

A survey to evaluate the implementation of a national clinical assessment form

Abstract Purpose: The Australian Universities Radiation Therapy Student Clinical Assessment Form (AURTSCAF) was designed to assess the clinical skills of radiation therapy (RT) students from the six universities that offer entry level RT programs. Given the AURTSCAF has now been in use for over two years, the Radiation Therapy Program Coordinators (RTPC) group initiated a post implementation evaluation survey. This formed the final phase of the AURTSCAF project and was funded by the Radiation Oncology Division of the Department of Health and Ageing. **Methods:** A cross-sectional designed survey using purposive sampling was distributed via email to all RT clinical sites. The survey asked questions about the requirements of a pass grade for students at different stages of their program, and the addition of a new category of assessment related to fitness to practise. Response types included both forced choice closed ended responses and open ended responses. There was also a section for open comments about the AURTSCAF. **Results:** There were 100 responses (55%) from clinicians who had utilised the assessment form over the previous 12 month period. Responses highlighted several positives with regard to the utility and implementation of the form. Comments regarding areas for improvement with the standardisation of the grading of students and consensus for the addition of a new domain in fitness for practise have informed the recommended changes proposed for 2012. **Conclusion:** This evaluation has provided a representative sample of the views of clinicians involved in assessing students on clinical placement. Recommendations include the addition of the sixth domain of assessment: Fitness for practise, the addition of descriptors and prompts for this domain in the user guide, the addition of a consensus statement about the use of the rating scale and dissemination of the proposed changes nationally.

Keywords: clinical assessment, evaluation, radiation therapy, students.

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Introduction Context

This paper presents the results of an evaluation of implementing a national radiation therapy clinical assessment form. Assessment of clinical skills is one of the most important aspects of radiation therapy student training. Historically this has transitioned from local department-specific systems to university-led assessments. The logical next step in terms of standardisation is to move to a nationally accepted set of standards and this is in line with assessment in other health disciplines. This move to nationally-based assessment standards is consistent with experience in other disciplines including physiotherapy,¹ speech pathology² and osteopathy.³ Indeed colleagues in nursing⁴ and medical imaging⁵ are also making progress towards a national assessment framework. London³ noted the vital role of centrally-based training for osteopathic education in introducing consistency between different schools and as the radiation therapy (RT) profession moves towards national registration it is essential that RT graduates exhibit similar standards nationally. Although the existing radiation therapy course validation procedures ensure currency and consistency of curricula, Starmer⁶ relates how the drive for international standardisation of medical curriculum content often conflicts with the variety of assessment processes.

In 2007, the Radiation Oncology Division of

the Department of Health and Ageing (DoHA) provided funding to the Radiation Therapy Program Coordinators (RTPC) group, for the development of a national clinical assessment and reporting form. The resulting Australian Universities Radiation Therapy Student Clinical Assessment Form (AURTSCAF) was designed for clinical assessment of all RT students from the six universities that conduct professional clinical placements as part of their undergraduate or postgraduate RT programs.

AURTSCAF development

A four phase strategy was used to develop and validate the assessment form and user guide.⁷ The phases were: Synthesis of the common assessment domains within the existing university assessment forms; Alignment with the Australian Institute of Radiography (AIR) Competency Based Standards⁸; Consensus feedback from radiation therapists and stakeholders, and Pilot testing of the form.

Following the pilot testing of the new form, a training package CD was developed to support the national implementation of the new assessment form. The training package included a narrated presentation to accompany the user guide. The presentation aimed to introduce the form and provide advice, suggestions and examples of how to complete it. The package also included information linking the assessment form with the AIR Competency Based Standards⁸ and tips on

providing effective student feedback. Participants were able to claim AIR Continuing Professional Development (CPD) points for completing the training and they were also requested to provide feedback to the RTPC group on the training package via a link to an evaluation questionnaire. The CD training package was provided to every RT clinical site in Australia. In addition, university facilitated education sessions were offered to RT clinical sites prior to implementation of the new form.

The new AURTSCAF was implemented nationally in mid-2009. Regular review by the RTPC group forms an important part of the implementation process to ensure that the tool maintains currency with regard to any changes in professional standards and practice. After the AURTSCAF had been in use for over two years, the RTPC group initiated a post-implementation evaluation survey. The aim of the survey was to review every aspect of the project, including the ease of use of the assessment form, the user guide and the training provision. The survey formed the final phase of the AURTSCAF project and was funded by the Radiation Oncology Division of the DoHA. The results of the survey are presented and discussed in this paper.

