

Preparation of the Clinical Case Study

Introduction

One clinical case study is to be submitted and assessed as reflecting the knowledge, skills and attitudes required of a specialist pain medicine physician.

The preparation of a clinical case study to a satisfactory standard, as well as being an important training experience, is an essential component of accreditation as a specialist pain medicine physician.

Choosing a case and starting early is recommended. The case must be one where the trainee has directly contributed to the care of the patient. Assistance from the Supervisor of Training (SoT) / Practice Development Stage Supervisor should be sought regarding case selection.

Gaining patient consent

Trainees must obtain patient consent for the collection and use of the patient health information in clinical case studies. Many hospitals will include this consent on their hospital consent forms but this must be confirmed rather than assumed. Consent can be gained verbally at the time of collecting health information or with a written consent form which is encouraged to avoid any confusion as to whether consent was given.

Trainees should be satisfied that patients are aware of and consent to the following factors:

- That their health information will be used for the further purpose of case studies, which are conducted for assessment of trainees rather than treatment of the patient.
- That the health information will be disclosed to FPM supervisors and may be disclosed to other administrative officers involved in conducting the clinical case studies. but that the supervisors and other administrative officers will not disclose the health information to any third parties;
- That the trainee will take reasonable steps to de-identify the health information, but that the patient might still be identifiable by reference to rare characteristics; and
- How the patient can access FPM's privacy policy.

Patient information needs to be de-identifiable to the extent that it is practical. This includes removing personal identifiers such as the patient's date of birth and address as well as removing other data such as rare characteristics which would enable identification.

Trainees cannot use the health information for any purposes other than case studies or disclose the patient's information to any other parties other than FPM and the supervisors involved in their particular case study, unless patient consent for this further use or disclosure is obtained.

The assessment of the case study does not depend on the outcome of the patient's treatment but on the demonstration of the knowledge and understanding of the trainee regarding presentation, cause, management and outcome.

Case study goals

1. To develop trainee knowledge, skill and judgment in identifying, acquiring, selecting and prioritising, positive and negative patient information that is relevant to a particular case presentation.
2. To develop trainee knowledge, skill and judgment in identifying, acquiring, selecting and prioritising scientific literature that is relevant to particular patient information in a particular case presentation.
3. To develop trainee knowledge and skill in integrating relevant patient information and relevant scientific literature to understand the patient's presentation and condition (s) and how these may be best managed.
4. To develop trainee knowledge and skill in clinical reasoning with the clinical data and such relevant literature as may be available, in order to make professional judgments and form professional opinions, and, develop a comprehensive, sociopsychobiomedical formulation encompassing a diagnostic impression and case formulation from which an individually tailored, multidisciplinary management plan is presented.
5. To develop trainee knowledge and skill in implementing and evaluating a patient-centred management plan and adjusting that plan based on outcome assessment.

Objectives

1. Formative
 - a. Develop an 'in depth' understanding of the **patient** (not only an understanding of the syndrome)
 - b. Develop skills in written communication about complex patients
 - i. Selection and prioritising of relevant information, both positive and negative
 - ii. Organisation of concepts in a logical sequence
 - iii. Develop skills in case formulation
 1. The relevance of the important features of the case
 2. Reasons these special features should be taken into account with the management of this individual patient.
 - c. Develop the clinical reasoning involved in developing an understanding of the patient and their condition and an appropriate management plan
 - d. Develop an in-depth knowledge of, and ability to adjust, the patient's management to the differing phases of their condition – acute, chronic, adjustment and rehabilitation
 - e. Develop skills in risk identification and management
2. Summative
 - a. Demonstrate written literacy
 - b. Demonstrate a detailed understanding of the issues relevant to the patient's presentation and care including the interaction of these issues and their contribution to the development of the patient's current predicament,

presentation, response to treatment, and outcome

- c. Demonstrate the application of the sociopsychobiomedical approach, with immediate, medium and long term perspectives
- d. Demonstrate an ability to appropriately adjust standardised treatment approaches to suit the individual circumstances of the patient
- e. Demonstrate an ability to integrate clinical reasoning and judgment with known scientific information, including when there is insufficient satisfactory scientific data
- f. Demonstrate an understanding of and ability to use a multidisciplinary approach, including:
 - i. organisational skills including delegation, supervision and coordination of the contributions of each discipline
 - ii. collaborative management, including with referring doctors and those providing follow-up care
 - iii. use of resources in a cost-effective manner
- g. Demonstrate an ability to identify and manage risk
- h. Demonstrate an ability to describe the patient's prognosis and the relevance of factors which influence this
- i. Demonstrate a professional attitude to the patient including consideration of the priorities of the patient and their family, the patient's interests and wellbeing during assessment and treatment, and with respect to management of the information the patient provides. Conflicts of interest should be clarified and their management described.

It is an advantage for the trainee to have had significant clinical responsibility in the management of the case but not essential. However, they must have contributed to the care of the patient (see Introduction). It is not necessary for the case to be unusual, difficult, "interesting" or to have a successful outcome.

