you are spending Year 3:
□ FMC □ NTCS □ PRCC

Personal details

1. Gender: □ Male □ Female

2. Date of birth (year): 19….

3. Nationality
   - □ Australian
   - □ Australian permanent resident status
   - □ Temporary entry permit (e.g. international student)
   - □ Other: *(Please give details)* ……

4. Do you speak a language other then English at your permanent address?
   - □ No
   - □ Yes: (*Please specify language)*……

5. Marital status

- □ Single
- □ Married/Living with partner
- □ Other: *(Please give details)* ……
- □ Divorced/Separated
- □ Widowed

If applicable, occupation of partner: ……..…

6. Number of children under 16 years of age: ……

7. Place of birth *(please provide town and state/country)* …….....

8. Please indicate the type of location you have lived in the longest in Australia:
   - □ Capital city or major urban centre (>100,000)
   - □ Regional city or large town (25,000 – 100,000)
   - □ Smaller town (10,000 – 24,999)
   - □ Small rural community (<10,000)

9. Number of years of secondary schooling in Australia outside of a capital city or one of the major urban centres: …….

10. Where did you do your longest period of primary and secondary schooling? *(Please provide town and state, or country if outside Australia).*…….....

11. Do you consider yourself to come from a rural background? □ Yes □ No

12. Admission/Entry scheme
    a. Please indicate if you are *(please select one response only)*
    - □ Medical Rural bonded Scholarship (MRBS) student
    - □ Unbonded Commonwealth Supported (HECS) student
    - □ Bonded Medical Places Scheme (BMPS) student
    - □ NT quota student
    - □ International student
    - □ Other: *(Please give details)* ……..

    b. Are you a NT quota student? □ No □ Yes

    c. Are you a PRCC quota student? □ No □ Yes

13. Scholarship
    Do you hold a scholarship?
    - □ None
    - □ Yes, Medical Rural Bonded Scholarship
    - □ Yes, Rural Australian Medical Scholarship Undergraduate Scholarship (RAMUS)
    - □ Yes, John Flynn Scholarship
    - □ Yes, other: *(Please give details)* ……

14. What is the approximate total amount of debt you expect to have at the end of Year 4?

    ……

15. What previous qualifications have you obtained?

Name of qualification	Year of completion	Name of institution

16. Do you have any previous full-time work experience? □ Yes □ No

    If yes, please give details: ……...

17. Rate the importance of the following factors in influencing your future medical career? *(Please score each factor from 1 to 5, where 1 = minimal influence and 5 = major influence, or 0 if you feel it has no influence. Tick the appropriate column for each factor.)*

Factor	**5** **(Major influence)**	**4**	**3**	**2**	**1** **(Minimal influence)**	**0** **(No influence)**
Family						
Spouse/partner						
Colleagues						
Income						
Workload						
Interesting work						
Location						
Travel						
Personal values						
Religious beliefs						
Role models						

Other: (Please specify and rate)……

18. On completion of your basic medical degree
    a. in which State/country you would most like to practice? (*please tick most appropriate choice)*
    - □ NSW
    - □ SA
    - □ NT
    - □ VIC
    - □ TAS
    - □ WA
    - □ ACT
    - □ QLD

□ Country other than Australia (please specify): ……...

b. in which geographical location in Australia would you most like to practice?

□ Capital city
□ Major urban centre (>100,000)
□ Regional city or large town (25,000 – 100,000)
□ Smaller town (10,000 – 24,999)
□ Small rural community (<10,000)

c. what area of medicine are you most interested in pursuing?

First preference: …….....

Second preference: …….....

Third preference: …….....

d. Before you entered medical school, what area of medicine were you most interested in pursuing? (First preference) …….....

e. Before entering Year 3, what area of medicine were you most interested in pursuing? (First preference) …….....

19. If all goes well, in what position and where do you see yourself working in ten years time?

    Position: …….....

    Place: …….....

20. a. Do you have a role model in medicine? □ Yes □ No.

    b. Do you have a role model outside medicine? □ Yes □ No

    c. If yes (20a or b), what are the key characteristics of your role model?

21. What three personal values are most important to you?

    i. ……..

    ii. ……..

    iii. ……..

Curriculum issues

Please answer the following questions in relation to the site in which you are spending your Year 3:

22. What are the educational advantages or benefits to you of your site?

23. What are the educational disadvantages of, or problems with, your site?

24. What are the social advantages or benefits to you of your site?

25. What are the social disadvantages or risks to you relating to your site?

26. If you could choose again would you make the same choice of site?
    □ Yes □ No.
    Please give reasons for your answer:

27. Consider the following statement: "There is adequate exposure to a range of clinical conditions in each of the core disciplines in Year 3."
    (Please tick the most appropriate response.)
    □ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree

28. In what areas do you think there are gaps?

29. In your opinion, how does your clinical involvement this year impact on the health service/s in which you are learning? Please give examples.

30. From your perspective, how does your experience this year impact on the community in which you are learning? Please give examples.

31. How could your learning experience in Year 3 be improved?

Resources

32. What resource do you use most often for your learning? *(Tick the best answer)*

□ AMC anthology □ Year 3 booklets for each discipline □ Web-based resources

□ Personal textbooks □ Other (please specify) …….