Methods

Survey design

Clinicians' feedback was collected from the 27th July to 2nd September 2011 via an on-line self-administered survey using SurveyMonkey™ (Palo Alto, California, USA). This method enabled anonymous responses to be provided easily by staff located in centres around Australia. The survey employed a cross-sectional design; this method is ideal for collecting data that cannot be directly observed, but instead are self-reported, such as opinions, attitudes, values, and beliefs.⁹ The survey asked a range of questions, including: professional background of the radiation therapist completing the survey, use and experience with the AURTSCAF, use and experience with the user guide and training package, and clarity and usefulness of the AURTSCAF. The survey also gathered opinions about the requirements of a pass grade for students at different stages of their program, and the addition of a new category of assessment related to fitness to practise. Response types included both forced choice closed ended responses and open ended responses, thus allowing both quantitative and qualitative data to be gathered. Data analysis was performed by the RTPC group using descriptive statistics for quantitative data, and thematic analysis for qualitative responses. Initially a small group of anticipated wide themes were used to group responses superficially and enhance familiarisation with the data. This was then followed by coding of data using an abstracting technique in order to group responses. This was followed by further development of the most appropriate themes and final grouping of responses for analysis.

Target population and recruitment

The target population to survey comprised RTs who had used the assessment form. Purposive sampling¹⁰ was employed to provide a representative sample of the population of radiation therapists involved in clinical assessment. Recruitment was conducted by providing written information about the survey to chief RTs from all Australian sites via email, along with a link to the survey for forwarding to relevant staff. Each of the six universities' clinical educators and supervisors of students in their respective states were also emailed directly with recruitment details. Approximately 180 emails were sent and reminder emails were also sent on two occasions over the period that the survey was open.

Ethics

Ethics approval was granted from the Human Research Ethics Committee of the University of South Australia; this being the institution from which the project was led on behalf of the collaboration of the RTPC group. Consent was implied by virtue of the participant reading the explanatory statement and completing the survey.

Results

Response rate

In total 100 participants completed the survey to give a 55% response rate. Most forced choice questions were completed by all participants, and participants provided a large amount of open ended responses which provided a rich source of descriptive data. Blank responses were omitted from the analysis as indicated by O'Rourke.¹¹ The following commentary presents the quantitative data along with relevant qualitative comments to help illustrate typical discussion themes. Thematic analysis and subsequent coding led to the development of themes relating to; training resources, differing staff expectations, fitness to practise and student feedback. Quotes from different participants have been used to illustrate the range of comments, although the anonymous nature of the survey makes cross-correlation of these comments impossible.

Demographics

The participants were representative of all states and territories that have students on placement, with the majority (40%) representing the State of Victoria. Other state contributions were; NSW (23%), SA (15%), Qld (9%), WA (6%), Tas (6%) and ACT (1%). At the time of the survey, the Northern Territory had not yet received RT students for clinical placement. Other notable characteristics of the participants were that 43% held an RT educator role, 39% were clinical practitioners and the remaining 18% were senior clinicians. There was a wide range of experience in their current role spanning less than one year to over 11 years. Of the responders, 64% had completed 1–5 forms in the preceding year; 14% had completed six to ten forms and 22% had completed over 10 forms. Most participants (56%) had used the form for both formative and summative assessments. Thus the sample was an appropriate representation of the wide variety of RT staff involved in clinical assessments across the country.

Training resources

In May 2009 training packages were distributed to every RT centre which provided student placements in Australia. Although 83% of participants were aware of this, only 63% knew how to access the package in their department. Half of the respondents had completed the training package and of those that did, only 31% claimed points for CPD. While 49% of the participants completed the training independently 30% completed the training as part of a facilitated session by the clinical site and 21% as part of a session facilitated by the university. The relatively low use of the training package among this group who chose to engage with the survey suggests that many staff members are using the AURTSCAF without the recommended training.

