CAMRT ACTRM

Advanced Practice Registered Technologist (Radiation Therapy)

Case Submission Guide

Advanced Practice in Medical Radiation Technology

June 2021

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INTRODUCTION

The second phase of the CAMRT Advanced Practice Registered Technologist (Radiation Therapy) ("APRT(T)") certification process is the submission and assessment of patient cases.

Candidates will submit a selection of cases from within the **last five years of their practice** to demonstrate their application of advanced practice competencies in a clinical setting. The patient case submission portion of the assessment provides candidates with the opportunity to demonstrate their clinical experience in greater detail, providing descriptions and demonstration of critical thinking, decision making and competence. Therefore, this phase will only address competencies in the core **clinical** and **technical** competency domains.

The purpose of this guide is to provide APRT(T) candidates and assessors with an overview of the Phase II, Patient Case Submission process. To help ensure a fair and transparent process, the guide provides tips and information to help candidates prepare their submission, as well as details and explanations on how the submitted cases will be assessed.

This Case Submission Guide includes important information on:

- Case submission components
- Steps in case development
- Endorsements for cases
- Assessment criteria
- Forms and examples

NOTE:

*Candidates are expected to use this guide in conjunction with the **APRT(T) Certification Policies and Procedures Handbook**, and*

Consult with their Advisor prior to submitting their documentation.

Candidate Enquiries

All enquiries about the APRT(T) certification process should be directed to:

Email: aprt@camrt.ca

Professional Practice and Research Department, CAMRT
180 Elgin Street Suite 1300
Ottawa, Ontario K2P 2K3
Telephone: 613-234-0012
Toll-free: 1-800-463-9729

OVERVIEW OF PATIENT CASE SUBMISSION

Before beginning the development of their patient case submission, it is important for candidates to understand that the focus of this phase of assessment is a demonstration of critical thinking and clinical decision making in the identified areas of clinical and technical competency.

Throughout the patient cases, clinical and technical competencies must be demonstrated, and it is important that the APRT(T) makes appropriate clinical decisions demonstrating an enhanced level of knowledge and accuracy.

Unlike the portfolio, it is not enough to provide evidence that an activity related to the case was carried out at a given time. Rather, the candidate should strive to provide a narrative account of decisions and resulting actions that relate to said activities. This is not always as simple as it sounds, so the APRT(T) certification process supports candidates (and assessors) with this process. One of these supports is this guide. Also provided to candidates are other references on Reflective Practice that may assist candidates as an academic framework (Appendix C).

Case Submission Components

The components of the case submission are:

1. Case Submission Summary Form
2. Patient Case Reports (5-10)
3. Endorsements for Cases

CASE SUBMISSION PREPARATION

***IMPORTANT**: Refer to the "Case Submission" section of the APRT(T) Certification Policies and Procedures Handbook for additional information.*

Preparing Cases for Submission

General guidance for the submission as well as a standard template for cases is provided to candidates. Cases must be prepared to fit into the described template. Assessment of the cases will be based on the Clinical and Technical competencies from the APRT(T) Competency Profile.

Basic Requirements

There are a number of basic requirements for all case submissions.
They must:

- Comply with the criteria set out by the CAMRT,
- Be professional in appearance – layout, presentation,
- Be free of spelling and grammatical errors,
- Have a design and format that is appropriate for the intended audience,
- Be manageable in length,
- Be well organized, and
- **Must comply with their institutional confidentiality and privacy policies/regulations*.**
  (*The candidate must also consider any confidentiality/privacy policies in relation to interprovincial transfer of their documents should they work outside of Ontario.)

Timelines

Patient case submissions are accepted based on a submission cycle throughout the certification process and must be submitted by the respective submission deadline. The deadline dates were selected to allow a reasonable amount of time for candidates to prepare a submission following success of the portfolio phase.

(See the APRT(T) Certification Calendar.)

***TIP**: It should be noted that patient cases must be submitted within the two (2) year eligibility period for the certification process, leaving adequate time for assessment, notification and successful completion of Phase III.*

Patient Case Submissions

Candidates are required to prepare a submission of **five to ten anonymized patient cases** displaying their breadth and depth of experience in all the advanced clinical and technical competencies.

Assessment of the cases will be based on the APRT(T) Competency Profile, thus candidates should also take care to ensure their submitted cases reflect the breadth of the **clinical** and **technical** competencies from the profile, not solely cases of interest. The types of cases highlighted are entirely at the discretion of the candidate.