Preparation

33. Consider the following statement: "Years 1 and 2 prepared me adequately for Year 3." *(Please tick the most appropriate response.)*

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree

34. What component of Years 1 and 2 provided the best preparation for Year 3?

35. What gaps can you identify in Years 1 and 2 on the basis of your experience in Year 3?

Assessment

36. To reduce the stress of the Year 3 exams the Curriculum Committee is considering a progressive assessment, for example, students complete 6 observed consultation assessments

(mini-CEX) during the year which would count towards the mark in Doctor and Patient 3. Do you agree that this would reduce stress?

□ Strongly agree □ Agree □ Neutral □ Disagree □ Strongly disagree

37. Do you have any other suggestions to improve assessment?

Thank you for taking time to complete this questionnaire.

APPENDIX B: Additional results from student surveys

Table X: Educational advantages of the sites (Comments transcribed verbatim from student survey forms)
FMC
Access to wide variety of patients. Access to all major specialties. Teaching hospital- most people want to teach educational sessions. Access to good library, internet, etc
Access to specialists, patient contact, resource allocation
Increased number of students-good measure of experience, Increased variety of clinical specialists
Great exposure
Urban area, services, extra curricular activities
Tertiary centre, see some of the rarer conditions
There are numerous doctors and equipment
Video exposure to illness
Central, all facilities avail at one location, variety, can see wide range of issues
No discreet blocks so I know where I'm at with each subject
Went to London for 3 months, opportunity, flexibility, major teaching hospital, lots of cases
No need to uproot family children from school
Lots of doctors
Access to lots of consultants
Exposure to range of conditions, serious conditions requiring hospital
Large teaching possibilities
Contact time with consultants, more research done by RMO
Hospitals with exposure to specialists clinicians and complex patients
Major tertiary institution and exposure to wide range of expertise
Wide range of exposure to clinical presentations, input from lots of clinicians
Wide range of conditions and we receive the patients you can't fix in the country
Exposure to many senior clinicians and complicated medical problems
Learning in a tertiary hospital allows access to a wide range of medical specialties and services, along with the opportunity to explore those in the metropolitan and rural community settings, varied clinical experiences, my teachers are leaders in their field and are keen to share knowledge, access to library, being well supported by many peers and friends
Best teachers
Large teaching hospital, see everything from the common to the uncommon
Central location
Many other students at the site with whom I can discuss problems with
Wide range of specialists
Capital city
Like that disciplines have been separated into rotations, see wide range of conditions
Many varied patients
More patients
Wide range of medical conditions
Wide range of experts
Library, on site with courses administration unit, specialty rotations, Internet access on campus with electronic reference access
Opportunity to work and learn at larger hospital
Good teaching
Close location of med school to hospital, good knowledge of what needs to be done
Large number of teachers and supervisors
Range of experiences
Major hospital, full spectrum of specialties
Spending time with medical staff who are using up to date relevant medical practices, varied experiences

Located at FMC
Broad range of specialists at this hospital
Exposure to wide range of medicine/conditions, many opportunities to go to wide variety of clinics teaching opportunities
Wide variety of presentations, lots of consultants to learn from
Major centre, wide range of conditions and proximity to teachers
NTCS
Great teachers, big enough hospital to get great patients, small enough to find them, good student: patient numbers
Better teacher-student ratio, and enthusiastic teachers. Less hierarchy in hospital-more casual relations with staff
High consultant and registrar to student ratio, commitment to teaching of above, Consultants at PBL's
More hands on exposure, close working relationships with teachers, large range of medical condition
Relaxed environment, good clinical exposure
Fewer students on the wards, enthusiastic staff in the NT
1. Good support staff 2. smaller hospital 3.Wide range of clinical experiences
Less students, more patient access, excellent teaching in wards
Exposure to specialist clinicians and the medicine that is referred away from regional sites due to complexity, exposure to large number of clinicians and different working styles
Low student: teacher ratio, Access to staff at all levels
PRCC
1. Practical skills development 2. Dedicated teaching 3. Immersion in Clinical environment 4. Develop knowledge of the business of medicine
Variety of Clinical exposure
Community exposure, continual patient exposure, mentoring by supervisors, focused teaching in PRCCs
Increased 1 on 1 time with specialists and doctors
Clinical exposure and 1 on 1 teaching. Involvement in the clinical team and greater independence
Free textbooks, Access to GP's, specialists
Good general coverage, lots of hands on
Interns! Great for teaching and usually very willing to use you in A & E, feel like you actually contribute. Good library and GP's re-invest init. Experiences are available if you seek them, little competition for them
Small hospital - good access to patients and one on one teaching. Relaxed atmosphere
Better student/teacher ratio. GP focused. Financial. No competing with other students/interns/nursing students
More hands on experience. More 1 on 1 teaching from specialists and GP's. Proven academic success of past students. More personal/tailored program available to suit my needs. Library of core texts in each practice.
Only 2 medical students here - they aren't sick of us yet, lots of one on one time with doctors
Plenty of exposure, hands on experience and one on one teaching.
Experienced rural GP's. First hand experience. Practical experience.
1. Hands on experience 2. Good student to staff ratio
1:1 teaching. People are more willing to have students because there aren't as many of us.
Live on site so access to learning opportunities is easy. Large amount pf clinical exposure.
Accessibility of consultants for teaching and feedback. Daily patient interaction with a lot of independence, e.g. Conducting our own consultations. Variety of clinical experiences throughout entire year as opposed to for 6 or 8 weeks only. Chance for excellent procedural experience. E.g. first assist in surgery
Copious GP exposure, smaller number of students
Major centre, wide range of conditions and proximity to teachers