When the assessment form was rolled out nationally it was accompanied by a user guide to assist clinicians in completing it. The guide illustrated specific criteria within each of the five domains of practice that should be assessed for each student. It also provided prompts in order to assist with determining a score for each criterion. Of respondents, 69%

were aware of the existence of the user guide.

“I think in general most RTs working clinically are unaware of the user guide. I believe this would be helpful to those RTs who have the responsibility of completing the formative and summative student assessments. I can never recall receiving the training package... It is imperative that for clinical placements, that students, educators and staff evaluating the students are aware of what the expectations are for that clinical placement. We all have to be on the same page!”

Of those that were aware of the user guide, 72% used it “sometimes”, 11% “always” and 17% never. Of the 12 additional comments provided, 3 respondents indicated that they had not needed to refer to the guide as much as they did “in the beginning”, while a couple indicated that they use it when looking for more detail on what they are assessing or when they had not filled out a form for a while. Of those that were aware of the guide, 99% thought it was a necessary document. Further comments highlighted the user guide as a useful resource with suggestions that it should be required reading for those who don’t complete the forms very often and that it is a good back up when marking is difficult. Again there was an underlying theme that many staff members remained unaware of the criteria in the guide and are using the AURTSCAF without any formal guidance.

Assessment form

In general the AURTSCAF received highly positive feedback. In particular comments underlined the positive impact of having a national standardised assessment, (especially in centres that had students from all universities) and also the value of being involved in its development and implementation:

“I think the implementation of this form has been of great benefit”

“(AURTSCAF)...is a very necessary collaboration between the tertiary education centres and overall it has created consistency for the clinical centres”

Most participants (88%) responded that they found the AURTSCAF easy to complete and none of them felt that the descriptors were unclear. This was an encouraging finding in contrast with previous findings in the literature which suggested students and preceptors could find difficulty with language used in competency assessments.¹² The most common (67%) average time frame taken to complete the form was 11–20 minutes, with only a small proportion (2%) of the participants reporting over 30 minutes needed

Assessment form: feedback provision

An overwhelming majority of participants (97%) felt that the assessment form enabled provision of sufficient and useful feedback to students. These positive responses however, were qualified with the following points raised in additional free text comments from respondents. The comment section is highly valued by clinicians to give more directed feedback to students. Some respondents felt the comment section was not utilised as well as it could and that students were often more concerned with “the numbers” and missed the point of feedback. This mirrors similar concerns in the academic world with students in general failing to act on feedback; this theme will be discussed later. It is important to acknowledge that verbal feedback was reported to be an important part of the feedback process and augmented the use of the form. The quality of written feedback in the comments section was also deemed

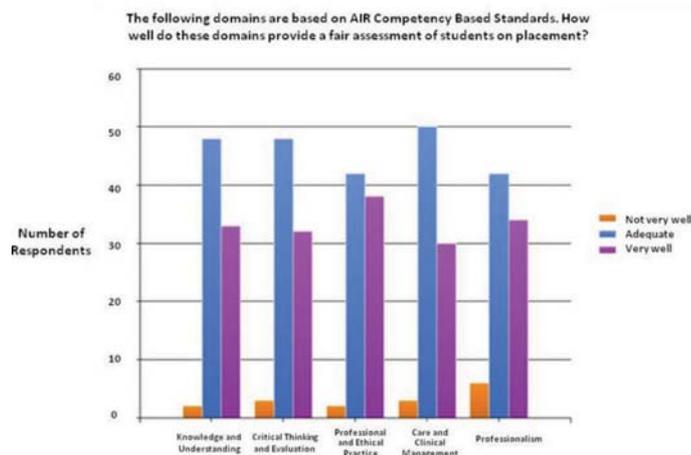


Figure 1: Comparison between assessment form and AIR Competency Based Standards domains.

an important factor in how well the assessment tool provided sufficient or useful feedback to students. Some respondents also felt the space allowed for comments from clinicians was insufficient and it was suggested the student comment space could be reduced. It was also suggested that a comment section be included after each domain of assessment. Some comments indicated that there were sometimes issues with staff providing inappropriate feedback. Respondents clearly felt that a lack of training was affecting quality of provided feedback:

“Some RTs I believe place too high an expectation on students in the early stages of a course, or fail to address issues that should have been recognised early in clinical placements. It is them not clearly knowing what they should have done or how they should assess them, that in my opinion, can lead to problems with students assessments later on in the course. I’ve had students who have been surprised at negative feedback given at a late stage of the course, when it probably has been identified much earlier but not adequately addressed. I don’t think this is fair on the student. Training in giving constructive feedback to students would also be useful.”