Presentation

The clinical case study is to be undertaken in a manner which requires a great degree of reflection and consideration of the relevant issues. This is qualitatively and quantitatively different from a letter to a referring practitioner. Whilst trainees are encouraged to read case studies published in the literature and use these as a model for their descriptions of patient histories, examinations and investigations, the additional expectation of this task is to demonstrate an appreciation of the issues described below, particularly with respect to the formulation and the rationale for the treatment plan.

The usual sequence is to initially provide the information about the patient considered relevant, the author's conclusions based on this information, and then a discussion about the relevant features presented by the case and its management.

The information is derived from history, examination and investigations of the patient. The author should make clear to the reader any additional sources used to obtain information (e.g. relatives and other collateral sources, review of the case notes), the report of the patient of their current experience ('symptoms'), before then providing objective data

(‘signs’) obtained by examination (including mental status examination), and results of investigations.

The author’s opinions are then provided in terms of the diagnoses and the formulation, with further elaboration, and with integration of the relevant literature, during the discussion.

The author is able to choose the perspective of presentation, such as from the onset of the disorder, or time of first presentation, or the time of referral to the pain clinic.

The author is also to decide the optimal method of presenting follow-up, progress observations and clinical interventions.

Prognosis is usually addressed in formulation and discussion, though if there are substantial developments during progress, earlier statements regarding prognosis may require modification with appropriate explanation, as is often appropriate in clinical practice.

It is important to note that the appropriate attitude of the clinical case study is a clinical focus. It is neither an academic study of a syndrome nor primarily a literature review of a clinical condition. The trainee’s understanding, judgement and ability to communicate these essential clinical features is being examined, rather than only their intellectual knowledge and ability to repeat information.

A professional standard of written English language using appropriate medical terms is required. Proof-reading either by the SoT or an independent expert is recommended.

Assessment Criteria

The clinical case study will be graded on a marking system:

- Pass.
- Close fail: minor corrections required.
- Clear fail: major corrections required.

The case study assessment is broken down into “case content” components. Each case content component is assessed against the generic criteria below. Each criterion for each case content component is assessed as being met to a satisfactory standard (pass), requiring minor corrections (close fail) or requiring major corrections (clear fail).

Whether a criterion meets a pass, close fail or clear fail depends on to the extent to which the material presented represents safe and effective patient care and demonstrates the trainee’s understanding of the patient’s predicament and management.

For example, if the material presented is deficient – or if the clinical reasoning is deficient -and incorrect conclusions reached, this may have the effect of altering a diagnosis or problem formulation and ensuing management; thus there is a potential effect on safe and effective patient care.

Generic criteria:

1. Communicates effectively in written English language, including adequate editing (proof-reading for spelling, punctuation, absence of abbreviations and appropriate de-identification).
2. Presents accurate and original work.
3. Presents information in a sequence that develops the case.
4. Demonstrates effective judgment in selecting of patient related data.
5. Demonstrates effective judgment in the selection of scientific literature.
6. Demonstrates effective skills in integrating patient data with scientific literature.
7. Demonstrates effective clinical reasoning, analysis and judgment.
8. Demonstrates appropriate judgment in presenting professional opinions.

Case component criteria:

1. Pass:
 - Provides all positive and negative information that is relevant.
 - Analysis of the information and demonstrates its relevance to the patient and her/his predicament
 - Provides an integrated discussion that draws on support from the scientific literature and further demonstrates the relevance of that information to the Study.
 - The language used is clear, professional, appropriate and concise and the topic is approached in a structured, systematic manner and the discussion is relevant to the case
2. Close fail:
 - Does not provide all the relevant data expected from an assessment
 - Little analysis of the data and its relevance to the patient and his/her predicament
 - Makes an attempt to provide an integrated discussion using the scientific literature, however, the relevance of the information remains uncertain.
 - The language used is occasionally unclear or unnecessarily extended and or the approach to the topic is confusing and or the discussion is not relevant to that section
3. Clear fail:
 - Provides non-specific and or inadequate information related to the patient
 - Does not consider or analyse that information and or relate it to the patient and her/his presentation
 - Does not provide an effective integrated discussion and or does not effectively use the scientific literature.
 - The language used is generally unclear, less precise or professional and may be inappropriate and or the topic approach is not structured and systematic or irrelevant.

Trainees may resubmit their clinical case study but a second clear fail grade will require a new case to be submitted. The chair, Examination Committee will be the final arbiter.

Content of the clinical case study

The clinical case study may be presented in a manner that the trainee considers will satisfactorily meet all the objectives of the exercise, although the usual order of presentations is a useful guide.

The clinical case study should present the information in a coherent logical order that allows the reader to easily follow the development of the clinical reasoning of the author. It will

demonstrate an ability to gather relevant information by history, examination and investigations, and then demonstrate an understanding of the issues as expressed in the diagnoses and formulation. Discussion of the issues of the case will allow further demonstration of the author's judgements and opinions, especially including discussion of the relevant scientific literature. A clinical case study that is merely a description of clinical information, treatments and outcomes will not satisfy the required standard.