Table XI: Educational disadvantages of the sites (Comments transcribed verbatim from student survey forms)
FMC
Too many students on some placements, some clinicians very busy
Too many students, doctors uninterested in teaching (more than at others?)
Less individual teaching
Training is not as detailed, formal as more rural, remote areas
More extreme end of medicine, not enough non-hospital based exposure to medicine, e.g. General practice, lack of interest in teaching and lack of consistency in teaching/learning experiences between departments and sites
There are few doctors willing to teach
Not much focus on the common problems competing for exposure
Less exposure to extremes of chronic conditions and unusual, rare conditions
Would love to do more GP stuff, not enough at Flinders
Random learning experiences
Some placements are brilliant others dreadful
Limited access to GP sessions
Too many students on some placements, some clinicians very busy
Many other students competing
London was more independent
Less patient contact
Not enough opportunities for practical experience
Students are the least important people in the team so are often ignored by senior staff, having to compete with students from other disciplines
Impersonal, I don't expect senior staff will know who I am
Less opportunity to practice skills
Large class sizes sometimes prohibit clinical experiences
Lack of hands on experience
Little personalized teaching compared to a smaller centre, less hands on work
Decreased chance to see patients due to more students
Impersonal it is rare for any consultant to notice students names
Med student overload lack of interest in teaching me
A rat race too competitive
Not too much one on one support, competing for clinics
Busy work load of consultants, not much teaching
More students
To few teaching sessions, lack of guidance, poor student teacher ratio
Competing with other students for limited opportunities
Lost in the crowd, many students from many disciplines fighting for teaching from the same people, don't get exposure to some illnesses, total lack of teaching from registrars and consultants in certain rotations due to their time restraints, poor focus on GP, very little choice in location for rotation as we are assigned to chase administration hassles
More hands on experience
Too many students
Not as broad range of things seen by specific students as in rural setting
Not everyone wants you there
Lots of staff and students, easy to get lost
More students, more competition
Too many med students, not enough resources or doctors with time to teach
Big hospital, impersonal
No practical practice exams
Less time with consultants, less formal teachings, less hands on practice, only one practice OSCE
Less one on one teaching , too many students

Anonymity, number of students (too many), lack of responsibility of hands on practical experience
NTCS
Lots of teaching that is not relevant to core 3rd year knowledge
Less access to library resources, textbooks etc
Library access, PBL's out of sync with relations
Rural- great lack of supervision
Teachers often not in tune with Yr 3 core curriculum
Nil
Unknown criteria to fill out, variable teaching
Limited library access
PRCC
Expansive colleague base to seek support 2. Access to profs that write the exams
Lack of standardization across sites
Lack of standardization, Inadequate induction of supervisors, lack of faculty meetings maintaining consistency within program
Poor coordination of learning objectives and teaching material, extensive time in travel in 6 hrs/wk
Isolation, lack of other students
Isolation, Lack of peers
not having a library, lack of peer support/direct
Isolation from peers. Missing out on extra curricular things at Flinders. Not able to see some of the situations handled in tertiary centres.
Less resources - reduced exposure to tertiary centre investigations and techniques e.g. arterial blood gases
No library. Have to chase learning opportunities. Small town life- gym, movies, friends close by. Inconvenience of moving twice. High level care exposed.
Limited library access. Patients with complex problems transferred to Adelaide. Limited exposure to certain areas. E.g. acute psychiatry, neonatology. Few physicians to model full examinations.
Greater need for self time management than in the city where you can focus on one block at a time
Lack of obstetrics and psychiatry exposure
Isolation, travel, "out of the loop"
Contact with lecturers, less rarer diseases/pathology
Access to major teaching hospital, otherwise very little. Distance from extended family support
Some specialists have limited exposure, e.g. Very minimal contact to paediatrics populations. Limited access to medical teaching rounds
Less specialist contact