Assessment form: consistency and objectivity

It was good to see that 93% of respondents agreed that the form enabled them to make a clear and objective assessment of student performance. As previously highlighted, some respondents indicated that they do not refer to the user guide, either by choice or because they were not aware it existed. Clinicians felt that there was always a level of subjectivity and interpretation differences between assessors about student performance. This variability between expectations of assessors was one of the reasons for the development of the form so it was pleasing to see that clinician feedback indicated that it allowed more consistency. Feedback also highlighted the importance of input from more than one clinician working with a student for their assessment to gain a balanced perspective.

From Figure 1 it can be seen that the majority of clinicians felt the assessment domains at least adequately provided a fair assessment of students on placement. Thematic analysis of free text comments from respondents highlighted concerns with the assessment of domain 5

<p>Definition A</p> <p>In order to pass the course, a student must obtain the following grades in the Clinical Supervisor's Final Summative Assessment:</p> <ul style="list-style-type: none"> - A minimum of '3' (satisfactory level of achievement) in each item listed in 'Section 3 Professional and Ethical Practice' section of the report. - A minimum of '3' (satisfactory level of achievement) in the following items listed in the "Care and Clinical Management" component of the report: 4.1, 4.2, 4.3 (treatment only) - No Unsatisfactory level of achievement (1) in any component of sections 1-4 - An 'S' (satisfactory level of achievement) in each item listed in section 5, "Professionalism". <p>Note: this definition allows for students to get 2s 'progressing but requires improvement' in sections 1, 2, and 4.3 (planning and sim).</p>
<p>Definition B</p> <p>In order to pass the course, a student must obtain the following grades in the Clinical Supervisor's Final Summative Assessment:</p> <ul style="list-style-type: none"> - A minimum of '3' (satisfactory level of achievement) in all items listed in sections 1-4 of the report. - An 'S' (satisfactory level of achievement) in each item listed in section 5, "Professionalism". <p>Note: this definition requires students to pass every item</p>

Figure 2: "Passing grade" definitions for comparison

(professionalism). This domain currently utilises a "Satisfactory or Unsatisfactory (S/US)" grading system instead of a scale from 1–5 as in domains 1–4. Responses suggested that there should be a marking scale for this section to reflect the range of attributes within the domain.

When asked how well the AURTSCAF could help to assess a student's skill to an appropriate level of competence for their year level at their university, most respondents (77%) responded that it was "adequate" with 20% rating it as "very well" and 3% responding "Not very well". Thematic analysis of the qualitative data again suggested the potential impact of low uptake of the training resources. It was noted by several clinicians that an understanding or knowledge of the appropriate level is important for assessing effectively, especially for clinical educators to be able to pass this on to the mentors or supervisors working with the students. Consequently where there was no knowledge of this level, clinicians found assessment difficult and sometimes:

"compared the student to what would be expected of a qualified"

"need reminding that the assessment should be directly related to the year/ level the student is at now, not in relation to how they will be at the end of the course"

Clear information about this level was not always available. Centres that have students from all universities and year levels however, noted the flexibility of the tool.

Another theme related to standardisation was the difficulty in interpreting what constitutes a pass or fail and in particular the use of "2s" on the rating scale. Clinicians felt that the descriptor for 2: "*Progressing but requires improvement*" was confusing as to whether this was a pass or a fail. They also wanted clearer guidelines around this rating with a national consensus about its use and failing students. Participants also acknowledged the question about grading in the survey was addressing this difficulty and welcomed a standardised definition and clarification:

"The only confusion I have seen amongst the team is the "2" progressing but requires improvement"

"This survey has also identified that there is consistency required in defining what constitutes a "pass" or "fail", and this will improve consistency"

Another view offered by participants was that even with the national clinical assessment form, it was still difficult to manage the different assessment form requirements for defined competencies from all the universities and that perhaps there could be a standard approach to core

RT practice here also.