There is a strict requirement relating to the currency of the cases submitted. To be considered for assessment, a submission **must** describe cases that the candidate has encountered within the **previous five years**.

Submission Format (Template Use)

Case submissions are sent electronically in the format and method prescribed in this guide. The basis of the patient case submission is a text-based document. However, a patient case submission may also be supported by information in other formats (e.g., images, etc.). Supporting information should only be provided when it is necessary for decision making and interpretation of the case. Case submissions will be authenticated by endorsements from an appropriate supervisor/healthcare provider to ensure the accuracy of cases being described. (See section on "endorsements", page 10.)

For the purpose of the APRT(T) certification process, an APRT(T) Case Submission Template (see APRT(T) Certification Handbooks and Guides) has been provided to facilitate the development of patient cases and increase consistency with regards to the format of documents submitted to third-party authenticators and assessors. Candidates should use the patient case submission format described in this guide, however, they may modify the format suggested if they think such modification will improve the demonstration of their competence in a given area.

Following submission of the cases, it will be checked for completeness and for accordance with the submission guidelines. Correctly submitted cases will be sent to assessors for review. Candidates will receive feedback for incorrectly submitted cases (see Appendix A – Return Form, Cases).

CASE DEVELOPMENT

Selecting and Mapping Cases for Submission

Before candidates begin preparing their cases for submission, it may be helpful to identify the different contexts in which they have gained knowledge and skills.

The purpose of the patient case submission is to provide another opportunity for the candidate to showcase their competency in a given domain. As such, selection of cases for submission is important to ensure the best overall presentation of competency is put forward. As interesting as a case may be, it will only help the candidate during assessment if it provides some clear demonstration of critical thinking, and an advanced level of performance related to the competency. Care should be taken to ensure each case is included for the purpose of demonstrating competency in one or more of the identified domains (clinical and technical) from the APRT(T) Competency Profile.

To assist in planning and organizing the patient case submission, a Case Submission Summary Form is provided in the Case Submission Template. The Summary Form acts as a Table of Contents and will help a candidate to see that the overall submission is meeting all required competencies.

Assessors are also guided by this summary form, but are not limited by it in their assessment of a candidate's competency. In other words, assessors may find examples of competency from other cases within the submission. Assessors will use their judgement that each competency has been thoroughly demonstrated throughout the submitted cases.

Essential Case Submission Requirements

There are a number of essential requirements for all patient case submissions:

- The complete submission must contain between five to ten (5-10) anonymized patient cases.
- Submissions must describe cases that the candidate has encountered within the previous five (5) years.
- The patient case reports should be prepared in keeping with the proposed format (see this guide).
- Each individual case report within the submission must address at least one (1) of the clinical or technical competency domains from the profile.
- The complete submission of cases should thoroughly address all areas of clinical and technical competencies from the profile at least twice.
- Each case will require one or more endorsements per case. Endorsements are requested by an appropriate third party (see page 10) to verify the accuracy of the described cases and competencies.

A Focus on Competencies

The patient case submission is an opportunity for the candidate to showcase their own critical thinking using the context of real-life clinical or technical interactions to demonstrate the justification for investigations, analysis and decisions. It will be helpful for the candidate to think of the case from this perspective as the case submission has been organized to best highlight decision making and critical thinking. The candidate's actions must demonstrate an advanced level of practice by making appropriate clinical decisions through careful analysis of key aspects of each case.

***TIP**: It is important to remember that too many details in the peripheral elements of the case can detract from the core elements of the competency showcased. In general, efforts should be made to adhere to what is relevant within a case. For example, if the patient's past medical history and family history are not relevant to the problem, state this.*

Evidence of Critical Thinking and Decision Making

Many of the competencies in the APRT(T) Competency Profile involve complex levels of decision making for the radiation therapist. The patient case submission provides a unique opportunity for a candidate to demonstrate this thinking to the assessment panel in a way that supports the evidence of advanced activity confirmed in the portfolio assessment.

As such, it is important that candidates strive to demonstrate the rationale that was behind their actions, and not just list their actions. An ideal case would demonstrate to the assessment panel how a candidate:

- Offers their interpretation of information and/or findings related to the patient or procedure, and uses this information in the context of wider evidence to support decisions
- Justifies decisions made and actions taken, while explaining their reasoning, including analysis and evaluation of alternative(s) (i.e., relevant arguments pro and con to the possible courses of action available)

General Guidance

- Each case should be constructed to emphasize competencies.
- A single case can emphasize multiple competencies.
- Overall, each clinical and technical competency must be covered at least twice.
- Each case should provide information to contextualize the decisions made and/or actions taken by the radiation therapist (see Appendix C).
- Read the case presentation back to yourself - Is there a natural flow from presentation to discharge and follow-up? Are all decisions explained?