Table XII: Social advantages of the sites (Comments transcribed verbatim from student survey forms)
FMC
In capital city- lots of things to do. Not separated from family and friends
Close to home
Friends, people to chat to, family lives in Adelaide
Capital city, not isolated
Night life
Living in the city, friends and family nearby
There are many shops around
Close to home and childcare, friends locally, easy access to Melbourne
Good for partner
Live with family, live at beach, live near hospital, supportive colleagues and friends
Contact with peers
Being amongst friends, living in a city
Support of family and friends
Able to remain with my family
Can live close to city
London- FMC close to home
Lifestyle of city
Friends and family
Still living at home with excellent network of family and friends
Close to family, able to continue part time work
More friends in city
Still living with parents in Adelaide, friends and girlfriend in Adelaide
Being well supported by peers and friends
Family, friends, are all based in Adelaide
Impact and availability of allied health at other community programs
Near my girlfriend and friends
Proximity of family
Boyfriend, friends
Friends
Convenience of being in a city
Friends and family
On site uni health services, my family live in the area
Family, girlfriend
More students around
I can still work, 10 min from home
Near family
Proximity to home and friends
Family, work and friends are here
Living with partner, close to city, no need to move
Would have felt isolated if spent whole year in rural area, partner and friends in Adelaide
Large city, variety of services, friends and support
My husband works in Adelaide. It was nor possible to apply for a PRCC place, as his job applications for the following year were required in advance of the selection process for the PRCC places. We would not consider living separately for 1 year and social networks also in Adelaide
NTCS
Great lifestyle, less hierarchical, lots more happy people
Easier relations with hospital staff, smaller student group
Smaller number of students, summer all year
Darwin and Katherine- very welcoming community

Nice group of people, easy social environment
Darwin is a great place to live
Convenience of large town, friendliness of small one
warmer, closer to home (NT Quota), smaller
Lots of outdoor activities available, socialising with seniors and being able to ask the less academic questions
PRCC
1. Values of rural life meet my own and my families 2. Getting to know people in the community
None
Community exposure
None
Beach, not much else
Nice people
I love my GGT orderlies, I love the pub!
Develop reasonably close relationships with doctors in practice, close friendships with other PRCC students and allied health people
Everyone's very friendly and welcoming and want to encourage us to return to the country to practice
New opportunities to meet different people. Can focus on study. Regular PBL's with other GGT students. Friendly community.
Get to know team members well. Housing provided, no rent to pay. Short drive to and from work. Good group of students who become your main social network.
Free Accommodation
Short distance from accommodation to clinic/hospital. Participate in community activities. More closer social relationship with doctors/teachers
No distractions
water sports, staff try harder to include you in social events
Can be close to my family and close to teaching site
Unique rural experiences, e.g. We attended a rodeo!!

Table XIII: Social disadvantages of the sites (Comments transcribed verbatim from student survey forms)
FMC
None
Nil
Absent from family
Far from immediate family, high expenses
There are no disadvantages
Less of group atmosphere because of potential to disperse in hospital and other locations and not socializing
My best buddies are in Perth and Darwin
Home
Most of my study colleagues and friends moved to rural areas
London- not as safe as Adelaide
Takes 40mins for a one way trip to uni
Travel time to and from hospital each day
I'm sick of Adelaide and I am scared I'm never going to leave
Being one amongst many, getting lost
Immediate family are not here
None
Increased pace of life can interfere with learning
NTCS
Upheaval moving to a new state, loss of social support
Isolated from rest of country and established friendships. Very transient population here, so friendships you do establish move on
Moving the family away from friends and relatives, schools etc
Moving to a new place (twice) and having to form new social supports
Far away from family
Away from friends and family, social isolation
Nil
Too much time spent with other medical students
PRCC
None
Isolation
Separation from family
Isolation, Travel
Isolation
Isolation
My friends are an 1hour 1/2 drive away
Seeing my patients in the community. Not much of a social life (I guess not a huge issue for this year, but still!)
Issues of confidentiality and small social environment. Left my study group in Adelaide (and best friends)
My friends far away. Transient placement - have to move at end of the year. Little entertainment available(e.g. Movies/restaurants)
Husband had to take leave without pay to be able to move with me. Had to leave friends behind in Adelaide. Had to move house, disconnect and reconnect utilities. Further away from families. Could feel isolated if don't make an effort to socialize or if didn't get on with other students. Easily recognizable as "the medical students" to community members. -lack of anonymity
Socially limited - no gym.
Segregated from the rest/ majority of students in Year 3. Some distance from family and friends.
isolation, closed community and associated risks e.g. Not getting along with GP supervisor, etc.

None
Isolation from friends
Difficult to interact within a small community without the label of a medical student
Limited social activities, e.g. We meet with groups to go out to dinner, sports activities are an option, but very limited by weather conditions (cold!)
Away from friends/ family

Table XIV: Students' perceived impact of their clinical involvement on the health service (Comments transcribed verbatim from student survey forms)
FMC
Quite often patients will talk more freely to students, often learned to improved patient care. Have more time to assess patients
Puts more strain on Dr's doing their job
Hopefully, we're more of a help to doctors than to builders
Will be less equipped
It doesn't, more a bother than helping in a way, selfish use of patients for own learning, and staff who are too busy cannot be bothered to teach
I do not personally think it made much difference
Not particularly
In many cases, the pt is able to talk for longer with the med student than the doctor makes the pt feel better
Enthusiasm for teaching to health care team, ass and paper work load, support to patients
At time I think I've slowed things down but more often I have been and assets to the team
Good reinforcement
Have been part involved and participated in clinical activities
Vital it clinical practice
Minimal impact, may save junior doctors some time on odd occasions
I don't think it influences negativity
Minimal impact
In many instances I believe that our clinical involvement as students is helpful to doctors and teams with whom we work, in terms of sharing the workload
Usually slows them down if we are allowed to be involved
Reduce the workload of intern in some situations
It depends on ward
To be honest I don't feel I'm making much of a impact neither positives not negatives, am able to give a small amount of patients a large amount of attention
Direct correction with effect this year and knowledge retained
Very little
Taking blood, help reduce the interns workload
It makes the institution
Mostly beneficial, health systems under strain
Help to reduce work load in some cases
Minimal
Probably impact neutral
Challenges clinicians to use best practice
Familiarity with procedures
Not particularly
Probably impact neutral
NTCS
Can be helpful
I think some patients get more explanations from me about what would happen to them in hospital, and about their condition, than from anyone else. Hopefully we were also helpful to the staff
I think it keeps them a bit fresh
Very important- core skills
Some rotations you are clearly helpful i.e. Medicine, others not so
Can help with tea, activities but can be interrupted by teaching
Mostly beneficial, health systems under strain
PRCC
Financial benefits of having us there, Contribution to clinical outcomes of practice, Motivates GP to