Future directions

As well as seeking feedback about the implementation, the survey also took the opportunity to canvass participants for their views on possible future developments of the tool. The potential developments included moving to an online version of the AURTSCAF, changing the pass/fail requirements and including a "Fitness to practise" domain of assessment.

Online completion

Respondents were divided about the option to complete the form online with 57% in favour and 43% against. This question attracted the greatest number of free text comments from respondents to qualify their answers. The responses were analysed and comments for each side of the argument collated for thematic analysis.

Supporters of online form completion felt that it would be advantageous for RT educators in particular. Participants were keen for a reduction in paperwork and felt that this move would align better with departments moving to paperless environments. Despite this, IT issues were cited as a potential barrier with computers being in high demand and access to the internet in particular being restrictive. This was perceived as an issue not only for staff wanting to complete the forms but also for students needing to access their feedback. Other comments noted that online form completion was already the case for National Professional Development Program (NPDP) assessments:

"...a step forward to what we are doing with our graduates (NPDP is online)"

There were clearly some differences in the perception of the online NPDP system:

"The AIR NPDP uses an electronic system and it's quite useful for feedback"

"...problems with the NPDP online systems – especially with access rights to members of staff and privacy of students information"

There were a number of concerns raised about these potential access rights and privacy issues but by far the most comments related to the use of the forms for student feedback. There were a number of participants who indicated that paperwork was more convenient for providing feedback directly to the student. The paper form was felt to provide a structure for discussion between students and mentors and there were concerns that an

Table 1: Proposed additional domain of assessment.

6. Fitness to Practise	S	US
6.1 Demonstrates the capacity to practise safely		
6.2 Demonstrates the behavior/ attitude/ values expected of a student practitioner		
6.3 Demonstrates an ethical approach to practice		
6.4 Demonstrates competence at the required level for their development to practice safely		
Overall, during this placement period, has the team any concerns about the student's fitness for practice? Yes – (please comment below and inform the University immediately) No		

Please note: 6.3 is included as even though section 3 of the assessment form deals with professional and ethical practices, there are no elements of this which specifically state "ethical practice"
S – satisfactory, US – unsatisfactory

online format would discourage this valuable interaction. There was no discernable correlation between choice of format and age or experience of respondent.

"Paper copy easier to be away from the clinical area and observe privacy"

"Easier to go over feedback in person with paper forms"

"I think that the paper copy works better as it helps to facilitate feedback discussions"

There were comments arguing for and against the value of access to previous student feedback which an online system could facilitate. Some participants felt that this could influence assessment of a student's current placement:

"Supervisor could see previous assessment on students which may affect judgement on the way they mark"

Conversely some staff members indicated the value of encouraging a more continuous approach to student progression through the placements:

"I think it is useful for all staff to be able to see previous reports so that judgments about the student's progress/improvement can be made"

Clearly these underlying issues will need to be resolved before future development of the form into a fully online format is initiated. One potential solution was indicated by one of the respondents who clearly saw the value of online and paper-based forms:

"If an electronic version is developed I hope that it would be an option along with the hard copy"

Pass requirements

Participants were asked to compare two proposed definitions (Figure 2) for a "passing grade" for final assessment of the student placements:

Students were categorised into; "beginning", "progressing" and "final" placements. Figure 3 illustrates responses to which definition would be most appropriate for each stage of training. It can be seen that clinicians were clear that "beginning" students should be allowed to exhibit developing or progressing grades ("2"s on the 1–5 scale) for some domains. They were also clear that more senior students would be expected to gain satisfactory grades ("3s" on the 1–5 scale) in all domains. For students who are mid-way through their program, clinicians were divided about which definition was more appropriate.

Fitness to practise

Participants were also asked to consider the addition of a 6th domain

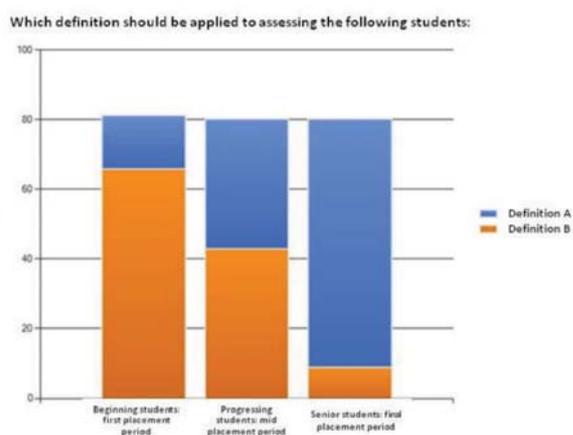


Figure 3: "Passing grade" definitions according to student experience

of assessment; fitness to practise (FTP). They were asked to provide their opinions on including assessment of this domain in the AURTSCAF according to the following definition of FTP:

"A student is fit to practise if they are free from any form of impairment which affects their ability to practise safely and effectively in radiation therapy"; this may include:

- Mental and physical health issues
- Impairment due to the influence of alcohol, drugs or other intoxicating substances
- Inappropriate behaviour, attitude, or values which affect professional conduct
- Less than satisfactory ethical approach to practice
- Deficiency in knowledge and understanding or competence (for a specific stage in the students development) which compromises the safety of patients or others."

The statement was accompanied by a grid of assessment items for the new domain as shown in Table 1.

Clinicians overwhelmingly (97%) supported the addition of the FTP domain to the assessment form. Thematic analysis of free text comments further highlighted this as something that was necessary and welcomed, particularly in view of national registration and licensing requirements of health professionals. Responses indicated that this accords with the

requirements of qualified staff and would strengthen the requirement for safety of patients and others. There were clear requests for some clear prompts or descriptors to be added to the user guide to define these new items of assessment.

Discussion

The survey aimed to collect feedback from participants regarding the implementation of the AURTSCAF as well as gauge opinions relating to proposed future directions. Thematic analysis has indicated the following discussion points and subsequent recommendations.

Training resources

Perhaps one of the most concerning and recurring themes from the data analysis concerned the lack of engagement with the support resources provided. It was clear from the results that the user guide and training package were both relatively underused and that this has led to some issues with the AURTSCAF completion. Qualitative responses identified issues relating to lack of agreement of expected levels of student assessment and inappropriate feedback provision. Both of these could be attributed at least partly to poor engagement with training resources. This lack of familiarity with training materials has also been noted in pre-registration nursing training.^{13,14} Although provision of additional assessment guidance is clearly indicated, the levels of engagement with support resources suggest that this may not reach relevant staff. There are several potential underlying reasons for this lack of engagement, including lack of time, resistance to change, staff apathy or poor distribution and communication processes. The actual barriers to engagement with the support resources will need to be identified in future research to develop an appropriate strategy for increased use of training resources. Another potential option for formalising training is clinical assessment credentialing which has been used successfully in physical therapy clinical instruction.¹⁵

Differing staff expectations

Although the AURTSCAF in conjunction with the user guide improves the consistency of assessment, there is clearly some remaining concern about how to use the form with students at different levels. As previously discussed, this may be a result of poor engagement with the support resources, however, this has also been found to be a concern in other disciplines such as nursing,¹⁶ where the difficulties of comparing students of different levels can arise. Several models have been proposed to help with this judgment, almost all derived from Bloom's¹⁷ taxonomy of the cognitive domain. In academia, student learning outcomes for subsequent years progress through these levels from recalling facts up to high level critical evaluation. Translating this to clinical skill competence is often complicated by the differing expectation of staff, particularly in relation to the NPDP role. Signing students off as having achieved the top level of skill acquisition implies to some staff that they cannot progress during their NPDP. Clearly the level expected of a year 1 student is different from that of a final year student but it would be unreasonable to prevent a good year 1 student from achieving the highest level in their assessments. Students must be assessed according to their level and thematic analysis illustrated that this was an identified concern among a subset of the participants. Students who receive inappropriate grades may exhibit reduced motivation and engagement. Provision of learning outcomes for different levels can clearly help here.

Differing expectations are particularly problematic in borderline situations. Findings in the literature suggest that some practitioners are reluctant to fail nursing students.^{18,19} This could be related to practitioners being naturally empathic individuals who are reluctant to upset students. By clarifying the exact requirements and standard expected for students to pass it is anticipated that this distinction will be made easier and this is one of the key recommendations arising from this evaluation.