- Discuss case with clarity so that all findings and decisions are clear.
- Provide each third-party authenticator with the relevant case(s) once complete so they can endorse it.

***TIP**: Each competency contains many indicators that can guide a candidate to the expected standard. For example, Clinical Competency #1, (Ensure that all relevant patient information is available for clinical decision making), contains many verbs in the competency and indicators that illustrate the level of critical thinking and decision making expected of an APRT(T):*

- Ensure
- Analyze available information
- Synthesize available information
- Employing relevant guidelines
- Determining completeness of information
- Ordering specific tests

Anonymization of Cases

All submitted cases must be anonymized before being transmitted to the CAMRT for assessment purposes. The candidate must take care to ensure that no patient identifiers are included which extends to the relatives, employers or household members of the individual.

***IMPORTANT**: Candidates must ensure that all unique identifiers be removed that may violate the patient's personal health information rights.*

For more information, refer to your facility policies involving anonymization of patient information.

ENDORSEMENTS

Each case must be signed off with one or more endorsements provided by a third-party authenticator. Recruited by the candidate, third-party authenticators could be a supervisor, colleague, peer or another health care provider who is familiar with the candidate's work and is qualified to sign off on the authenticity of the case. (This would normally be a doctor, but could include a physicist, a pharmacist, and advanced practice nurse, an APRT(T), etc.)

This endorsement must attest to the **accuracy of the case** in the way the candidate describes it, in addition to affirming the competency being claimed.

The person providing the endorsement should be someone **who has the skills and knowledge to be able to verify that the candidate has demonstrated the required competency(ies) and can provide evidence to this effect**.

This may require interpretation and judgement by the authenticator and the candidate should provide them with the APRT(T) Competency Profile as a reference.

Please note: There may be more than one authenticator per case.

The Case Submission Third-Party Letter & Endorsement Form will be sent to authenticators for their endorsement along with the case(s) once completed.

The CAMRT reserves the right to audit a candidate regarding their submitted cases.

Case Submission Template: Submitting files

Upon receipt of payment of their case submission fee, CAMRT will provide the candidates with instructions on how to submit their documentation.

When candidates request endorsements from third-party authenticators, they should provide them with:

- A copy of the case(s) they are being asked to endorse,
- The Case Submission Third-Party Letter & Endorsement Form, and
- The APRT(T) Competency Profile
  (See APRT(T) Certification Handbooks and Guides).

Candidates will need to clearly identify which cases and competencies they are requesting their authenticator(s) to endorse; then request their authenticators to compile their endorsements and send them **directly** to: aprt@camrt.ca

AFTER SUBMISSION

Each patient case submission will be first **endorsed** (by one or more authenticators) and then **assessed** by subject matter experts in radiation therapy (a minimum of two experts per case submission). All precautions will be taken by the CAMRT to ensure that conflicts of interest are avoided.

The assessment of case submissions is based on successful demonstration of clinical and technical competencies as delineated in the APRT(T) Competency Profile. The evidence provided for each competency will be reviewed as follows:

1) The candidate's third-party authenticator(s) will first review the case for endorsement,
2) The authenticator(s) will send the endorsed case(s) directly to CAMRT,
3) If submission of all cases is in the prescribed format, the cases will be sent to the assessors for scoring.

Authenticators are asked to check if those competencies listed in the case have been described accurately and as described in the APRT(T) Competency Profile; and then will check off if this has been demonstrated for each competency listed in the case they are endorsing.

Assessors are asked to review candidates' evidence and exercise their best judgment on the extent to which candidates have demonstrated the knowledge and skills required to be an APRT(T) are accurately based on the competencies as described. The assessors will also check for competency alignment to the case and the thoroughness of the requested competencies based on the APRT(T) Competency Profile.

Assessment Criteria

When reviewing case submissions:

Authenticators will consider the competencies listed for the case and check whether the following was demonstrated:

- ✓ Accuracy of the competency against the APRT(T) Competency Profile
- ✓ Accuracy of the candidate's account of the case and the duties and decisions carried out

Assessors will review the information describing each competency across all cases within a candidate's case submission and determine a score.