keep their skills up (well some of them)
They are getting a really good deal! Practice making money
Encourage updating skills, Provides variety in their work
Improving outcomes for patient, continuity of care
improves it, doctors seem to like it
Stressing mental health team b/c they have no work for us
Not sure, don't know how it works when I am not there
Alleviating some of the stress of A & E for interns
We provide an extra set of hands which the services find helpful. Many patients appreciate the second opinion approach. The doctors enjoy the fresh learning attitude we bring.
GP - Holistic approach, more problem focused. Hospital- higher turn around, much more acute management
Patients subjected to extra examination. Provides extra time for discussion for patients with complex issues. Can slow down the Dr's if we are interviewing or examining patients, less patients seen by Dr, less income for practice and less appointments available.
Clinical involvement so far this year has focused the majority of my learning
Can give patients opportunity to hear things about illness from different perspective.
Extra time to do procedure because of explanation/ demos etc. extra costs e.g. Accommodation, equipment used etc.
Education and learning for health professionals but also greater constraints on their time.
I believe as the year has progressed that the medical student has become a resource to the local GP's. i.e., Clinical involvement has had an interesting positive impact.
I know the patients enjoy seeing the students and the interns also get a lot of assistance from students after hours and on weekends. Consultants who teach are forced to keep their skills and knowledge tuned and up to date.
Comic relief

Table XV: Students' perceived impact of their clinical involvement on the community (Comments transcribed verbatim from student survey forms)
FMC
This experience is helping me to become a better doctor, service to the community in later years
Good doctors are good for community
Ability to perform basic life support
Initially it probably was a showing effort however in the end will benefit community
I think people are less likely to want to come to a teaching hospital
No
Am now able to provide CPR
Likelihood of practicing here in future
Minimally
Little impact
Meeting patients from the community
Incorporating medical students into private practice would improve our exposure to initial presentations of clinical problems
In the community setting we are likely to be helpful and can influence community health first hand through involvement
It depends on ward
Minimal rural placement
Minimal impact
Minimal
Very little
It doesn't
No
It doesn't
NTCS
People understand this is a teaching hospital; and seem happy to let us "practice " on them
Unsure
Will encourage me to return to the community later when qualified
Minimal impact
PRCC
My family is a community minded family and we have got involved in community e.g. Childcare, kindly, soccer club- people
No real impact on community outside health service
Community pleased to have medical students in town - little direct impact
limited impact
no idea
Patients have been very welcoming
Patients get more time over all with medical personnel when parallel consulting with us
They enjoy hosting us and feel that they are contributing to future rural doctors.
Much closer to patients, different attitudes to Dr's and health care
Provides a sign to the community that there are people interested in rural health for the future (Often get asked if I'll come back when qualified) Empowerment for patients and other health professionals by asking them to teach us and give insight into their problems. Through community activities sport. get to educate people about our program and what it takes to be a Dr.
Greater opportunity for continuity of care
Can give patients opportunity to hear things about illness from different perspective.
Chance to contribute to educating the "future"
They feel they're helping train us, so greater ownership of services. They hope we will come back.
Given community an extra resource, hope that the Dr shortage is being addressed.
Not much