Fitness to practise

With the forthcoming inception of the Medical Radiation Practice Board of Australia in July 2012, students will be required to be registered, thus universities must take steps to ensure that they adequately monitor and document that students have the capacity to practise safely, competently and ethically without impairment. This will serve to further protect the public from harm. Assessing students on the FTP domain will allow practitioners who are supervising students to document whether there are any concerns or questions about the students FTP, as some of the elements are not incorporated into the assessment of professional attributes in the current version of the AURTSCAF. It is encouraging to see this suggestion being embraced by the respondents and this promises to assist with implementation.

Student feedback

One of the most puzzling responses in the survey was the wealth of differing feedback related to use of an online form, given that the NPDP program uses online forms already. Given the increasing move to paperless departments in both clinical and academic environments it would seem logical to adapt the form for use as an online tool. There are considerable challenges here with different learning environments and access to IT resources in departments, although this has not proved to be a major barrier to adoption of online access for the NPDP programme. Thematic analysis of responses to this survey indicated some concern with potential online access to previous feedback influencing form completion. Rather than a problem, the opportunity to gauge student progression and highlight the importance of continuous development is potentially one of the real benefits of an online competency assessment. Having access to previous forms would enable an educator to determine if the student is making progress or not and help to direct feedback appropriately. Clearly there is a perception that some educators may be influenced by previous feedback and guidance relating to this may be warranted. There is a fine balance between ensuring objectivity and nurturing a continuous development approach in the student. There is also the consideration that many institutions do not allow the release of previous student marks or assessment. The comments from participants indicate a lack of agreement about the value of access to previous feedback and further discussion relating to this would be of value.

From a student perspective, the modern RT student is actively encouraged to take ownership of their learning, reflect on their experiences and demonstrate continuous development. The ability to build on previous feedback is an essential component of this process. This is not something that happens instinctively. Cassidy²⁰ suggests that new nursing students often lack the emotional capacity to link academic knowledge with their clinical situation. Useful feedback as well as the ability to critique previous performance should help to build these skills in new students. One of the themes from the results was a perception that

students focus on passing competencies rather than engaging with the qualitative feedback comments. Fahy²¹ related similar experiences with undergraduate nursing student assessments where clinical preceptors recognised that students felt overwhelmed and focused on completion of the competence document at the expense of additional learning. These comments are, of course, essential in developing reflective practice in the students and provide useful suggestions that can feed into their action plans. Since reflection is an increasingly essential professional requirement, universities are working to instil a reflective approach to clinical learning in RT students.

It can be seen that student and clinical staff attitudes to feedback need to be aligned. By allowing clinicians to access previous forms for students (potentially via an online resource) student feedback can demonstrate a more continuous approach to professional development, but there are ethical concerns with this. Students in turn need to recognise the value of regular feedback and the need to reflect and act on it. Although not specifically evaluated in this survey, a logical future study could determine the level of agreement between staff and student perceptions of the accuracy of competence assessment. A similar study²¹ investigating student and assessor views of competence assessment in a BSc Nursing programme discovered that although undergraduate nursing clinical educators considered their assessment to judge competence adequately, the students tended to disagree. It will be interesting to see if the same issue arises here when these evaluation results are compared with future student evaluation of the form. It is hoped that future training can address these issues and ensure that relevant feedback is provided and used appropriately.

Conclusion

This evaluation has provided a representative sample of the views of clinicians from RT sites which provide placements to students and who have utilised the AURTSCAF since its implementation. The results of the survey show high levels of support for the current process and document, and demonstrate that the national form is capable of providing a clear objective assessment of performance. The results of the survey have been used to inform future developments of the AURTSCAF and potential avenues for further research.

The recommendations from this study with the support of the RTPC group are as follows:

- The addition of a sixth domain of assessment: Fitness to practise
- The addition of clear descriptors and prompts for the new domain in the user guide
- With regard to “2”s (“*progressing but requires improvement*”) the proposed word change to “*requires improvement to progress*”
- Inclusion of the user guide in university documentation that accompanies the assessment form so that it is always accessible by clinicians.
- Dissemination of the proposed changes to the assessment form nationally through publication of the evaluation survey in *The Radiographer* and other avenues of communication with clinical sites in each state including a generic email to clinical educators
- Recognition that continued support and training for clinicians in the use of the assessment form for Australian RT students is essential, and valued by clinicians
- For accuracy of content and efficiency in training, a move from CD/paper based resources to an online community resource accessible by

all Australian RT clinical educators is acknowledged by the RTPC as the best way forward. Strategies for developing and maintaining these resources require exploration

- Further research into barriers to clinician engagement with clinical education training resources.