Refer to the "Case Assessment Criteria", in section D, of the APRT(T) Certification Policies and Procedures Handbook for additional information on procedures for scoring, assessment, and notification of assessment status.

Appendix A. Return Form, Cases

(*A copy of this form will be provided to the candidate.*)

The patient case submissions of candidate _____

(Please check all that apply).

Did NOT:

☐ Comply with criteria set by CAMRT

☐ Have design and formats appropriate for the intended audience

☐ Have a complete Case Report Summary

☐ Contain a clearly explained purpose for each case, with a map to relevant clinical and technical competencies

☐ Include appropriate references to relevant literature in radiation therapy

☐ Focus on knowledge and skills (rather than time spent)

☐ Comply with the CAMRT template

☐ Anonymize all patient identifiers

Was NOT:

☐ Free of spelling and grammatical errors

☐ A manageable length

☐ Well organized

☐ Appropriately endorsed

_____

Project Manager/Assessment Panel Representative

_____

Date

Appendix B. Case Submission Examples

The following case examples are meant to help candidates and assessors reflect on the layout and quality of the submissions.

Example: Case Submission Summary Form

Please check the competencies that apply, for each case submitted:

No.	Case Title	COMPETENCIES								
		Clinical							Technical	
		C1	C2	C3	C4	C5	C6	C7	T1	T2
1	Case 1	x	x	x		x		x	x	x
2	Case 2	x	x					x	x	x
3	Case 3	x	x	x	x	x		x	x	x
4	Case 4	x	x		x	x	x	x	x	x
5	Case 5	x	x	x	x	x	x	x	x	x
6	Case 6	x		x		x				
7	Case 7		x		x	x	x	x	x	x

Each submitted case meets the following requirements as specified in the APRT(T) Case Submission Guide:

☒ Built according to the case study template

☒ Addresses at least one competency from the APRT(T) Competency Profile

☒ Case is within the 5-year window

☐ Contains supporting files (if required)

☒ **Case is fully anonymized**

Example 1: CASES

Case number: Case 1

Case title: Male, 60, metastatic lung cancer to bone

Date: June 28, 2013

Introduction *(approximately 150 words)*
The following case describes a gentleman, suffering from metastatic lung cancer to bone. He was referred to our Bone Metastases Clinic with the goal to receive treatment opinions from all disciplines, specifically radiation, interventional radiology and surgical, in order to best manage his back pain. It illustrates nicely the importance of a multidisciplinary approach to treatment and how knowledge in all treatment options is of importance for our patients. Being able to identify patients that would benefit from alternative methods of treatment ensures our patients are truly receiving the comprehensive care that they deserve.
Patient background
June 28th 2013. A 60-year-old gentleman diagnosed with non-small cell lung cancer was referred to the Bone Metastases Clinic (BMC) to assess treatment options for his persistent back pain. He had undergone previous radiotherapy to both his right lung and his thoracic spine with good response, however, now was experiencing pain lower in his lumbar region.
Initial radiation therapy consultation
I initially saw the patient in clinic. On examination, the patient indicated he was able to ambulate, however, doing so increased the pain in his lower back. He stated the pain in the lumbar area was 3/10 when he woke in the morning, and gradually increased to 5/10 throughout the day. He stated that lying down provided great relief, and could sometimes fully eliminate his pain. He indicated that he did experience a dull throbbing pain bilaterally in the medial aspect of both thighs, sometimes accompanied by a tingling sensation, but denied any numbness. Further discussion revealed his bowels and bladder were functioning normally for him.[C2] I enquired about his pain medication to which he stated he was not taking any pain medication at that time, however, did have a prescription for hydromorphone 2mg. He stated he was very reluctant to take it due to his fear of the perceived side effects from narcotics. After reviewing the images, and given my assessment of the patient, the orthopedic surgeon indicated that due to the multilevel disease as well as the fact that part of his lung was not functioning, he was not a suitable candidate for conventional open surgery. The patient had previous courses of radiotherapy to his right lung in March 2013 and his thoracic spine in June 2013. I reviewed the Mosaiq treatment plans of both courses of treatment to ensure there was no overlap of fields or any other contraindications as to why the lumbar spine could not be treated with radiotherapy. Having found no contraindications, I did recommend to the orthopedic surgeon that radiation therapy to this area was still an option and should be considered.[T1, T2] The orthopedic surgeon agreed and thus I coordinated all appointments for the patient to have his external beam radiotherapy.
Investigations

During preparation for the Bone Metastases Clinic, I noted that the patient's most recent bone scan was older than 5 months. I ordered a new bone scan (to be completed prior to CT simulation) to verify that this new lumbar pain/lesion was his only other metastatic bone site. [C1]

Radiation therapy care plan

The patient was subsequently planned to commence his radiotherapy beginning on July 8, 2013. A prescribed dose of 20Gy in 5 fractions was planned.