Table VI: Recommended improvements for the learning experience in Year 3 (Comments transcribed verbatim from student survey forms)
FMC
More tutorials on core/hard to cover topics, e.g. Fluid balance. More involvement in patient care (in some disciplines only, most have been excellent.)
Less ward rounds! - mostly useless. More opportunity to admit patients into wards - most valuable. Less assignments!
More time with consultants/registrars
Less assignments to allow me more time for ward work and individual study
More diversity
More guidance from senior staff, more teaching rounds
More relevant and common conditions tutorials instead of tutorials that are irrelevant such as 2 tuts on renal transplants.
More time, less useless assessments
Another 2 hours in the day, testing, feedback thru out the year
Pretty good
More structure to surgery
More overall coordination for the year
More regular feedback
Less written assignments, detracted from time on wards, caused stress, could be alone over years
More one on one teaching
Lectures not always starting on time
Better tutorial in medicine
More time allocated to clinical learning without worrying about a plethora of reviews
Ward round are not effective learning opportunities, more uniform teaching from consultants and registrars
Through shifting some of the assessment items to 4th year it would allow more time for practical experience and studying to achieve competence in our core areas
Pay staff to teach
Need some more direction when on ward
The provision of some scope
Less assignments
I would like more structured lectures to support me
More direction for learning objectives in the various disciplines
More opinions for clinical specialists in surgery instead of staying on one specialty
Less surveys
Have an hour session with senior registrar or consultant each week in which we can ask questions, provide a tutor for all PBL tuts, have a formal mentor ship program for career advice, more communication between students from different sites as a guide to clinical examples seen in other locations, repeat SCIM's from 2nd year in third year as practice in OSCE situations which we didn't get at all anywhere else, be truthful when making comment, I think its important to assess the common and potentially life-threatening conditions, not necessarily the rare even though it is the process more so than the diagnosis, more SCIM's, start third year rotation at end of second year, provide us with more learning resources
Add a extra week to each block
More integration into clinical teams
Less students
More monitoring
No continuity of care assignment
More time, less useless assessments
Less students
NTCS

Less low yield, low value assignments, more time available for wards/clinics
Be given clear expectations of what to learn, how to approach each discipline and most of the stuff we said in the focus group
Less Assignments! If this is a clinical year stop dragging us away from the clinical environment
Having a great understanding of my own goals and requirements this year.
Teach our teachers how to teach well, Make it clear to us and our teachers what is the baseline level of knowledge in each area
Slightly more guided
Less assignments, more weighting for clinical work
Less surveys
PRCC
Unsure of role of academic co-coordinator in coordinating my year. Have had limited contact with this person and they have not had a strong presence within the group.
Role of Academic Co-coordinator should be more clearly defined and more regular contact with practice supervisors to ensure consistency across sites
Be less stressful, more defined support from academic coordinator
actual teaching facilitated by university
greater feedback, cross site standardization
Equality with sites e.g. Less drama about housing and learning/study space so we can get on with study. Teachers more experienced in our level of learning. Contact with academic coordinator and doctors who teach us
More emphasis placed on ward rounds, or at least scheduled time in which to go to them. Would provide some motivation and direction.
Improved organization of timetables/scheduling.
Better library, greater exposure to specialists, different mentor/GP supervisor. PBL not on Wednesdays (Mon, Fri)
A bit more direction as to what will be examined would be nice as things can be overwhelming when you don't know where to begin. Actually no exams at all would be a great improvement!! Perhaps offering a rotation of a few weeks at an acute psychiatry facility would assist in closing that gap.
Give me the exam answers!
More structured/focused assessment regularly throughout the year on specific disciplines of medicine, especially in relation to knowledge of Health and Illness (KHI)
Syllabus to work through
Psychiatry, visiting specialist, more use of specialist who do visit. I.e. Neurologist
Improved personal immune system

Table VII: Reasons offered by students as to whether or not they would make the same choice of site again

Site	Same choice of site	Reasons regarding choice of site (Comments transcribed verbatim from student survey forms)
FMC		
FMC	N	Better clinical teaching exams available and elsewhere
FMC	N	Family circumstances dictated staying at FMC would now be free to more
FMC	N	
FMC	Y	Good experience so far
FMC	Y	
FMC	Y	Avoiding the country
FMC	Y	
FMC	Y	Was unable to go rural family needs, but would have liked more intense rural exposure
FMC	Y	I tried to get into Darwin, would still try there
FMC	Y	London
FMC	Y	No choice in uprooting children from school
FMC	Y	I think this is the site that's suits me and my aspirations
FMC	Y	Want to be with family
FMC	Y	Family reasons was unable to go to other location. If personal choice alone, I would have gone to Darwin
FMC	Y	Prefer city
FMC	Y	Love is travel
FMC	Y	It offers exposure and experience not gained
FMC	Y	Feel I got a great experience, good learning
FMC	Y	Happy staying in Adelaide
FMC	Y	Easier to avoid people I don't get along with
FMC	Y	Because the advantages are more important at this stage, the practical skills can be developed next year
FMC	Y	I feel that I have gained the experience I have been hoping for in terms of involvement in various disciplines
FMC	Y	I think its important to be educated at a teaching hospital
FMC	Y	As and international student it was difficult for my partner to get work outside of a major centre
FMC	Y	Near my partner
FMC	Y	
FMC	Y	Keen to get rural exposure in this course
FMC	Y	
FMC	Y	To be with boyfriend and friends
FMC	Y	More variety
FMC	Y	I've been pleased with Year 2
FMC	Y	
FMC	Y	Have enjoyed FMC
FMC	Y	
FMC	Y	
FMC	Y	
FMC	Y	Husband lives/studies in Adelaide
FMC	Y	
FMC	Y	I don't feel rural is the best place for me this year, I like knowing I am working with doctors who are monitored and who are at the top of their field
FMC	Y	I didn't have a choice where I got excepted
FMC	Y	Enjoying range of medicine