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References

- 1 Dalton M, Keating J, Davidson M. Development of the APP (Assessment of Physiotherapy Practice) Instrument – A standardised and validated approach to the assessment of clinical competence in physiotherapy. Available online at <http://www.altc.edu.au/resource-development-clinical-assessment-griffith-2009>
- 2 McAllister S, Lincoln M, Ferguson A, McAllister L. *COMPASS™*: Competency assessment in speech pathology. Melbourne: The Speech Pathology Association of Australia Ltd; 2006
- 3 London S. The assessment of clinical practice in osteopathic education: Is there a need to define a gold standard. *Int J Osteopath Med* 2008; 11: 132–36.
- 4 Crookes P, Brown R, Della P, Dignam D, Edwards H, McCutcheon H. The development of a pre-registration nursing competencies assessment tool for use across Australian universities. ALTC; 2010.
- 5 Kilgour AJ. Assessment of competency in radiography students – a new approach. *Radiographer* 2011; 58 (3): 32–37.
- 6 Starmer DL, Chapman E, Millward MJ. Applying global frameworks to assessment in medical education: An example of a nationally produced curriculum for cancer education. *J Cancer Educ* 2010; 25: 285–89.
- 7 Dempsey SE, Giles E, Chiswell M, Wright C, Charlton N, Rowntree P, *et al*. Development and implementation of the Australian universities radiation therapy student clinical assessment form. *Radiographer* 2012; 59 (1): 13–25.
- 8 Australian Institute of Radiography Professional Accreditation and Education Board. Competency Based Standards for the Accredited Practitioner. Victoria: AIR 2005
- 9 Lui C. Cross-Sectional Data. In: Lavralos PJ, Editor. Encyclopedia of survey research methods. Thousand Oaks, USA: Sage Publications, Inc. 2008. Available online at <http://srmo.sagepub.com/view/encyclopedia-of-survey-research-methods/n120.xml>
- 10 Battaglia M. Purposive Sample. In Lavralos PJ, Editor. Encyclopedia of survey research methods. Thousand Oaks, USA: Sage Publications, Inc. 2008. Available online at <http://srmo.sagepub.com/view/encyclopedia-of-survey-research-methods/n419.xml>
- 11 O'Rourke TW. Methodological techniques for dealing with missing data. *Am J Health* 2003; 18 (2): 165–68.
- 12 Bradshaw C, Butler MP, Cassidy I, Fahy A, McNamara MC, Tuohy D. Evaluating clinical competence assessment. *Nurs Stand* 2011; 25 (50): 42.
- 13 Calman L, Watson R, Norman I, Redfern S, Murrells T. Assessing practice of student nurses: methods, preparation of assessors and students views. *Nurse Educ Today* 2002; 38 (5): 516–23.
- 14 McCarthy B, Murphy S. Assessing undergraduate nursing students in clinical practice: do preceptors use assessment strategies? *Nurse Educ Today* 2008; 28 (3): 301–13.
- 15 Housel N, Gandy J, Edmondson D. Clinical instructor credentialing and student assessment of clinical instructor effectiveness. *J Phys Ther Educ* 2010; 24 (2): 26–34.
- 16 Hand H. Assessment of learning in clinical practice. *Nurs Stand* 2006; 21 (4): 48–56.
- 17 Bloom BS. Taxonomy of educational objectives: the classification of educational

-
- goals: handbook 1, cognitive domain. New York: Longman; 1956
- 18 Heaslip V, Scammell JM. Failing underperforming students: The role of grading in practice assessment. *Nurse Educ Pract* 2012; 12: 95–100.
- 19 Duffy K. Failing Students: A Qualitative Study of Factors that Influence the decision regarding assessment of students' competence in practice. London: NMC; 2004
- 20 Cassidy S. Interpretation of competence in student assessment. *Nurs Stand* 2009; 23 (18): 39.
- 21 Fahy A, Tuohy D, McNamara MC, Butler MP, Cassidy I, Bradshaw C. Evaluating clinical competence assessment. *Nurs Stand* 2011; 25 (50): 42–48.
-