After the treatment aspect of his care was coordinated, I further discussed with the patient his fear of using his prescribed medication. He indicated he was fearful of becoming addicted to narcotics. I reaffirmed to the patient that the chances of this happening were quite low, and in fact the benefits in terms of taking the hydromorphone and providing pain relief, outweighed the possibility of addiction. I explained to him that he was prescribed that specific dose in order to minimize the pain until the effects of his treatment regimen began. At that time, he would be taken off the narcotic.[C3, C7] The patient was pleased with this explanation. [C5]

Adaptation to radiation therapy care plan

Given his clinical assessment and after reviewing his diagnostic images, I discussed with the orthopedic surgeon the patient's eligibility for a percutaneous vertebroplasty (PV) procedure. The main criteria for this procedure are percussion tenderness at the lesion site, and associated diagnostic imaging verifying an actual tumour at the same location. This procedure has proven beneficial to previous patients and I thought it would be a viable option for this patient to provide stability and pain relief. The orthopedic surgeon agreed. I made a referral to the interventional radiology team, however, unfortunately the interventional radiologist was not in clinic that day. I indicated to the patient that I would follow up with him on Tuesday for assessment of PV. [C2]

Patient follow-up

I followed up with the interventional radiologist who did agree that this case was amenable to RFA (radiofrequency assisted) vertebroplasty. I informed the physician that the patient would be starting radiation soon and could be re-assessed once this was completed and she agreed. Subsequently, I ordered a dedicated CT spine, as this is the diagnostic imaging of choice for assessment by interventional radiology for percutaneous vertebroplasty.[C1] As well, updated imaging would be necessary post radiation to understand the level of tumour involvement after treatment. Following this, I arranged for the patient to be seen for review and assessment by the interventional radiology team one month after completing his radiation therapy treatment.

Learnings

This case was informative as it took into account opinions and treatment options from three different disciplines. Although an open surgical approach was not an option for this patient, it was reassuring to see how minimally invasive techniques could benefit him. Discussion occurred surrounding the timing of the PV versus the radiotherapy and which should precede the other. However based on a previous PV study that I co-led I was able to inform the team that there was no evidence to support one versus the other. The patient did end up having both procedures done on him and did well for a period of time. The patient truly did receive a comprehensive care plan.

Case evaluator comments: case showed evidence of Clinical Competencies:

- C1 (assessing/determining need for additional diagnostic imagining as well as the autonomous ordering of required the required imaging to assist in clinical decision making). Strong evidence to indicate this Competency will receive a PASS. More cases will be required to solidify PASS.
- C2 (assessing patient's physical condition through history and physical; establishing eligibility for RT). Some evidence, more cases validating C2 will be required for a PASS.
- C3 (some but minimal evidence of assessing and responding to patient's emotional condition). Minimal evidence, stronger evidence in a number of other cases will be required for a PASS.
- C4 (not addressed in case). Unable to assess PASS or FAIL of competency C4, more cases required
- C5 & C6 (Collaborated with team to formulate AND Implement overall care plan of RT treatment and percutaneous vertebroplasty; Specific to RT, assessed previous Tx field(s) and impact on new Tx field/site) Strong evidence to indicate this Competency will receive a PASS, more cases will be required to solidify PASS.
- C7 (communicated to patent need/role and purpose of pain medication). Minimal evidence, stronger evidence in a number of other cases will be required for a PASS of C7.
- C8 (not addressed in case) Unable to assess PASS or FAIL of competency C8, more cases required.
- T1 & T2 (minimal evidence, assessed that no contraindication existed and recommended RT as essential part of care plan). Minimal evidence, stronger evidence in a number of other cases will be required for a PASS of T1 and T2.

Note: Case 1 is only one case of many used to assess the Clinical and Technical Competencies. The entire suite of cases submitted will be taken into account with the other to ensure that all of the competencies in the clinical and technical domains are covered in the depth and breadth expected of the APRT(T) and as described in the competency profile to determine a Pass or Fail for each individual competency.