FMC	Y	Big enough change to come from overseas to Australia, happy, settled in Adelaide see myself in major hospital in future
FMC	Yes	Not prepared to buy a car, more difficult for international students to get rural/NT placements
FMC	Yes	Family and work were the main reasons for being here
FMC	Yes	Spouse can't move occupations for my study, still have financial commitments here which would be hard to overcome to move to another site
FMC	Yes	Wife is in Adelaide - rural out of the question
FMC	Yes	Although still recognising that there are pros and cons to each site, I am now more aware of the extra teaching and care that the regional site students receive, which seems to suggest that the school cares more about the outcome from these sites.
NTCS		
NTCS	N	I would choose NT rural clinical school, PRCC is very good self directed way to learn
NTCS	N	I think that this a great site but it has been a big upheaval for my family
NTCS	Y	Glad to have the experience just to be in Darwin and I think we get a better deal than Flinders
NTCS	Y	Great to have exposure to rural GP and a teaching hospital
NTCS	Y	
NTCS	Y	Darwin is like the best compromise between a PRCC and a city teaching hospital
NTCS	Y	No regrets
NTCS	Y	Excellent experience
NTCS	Y	It's been a good experience, lots of hands on experience, very inclusive environment.
PRCC		
PRCC		I will tell you when I get my exam results back
PRCC	N	Poor support from uni, no idea what I'm doing
PRCC	N	Not very welcoming doctors who don't understand what their role is
PRCC	N	Isolation
PRCC	Y	I've had a great experience
PRCC	Y	Nice people, Good clinical exposure/involvement in practice
PRCC	Y	I felt that this was a good place to do Year 3 and basically still do
PRCC	Y	
PRCC	Y	Happy so far!
PRCC	Y	Quiet, friendly place to do a stressful year - exposure to a potential future career
PRCC	Y	Suits My learning style, lovely GP tutors, safer environment
PRCC	Y	I an enjoying the year although it is very busy. I prefer living in a rural setting to city living.
PRCC	Y	I like it here, I'm glad I'm not in the city, no traffic!
PRCC	Y	
PRCC	Y	Great educational opportunity
PRCC	Y	I like it here
PRCC	Y	Good support for my family, Great teacher and facilities, good social life
PRCC	Y	The clinical staff are wonderful - excellent teachers, very knowledgeable and encouraging
PRCC	Y	Nice variety of medicine

Table XVIII: Gaps in exposure to clinical disciplines (Comments transcribed verbatim from student survey forms)
FMC
Cardiology, Oncology, Ophthalmology
Practice Exams - promised not delivered
Psychiatry and medicine
General medicine
There are patients but many doctors aren't willing to teach or explain what to look for in different conditions, minimal supervision of exam
Medicine
Possibly specialty areas of surgery ophthalmology, dermatology
Surgery is too rushed
Undifferentiated patients
Dermatology, ENT
ENT, limited exposure to range of med problems
Medicine in general
Infectious diseases
Impossible to cover everything in 8 week blocks
Specialities of internal medicine, emergency medicine
Need more exposure to the initial presentation of clinical problems
Any gaps are due to availability of or admissions of patients with particular conditions, I don't believe there is anything that can help this, as often what you see is determined by chance in terms of what patients are present at the time of the specific rotation
Flinders lacks clinical practice opportunities, while rural areas lack teaching opportunities
It would be helpful to have students rotate through general medicine during that term
Medicine
My surgical rotation were both pretty specialized, I didn't see many other surgical problems
ENT neurology
Very little
More focused teaching
Teaching relating to patients seen
O & G, Psychiatry
Emergency
O and G not enough exposure in labour ward, way too much competition
No practice exams
Would like to split medicine term into 4 week blocks in different wards to see more
Common GP presentations, emergency medicine
In most areas - particularly medicine and paediatrics, trying to cram too much into 1 year leaves little time for consolidation
NTCS
Depends entirely on your rotation, the staff and how proactive you are (plus the patients who happen to show up)
Probably some of the psych disorders e.g. eating disorders
Not enough time to have exposure to the range of conditions required
GP
Nil (In Darwin)
Strong emphasis on tropical medicine, so perhaps more common conditions may be missed
GP
PRCC
Paediatrics, Women's Health for Male Students, In patient psychiatry
Psychiatry - inpatient, paediatrics
Paediatrics, acute medicine, psychiatry

Obstetrics, Psychiatric, Gynaecology, Emergency/Acute Med
Psychiatry
Psychiatry, Paediatrics, Medicine
In-patient paeds. Internal medicine
Paeds, Acute psych
Tertiary Medicine - major surgery and paediatrics ICU. Etc
Specialists, high risk procedures and surgery e.g. Dermatology, paeds, o & g.
Psychiatry, Paediatrics (e.g. Neonatology, paed. Surgery.)
Psychiatry – Acute
Obstetrics and Psychiatry
Psychiatry
Psychiatry, paediatrics
O & G, Psychiatry
Acute psychiatry
I think there are gaps in Paediatrics Clinical experiences
In house paediatrics

