Dentist, Dr B

A Report by the

Health and Disability Commissioner

(Case 02HDC16651)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Dr A	Dental Advisor at the regional dental service
Dr B	Provider / Dentist
Miss C	Consumer
Ms C	Consumer's mother
Dr D	Dentist

Complaint

In September 2002 a complaint was made to Dr A of a regional dental service about the dental services provided by Dr B to Miss C. Dr A is the dental advisor for the dental service, which forwarded the complaint to the Commissioner on 6 December 2002. The complaint was summarised as follows:

Between June 2000 and October 2001 Dr B did not provide dental services of an appropriate standard to Miss C. In particular Dr B:

- *did not treat tooth 47 on 9 June 2000 or 26 October 2001 despite noting in the treatment plan that treatment was required*
- *did not treat tooth 37 on 9 June 2000 or 26 October 2001 despite noting in the treatment plan that treatment was required*
- *on 9 June 2000 performed a root canal treatment of a poor standard resulting in the tooth developing a discharging sinus*
- *on 26 October 2001 performed treatment of a poor standard on teeth 15 and 16 filling the teeth and leaving overhangs.*

An investigation was commenced on 20 February 2003. Dr B has not responded to the investigation.

Information reviewed

- Miss C's dental records, X-rays, photographs and extracted teeth
- Information from the Dental Council of New Zealand
- Information from HealthPAC, Ministry of Health
- Independent expert advice from Dr Paul Scott, dentist
- Information from Dr D, subsequent dentist
- Information from Dr A, dental advisor

Information gathered during investigation

Background

In 2000 Miss C was a 15-year-old high school student who had recently arrived in New Zealand from overseas. She had not attended a dentist in her home country but may have attended a dentist in New Zealand sometime before seeing Dr B, although she cannot remember his name. Her recollection of Dr B's dental treatment is vague. She recalls seeing the school dental nurse but not when, or the treatment, if any, that was provided.

In June 2000, she was suffering toothache, and her mother, Ms C, made an appointment with a local dentist, Dr B, to examine her daughter's teeth. Ms C recalls attending some dental appointments but her daughter usually attended on her own. Ms C could not recall specific details but remembers Dr B telling her that her daughter had a lot of dental work to be done.

Dental treatment – 2000

According to Miss C's records she consulted Dr B at a dental centre, on 9 June 2000. Her records note that she required a root canal filling to tooth 24, fillings to teeth 37 and 47, and fissure sealant to teeth 16, 17, 26 and 27. Dr B commenced root canal treatment to tooth 24 that day.

On 16 and 20 June Dr B continued Miss C's root canal treatment on tooth 24. The dental records note that Dr B used "calcium hydroxide in the canal".

On 28 June Dr B sought prior approval for Miss C's root canal treatment on tooth 24 from Health Benefits Ltd, now called HealthPAC. HealthPAC reviews and approves expense claims submitted by providers, including dentists, for treatment.

On 29 June Dr B placed an amalgam filling to tooth 24 and noted, "School nurse did something to her teeth." Miss C recalled seeing the school dental nurse but not what treatment, if any, was performed. HealthPAC could not provide any details of the dental treatment by the school dental nurse. At this appointment, Miss C's treatment was recorded as completed and she was placed on Dr B's recall list for June 2001. There is no record of treatment to teeth 37, 47, 16, 17, 26 and 27.

In August, Dr B claimed $151.45 for the examination and root canal treatment. A note on the claim indicates "(single canals don't need special approval) 2 or more teeth to do". The authorising signature is unclear. He received payment from HealthPAC in September.

Dr D is Miss C's current dentist. Dr D explained that when a dentist claims for the costs of dental treatment it implies that the dentist has completed the treatment and given the patient a clean bill of dental health. In making a claim, the dentist must sign that the treatment is complete and the patient is dentally healthy at that point.

Miss C did not have any further dental treatment between June 2000 and October 2001.

Dental treatment 2001

On 26 October 2001 Miss C consulted Dr B again because she had toothache. Her dental records indicate that Dr B took a "bitewing" X-ray and recorded that she needed fillings to teeth 37, 15 and 16 and had fractured tooth 47. The records indicate that Dr B placed a two-surface filling to tooth 16 on 29 October, a two-surface filling to tooth 37 on 31 October, and a two-surface filling to tooth 15 on 7 November 2001.

On 14 November Dr B recorded: "Still tooth sensitive see her after examination." A claim for treatment was sent to HealthPAC on 11 November and paid on 20 December. There is no record of treatment to tooth 47 or follow-up of Miss C's sensitive tooth.