Case Endorsement *(for each case)*

Case number: Case 1

Case title: Male, 60, metastatic lung cancer to bone

APRT(T) Competencies *List each competency you are demonstrating in this patient case (add lines as needed)*	**Case Endorsement** *For each competency, indicate which third party authenticator you think is most appropriate to endorse the competency described.*
C1	Example: “Jane Doe, Supervisor”
C2	Example: “Jane Doe, Supervisor”
C3	Example: “Jane Doe, Supervisor”
C5	Example: “Jane Doe, Supervisor”
C7	Example: “Jane Doe, Supervisor”
T1	Example: “Jane Doe, Supervisor”
T2	Example: “Jane Doe, Supervisor”

☒ Case is fully anonymized

Example 2: CASES

Case number: Case 2

Case title: Male, 83, lung cancer with back pain

Date: August 2013

Introduction *(approximately 150 words)*
The following case summarizes an 83-year-old lung cancer patient being referred for management of his recurring back pain. It illustrates nicely that even though patients have had treatment to a certain area of the body, they are still eligible for more radiation, and it too can be effective. It provides a suitable alternative to patients who are not surgical candidates.
Patient background
In ***August 2013***, an 83-year-old gentleman with stage IV lung cancer, metastatic to bone, was seen in the Bone Metastases Clinic (BMC). He was referred for low back pain. The patient had completed a course of radiotherapy in February of the same year which provided benefit, however now stated that the pain was returning.
Initial radiation therapy consultation
During his consultation in the BMC, I performed the initial assessment. On examination the patient stated he was having more pain in the lumbar area which had been previously treated. He stated that he thought the pain improved after his initial radiotherapy, but did not eliminate it entirely and the pain was in fact returning. He stated it did not radiate, denied any pins and needles sensation, and stated no numbness in either leg. He did have long-standing bladder issues (from his previous cancer) and stated his bowels were functioning normally. He indicated he was ambulating with some difficulty but sleeping adequately.[C2] Further assessment revealed to me that the patient was on a 50ugm fentanyl patch and was taking 2 extra strength Tylenol and 2 tablets of hydromorphone BID. I was going to counsel the patient regarding his pain medications, specifically the fact that the Tylenol was not likely contributing to his analgesia, but I recalled that combining a low dose NSAID (non-steroidal anti-inflammatory) with narcotics was actually quite effective, so I did not suggest any alterations to his pain medication regimen. The patient confirmed this regimen was actually providing pain relief.[C7] The patient completed a course of radiotherapy to his lumbar spine the preceding February. A dose of 2000cGy in 5 fractions was delivered to L2-L4. The patient was radiation naïve to all other sites of his body.
Investigations

When the patient arrived at the BMC, he did not have any recent imaging. Knowing that the orthopedic surgeons require imaging, specifically plain x-rays when evaluating the spine, I ordered a plain x-ray of the thoracic/lumbar spine and sent the patient for the test. The patient returned immediately after the x-ray.[C1]

After hearing my review of the patient, the orthopedic surgeon reviewed the images and indicated there was no role for surgery at the present time. I discussed the previous radiotherapy plan with the surgeon and indicated the patient would be a candidate for further radiotherapy to this area.[T2] The surgeon agreed. [C5, C6]

Radiation therapy care plan

Adaptation to radiation therapy care plan

Given the fact that the initial radiotherapy to his lumbar area was effective, I suggested we repeat the treatment to the same area.[T2] I did however suggest modifying the prescribed dose to 800cGy in a single fraction in keeping with re-treatment protocols. The radiation oncologist on call agreed with my suggestion. As such, I arranged for the patient to be simulated the same day as his clinic visit with us in the BMC. I attended the simulation session and placed a wire around the area where the patient indicated he was having pain.[T1] I did this in order to further verify that the previous treatment area encompassed his painful site. [C6 T1] After reviewing the simulation image, I did verify that the plan to re-treat L2-L4 would adequately cover the painful disease and informed the planning therapists. The treatment field was placed and no further modifications were necessary.[T1, T2] I reviewed the treatment plan with the radiation oncologist, who agreed with all facets.

Patient follow-up

In order for us to evaluate the effectiveness of his repeat radiation and assess the possibility of requiring further, different approaches to manage his pain, I made an appointment for him to come back for follow up in the Bone Mets clinic in 3 months time. I ordered a repeat CT scan as well so a complete assessment could be made.[C1, C2]

Learnings

Although this case resulted in a re-treatment of the same area, it still entailed performing a thorough assessment to ensure nothing clinically had changed. If the patient was experiencing numbness in his legs or bowel or bladder issues, it may have meant the patient now had a cauda equina syndrome or other nerve involvement. Thus, it really emphasizes taking the time to talk with our patients.