Table XIX: Gaps in Years 1 and 2 (Comments transcribed verbatim from student survey forms)
Clinical Knowledge
Paediatrics, O & G - the basics
Pharmacology- Endocrine unit needs revamping
Professional development, Clinical Stress setting
We need paediatrics clinical teaching in Yr 2, O & G physiology needs extra teaching
Paediatrics clinical skills in Years 1 & 2, O & G basics
Will tell you when I fail my exams - ANATOMY!!
Hard to put the subject into context of immediate management of patients in Year 1 & 2. This was the biggest learning curve faced in Year 3.
Anatomy, Little General Practice Teaching, Pharmaceuticals, prescribing dosages.
Anatomy. Clinical- pathological approach, specialist strains
I need more practice at technical skills - e.g. Examinations, injections, suturing etc., but I guess that is what Year 3 is for.
KHI - so much more expected knowledge in yr 3 than was covered in Year 1 & 2
Sometimes for certain important topics, extra teaching/lectures may be helpful on top of PBL's since it further highlights importance of that topic and can help students focus on core information.
Psychiatry
Haematology, Muscular skeletal clinical applications
Anatomy
Paediatrics case
Lack of general medical examination techniques
Basic teaching on how the wards/hospital are run i.e. patient notes, computers etc
Presentation to consultants
Practical applications: i.e. prescribing practices, GO experience, surgically oriented assessment of patients (as opposed to medical), Pharmacology
We should have had a focus on evidence based medicine from 1st year. It would have added a dimension to PBL and taken some pressure off this year
Clinical reasoning, forming a system for this
Patient based clinical skills
Investigation and management
Not enough management
Need more clinical teaching in Years 1 and 2
Hard to fit with clinical experience
Renal, haematology in Year 2
Ward work, presenting to consultants
Anatomy
No gaps in Year one and two
Basic clinical science, surface anatomy, pharmacology, microbiology
Paediatrics
Not enough time on each block of theory, more information assimilation
Prep for med
Knowledge of drug names is more important than we were led to believe in the first 2 years
GP staff
PBL's on microbiology and more directed pharmacology would be helpful
Clinical experience, clinical examination
Radiology
Some stuff in CVS would be good
Clinical experience
Anatomy and physiology
Too little ward time where actually involved in ward work

Radiology, need step by step and lots of examples
Inconsistent clinical experience, completely dependent on tutor (need to have more lectures/demonstrations for whole class)
Not enough understanding of pathology or the disease process- in Year 3 we are expected to be formulating differential diagnosis and management plans when often we have not heard of the conditions on the differential diagnosis list. We have little teaching in GP subjects and so arrive on our GP rotations with little idea of the management for hypertension etc.
Anatomy and Pharmacology, good to do more formally in Year 1 and 2

Table XX: Assessment suggestions
Increase weighting of case commentaries, reduce weighting of exams
Weight the case commentaries better. They are way more work than 2% reflects
Knowledge testing at the end of units to spread knowledge testing through year
Weight the commentaries properly
Weighting of case commentaries
As long as it establishes my competency I'm not fussed. Exams will always be stressful.
Make assignments worth more - energy expensive
I would rather have 1 episode of stress than many spread throughout the year. However I would not object to on line theory assessments etc.
Current forms of assessment during the year were almost useless. There should be more regular and more structured assessment throughout the year on the specific discipline of medicine. This should not only be in forms to assess Dr and patient, but also knowledge of Health and Illness. Students work extremely hard throughout the year aiming for end of year exams where it is all or nothing and unfortunately they may get to that point with no real indication of where their weakness live or of any deficits/ holes in their knowledge, or even whether the manner in which they are delivering their knowledge is appropriate.
More guidance in exam preparation
Spread out the assignments more
1. 2 Weeks of SWOTVAC - gives catch-up for students in various blocks, e.g. Some rotations are more demanding than others, e.g. Medicine rotation at FMC has many tutorials, ward time etc. and more demanding on time than other rotations. Therefore the timing of rotations may impact exam preparation. 2. Formal practice OSCE and written exam questions at all sites with feedback. 3. Supp exams should be held a significant time after exams. 1 week does not allow sufficient time to make any significant improvement - not a fair chance to demonstrate true ability. Students need time to absorb the info that they have to take a supp, deal with the stress, perhaps heal from illness and get a chance for review.
The only way to reduce the stress of it is to reduce the amount. Moving it around just moves the stress around with it.
Make continuity of care accessible as a DPS exam topic. E.g. Multiple choice questions instead of a big assignment. I find that the many assignments we have to do takes away from study time and increase stress significantly.
Consider different FMC sites have different assessment e.g. 4 term - NHS + Glenside have major presentations (not formally assessed) whilst others don't, this isn't equal
Less assignments! Very stressful Note: making assignments worth more will not decrease stress as students still have to pass exams to get through yr 3!
Case write ups and clinically based assignments are extremely valuable.
Cut down on the number of small assignments that aren't worth much
I would move to DPS to 4th year
Reduce the number of small assignments could be done in 2nd or 4th year e.g. c of c, ethics, EBM
Remove waste of time assignments e.g. ethics cases, c of c
Too many assignments in Year 3 that take lots of time but don't count towards final mark, it's a difficult and stressful year just learning what we need to know for exams, don't need added work
Remove continuity of care assignment
There should be ward round where a consultant asks a student to exam and history from one patient. I think one patient in the whole ward round is not too consuming. There should be one long case like a physician trainee go through for one student a week on each ward