Emphasis should be given to the multidimensional aspects of pain and interdisciplinary approaches to the diagnosis and management of the patients with pain.

The clinical case study must be a minimum of 2500 and a maximum of 5000 words, in 12-point type, and double-spaced on A4 pages. The clinical case study must be submitted as a Word document to the faculty via fpm@anzca.edu.au

Please be reminded to provide

1. A title page with word count and key words. The key words are as expected for journal article submission i.e. use <http://www.nlm.nih.gov/mesh/MBrowser.html>
2. Headings - as outlined on page 6-8 of the above document and the trainee can supplement with tables or timelines if relevant
3. An introductory paragraph stating why this particular case is of interest (what is to be learnt from the case or what the author will develop in the discussion after presenting the case)
4. Examination findings which include comment on negative findings (i.e. 'stating the musculoskeletal and neurological examination was normal' lacks adequate depth). A mental state examination must be provided, with comment on affect and pain behaviours and transference experienced by the clinician as relevant.
5. A dot point list of diagnostic criteria according to a recognised frame work (IASP/DSM/etc.) with the relevant item numbers (prior to the formulation section)
6. Management both short and long term and the anticipated challenges presented by the case
7. A discussion of appropriate length and complexity relevant to the case presented
8. References in journal format

The following is a suggested format:

Cover sheet template

- Trainee's name and College ID.
- Training site/unit and SoT / PDS supervisor
- The title
- Trainee's statement of involvement in the management of the patient.
- The word count
- Keywords (appropriate for indexing)
- Supervisors statement on the methodology used by the trainee for sourcing references

Introductory paragraph

Demographic data

- Made up patient initials or name i.e. pseudonym: Ms MT
- Age
- Place of residence
- Marital status
- Domestic arrangements
- Source of income

Current condition

- Source of referral
- Reasons for referral
- History of present illness
- Specific pain and biological history

Systematic review

- Medication history (including as required, complementary and alternative medicines, over the counter medicines, adverse drug reactions)
- Treatment / outcome history
- Systems review
- Functional review
- Substance use history (alcohol, tobacco, illicit drugs, caffeine)
- Past medical, psychiatric history
- Forensic history
- Family medical, psychiatric history
- Medico-legal activity

Current relationship

Experience of family life

Personal development

- Early health and milestones
- Early behaviour
- Education history (level achieved, relationships with teachers and peers, extra-curricular activities)
- Employment history (type of work, periods of unemployment, relationships with bosses, supervisors and colleagues)
- Social / marital history
- Interests / activities

Examination

- Physical – pain orientated, functional and other relevant
- Mental state

Investigations

- positive and negative, past and pending or to be ordered

Diagnostic List (with Taxonomy Framework)

Use a well-recognised diagnostic framework for pain, medical conditions and psychiatric conditions (IASP, DSM 5, ICD-10).

Formulation

This is a most important aspect of the clinical case study, being the author's analysis of the important issues of the case, presented in a manner which highlights the author's level of skill as a specialist pain medicine physician.

A formulation comprises

- An introductory statement of salient demographic data
- A brief summary of the most important features of history and examination
- Diagnoses
- The opinions of the author regarding the relationships between the influential factors of the case, which may be expressed in terms of
 - Predisposing
 - Precipitating
 - Perpetuating
 - Aggravating
 - Relieving factors

Sophisticated formulations illustrate

- the manner in which these factors are influential
- their relative importance to the disease, suffering and function of the patient
- the dynamic interaction of the biological, psychological and social components of the case
- a similar consideration of the prognosis, including anticipated risks and problems.

Management plan (short and long term)

This consists of a coherent and well supported management plan, immediate, short and long term. This includes an understanding of the rationale and techniques of treatment provided by colleagues, including physiotherapists, occupational therapists, psychologists, nursing staff and general practitioners. Attention should be given to important non-professional influences in the patients' environment and community such as family, employers, and relevant social agencies.

Managing the limits of treatment with the patient is a special challenge to be addressed: e.g. a hoped for operation / medication that is not available.

Outcome Assessment

The methods used to assess the benefits and adverse outcomes following interventions are to be considered in detail, including an explanation of the relationship between the outcome and the intervention. (It may be causative or coincidental.)

Follow up and progress
Plans for follow-up should be described in a manner that takes into account appropriate, cost-effective use of resources, responsibility, and delegation to properly skilled and well supported people, using criteria that are clinically significant. These may be tools derived from research (Rating scales) and/or features of the patient's presentation that are significant and likely to change with the interventions. They should be readily measurable in a reliable and valid manner. Reliance of the patient's self-report of pain intensity is insufficient. Generally sustained

improvement of function is required to justify continuation of any intervention.

Discussion

The discussion is the opportunity for the author to demonstrate, with greater sophistication and detail, their understanding of the significant issues highlighted by this patient's predicament and its management.

References

References should be used during the discussion with an explanation as to how closely the research applies to this patient's situation, and why it supports or otherwise the presentation and outcomes achieved. These should be presented in a manner consistent with a major pain journal such as *Pain* or *Pain Medicine*.