The patient would have been a candidate for an international bone trial (SC23) examining the results of dexamethasone versus placebo in the prophylaxis of radiation induced pain flare following palliative radiotherapy for metastatic bone disease, however given that he had previous radiation to this site, made him in fact ineligible.

Although the patient had previous recommendations from our pain team which was working for him, it is important to recognize that this helps relieve the symptoms of the disease and not the disease itself. Therefore, being able to look beyond just pain as a factor is important in making treatment decisions.

Case evaluator comments: case showed evidence of Clinical Competencies:

- C1 (two examples in one case: assessing/determining need for additional diagnostic imagining as well as the autonomous ordering of required the required imaging to assist in clinical decision making). Strong evidence to indicate this Competency will receive a PASS. Combined with Case 1, candidate would receive a PASS for this competency.
- C2 (assessing patient's physical condition through history and physical; establishing eligibility for RT). Some evidence, more cases validating C2 will be required for a PASS.
- C3 (not addressed in case). Unable to assess PASS or FAIL of competency C4, more cases required
- C4 (not addressed in case). Unable to assess PASS or FAIL of competency C4, more cases required
- C5 & C6 (Collaborated with team to formulate AND Implement overall care plan of RT treatment; Specific to RT, assessed previous Tx field(s) and impact on new Tx field/site). Strong evidence to indicate this Competency will receive a PASS, more cases will be required to solidify PASS.
- C7 (communicated to patent need/role and purpose of pain medication). Good evidence, stronger evidence in a number of other cases will be required for a PASS of C7.
- C8 (not addressed in case) Unable to assess PASS or FAIL of competency C8, more cases required.
- T1 & T2 (discussed role of RT with surgeon, provided autonomous consultation with simulator staff, chose dose/fractionation/approved simulator image assessed that no contraindication existed and recommended RT as essential part of care plan). Strong evidence, more cases will l be required for a PASS of T1 and T2.

Note: Cumulatively Cases 1 and 2 built strong evidence for C1, C5, C6, C7, T1 and T2. To solidify PASS, a few more Cases with examples will solidify scoring. Minimal to no evidence presented for C3, C4, and C8 in the first 2 cases, subsequent cases need to address these in order to determine a Pass or Fail for these latter competencies. .

Case Endorsement *(for each case)*

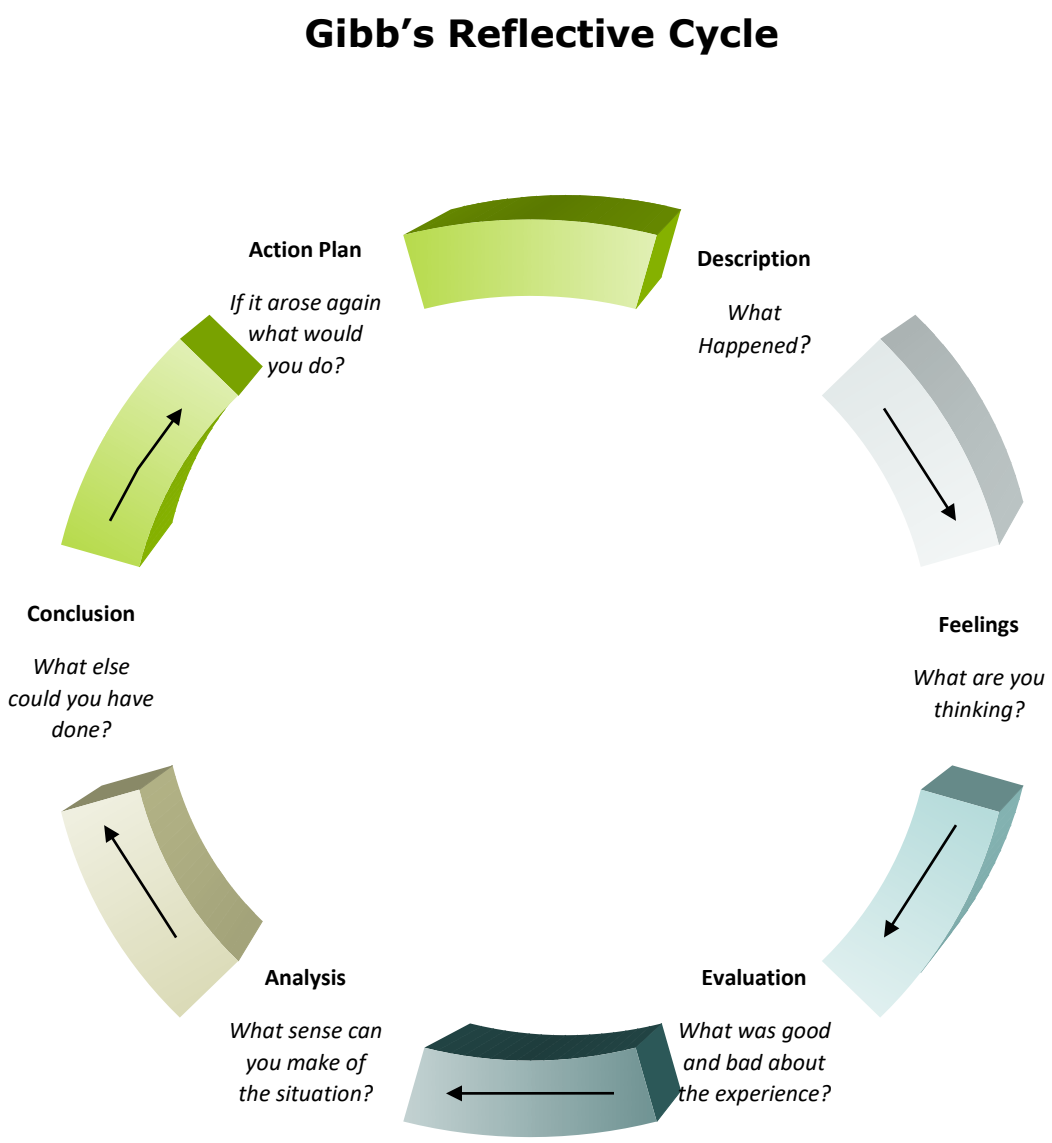
Case number: Case 2

Case title: Male, 83, lung cancer with back pain

APRT(T) Competencies *List each competency you are demonstrating in this patient case (add lines as needed)*	**Case Endorsement** *For each competency, indicate which third party authenticator you think is most appropriate to endorse the competency described.*
C1	Example: “Jane Doe, Supervisor”
C2	Example: “Jane Doe, Supervisor”
C5	Example: “Jane Doe, Supervisor”
C6	Example: “Jane Doe, Supervisor”
C7	Example: “Jane Doe, Supervisor”
T1	Example: “Jane Doe, Supervisor”
T2	Example: “Jane Doe, Supervisor”

☒ Case is fully anonymized

Appendix C. Reflective Practice Framework



GIBBS, G. (1988) *Learning by Doing: A guide to teaching and learning methods*. Oxford: Further Education Unit, Oxford Brookes University.

John's Model for Structured Reflection (1993)

The following questions are offered as a guide to help reflection on experience.

1. **Phenomenon**
   - Describe the experience.
2. **Causal**
   - What essential factors contributed to this experience?
3. **Context**
   - What are the significant background factors to this experience?
4. **Reflection**
   - What was I trying to achieve?
   - Why did I intervene as I did?
   - What were the consequences of my actions for:
     myself, the patient/family, my colleagues?
   - How did I feel about this experience when it was happening?
   - How did the patient feel about it?
   - How did I know how the patient felt about it?
   - What factors/knowledge influenced my decisions and actions?
5. **Alternative Actions**
   - What other choices did I have?
   - What would be the consequences of these other choices?
6. **Learning**
   - How do I now feel about this experience?
   - Could I have dealt better with the situation?
   - What have I learnt from this experience?

Johns C (2002) Becoming a Reflective Practitioner Blackwell Publishing Ltd Oxford, UK

Borton's Framework Guiding Reflective Activities (1970)

What?	So What?	Now what?
This is the *description* and *self-awareness* level and all questions start with the word what	This is the level of *analysis* and evaluation when we look deeper at what was behind the experience.	This is the level of *synthesis.* Here we build on the previous levels these questions to enable us to consider alternative courses of action and choose what we are going to do next.
Examples What happened? What did I do? What did others do? What was I trying to achieve? What was good or bad about the experiences	Examples So what is the importance of this? So what more do I need to know about this? So what have I learnt about this	Examples Now what could I do? Now what do I need to do? Now what might I do? Now what might be the consequences of this action?

Borton, T (1970) Reach, Teach and Touch. Mc Graw Hill, London.