Dental treatment 2002

On 16 May 2002 the dental centre received a telephone call from Ms C asking that her daughter's dental care be transferred to another dentist, Dr D. The change of dentist is recorded in Miss C's records. She advised me that she did not want any further dental treatment from Dr B because he hurt her by pushing the examination mirror into her gum. She had continued to suffer toothache, and every time her mother suggested she go to the dentist she said that she would suffer the pain rather than see Dr B. Ms C confirmed that her daughter complained about Dr B's treatment from the first time she saw him and, with each consecutive appointment, she found it very difficult to motivate her daughter to return.

Dr D advised that on 16 May 2002 Miss C's mother asked him to examine Miss C's teeth because she was in pain. He understood that she had suffered pain ever since Dr B had treated her teeth in 2000. On examination he found a number of her teeth needed dental treatment.

Tooth 37

Dr D could find no evidence that Dr B had treated tooth 37. He advised me that there was "no sign that tooth 37 had ever been filled or prepared for filling" (even though Dr B recorded treatment to tooth 37 on 31 October 2001). He found "acute pulpitis" of tooth 37. He proceeded to "open it up", meaning that he drilled out the decay to assess whether he could save the tooth, but he found the decay so extensive that he had no option but to extract it.

Tooth 24

Dr D also found a discharging sinus from tooth 24. He said that his main aim at Miss C's first appointment was to ease her pain. He prescribed penicillin 500mg three times a day. Miss C's next appointment with Dr D was on 22 May. At this appointment he noted that tooth 24 was less inflamed, but was "still throbbing at night". Miss C had further treatment from Dr D on 24 May and 26 June 2002. Dr D explained that he had to remove the previous amalgam from tooth 24 and found there was "no true root canal filling at all". Amalgam had been "stuffed" down the root canal, apparently in an attempt to make it appear that it had been root filled. The amalgam appeared to be "driven straight on to what could have been vital pulp … (vital nerve of the tooth)" or what could have been a vital nerve at the time. All the necrotic (dead) tissue, which should have been removed from the root canal, had not been removed. The result was that the vital nerve would have caused a lot of pain (eventually becoming non-vital) or, if the amalgam was stuffed onto a non-vital nerve in the canal, there would have been no way to relieve the pressure (infection), resulting in a sinus discharging through the gum. Dr D said that he had never seen amalgam used to repair a root canal in the many years he has practised dentistry.

Dr D continued to treat tooth 24 but advised me that “the prognosis is poor”.

Dr D found it very difficult to control Miss C’s pain. Eventually he found that the pain appeared to be coming from tooth 24 but, once that was under control, he found that it was masking pain coming from tooth 37. It was at this point that he realised that tooth 37 was “past saving”.

Tooth 47

Dr D said that he could find no evidence that Dr B had treated tooth 47 in June 2000. There was no record of tooth 47 being treated even though Dr B had seen Miss C again in 2001. Dr D removed tooth 47 on 26 June 2002.

Teeth 15 and 16

Dr D also had to replace fillings in teeth 15 and 16. He explained that both teeth had “overhangs”. Once a tooth is prepared for filling, a band is placed around the tooth, and amalgam is packed tightly down into the cavity made by the remaining tooth and the band. The band is placed firmly up against the gum and sometimes a wedge is used to keep it tight against the tooth as it is packed with the filling material. Once the band is removed the new filling can be properly contoured to form the normal shape of the tooth.

Dr D attempted to give an explanation of Dr B’s dental treatment. He explained that when Dr B filled tooth 15 and 16 it appears that the band had not been sufficiently tight around the tooth or against the gum. The result was an “overhang”, which means that the filling, instead of following the normal contours of the tooth, ends up with a big piece protruding out. This leaves an area between the filling and the gum that is very difficult to keep clean, allowing food and bacteria to accumulate, which eventually becomes infected. This is the condition in which he found tooth 16. In relation to tooth 15, the decay was at the back of the tooth, which would normally be filled as above. However, with tooth 15, part of the tooth had not been prepared at all, which would have made it very difficult to pack the filling, “ending up with a gap between the filling and the tooth” and some of the tooth not filled.

Independent advice to Commissioner

The following expert advice was obtained from Dr Paul Scott, an independent dental surgeon:

"**Complaint**

[Miss C's] complaint is summarised as follows:

Between June 2000 and October 2001 [Dr B] did not provide dental services of an appropriate standard to [Miss C]. In particular [Dr B]:

- *Did not treat tooth 47 on 9 June 2000 or 26 October 2001 despite noting in the treatment plan that treatment was required.*
- *Did not treat tooth 37 on 9 June 2000 or 26 October 2001 despite noting in the treatment plan that treatment was required.*
- *On 9 June 2000 performed a root canal treatment of a poor standard resulting in the tooth developing a discharging sinus.*
- *On 26 October 2001 performed treatment of a poor standard on teeth 15 and 16 filling the teeth and leaving overhangs.*

Supporting Information

- Complaint letter to the Commissioner, 2 pages, marked 'A'
- The Commissioner's investigation letter to [Dr B], 2 pages, marked 'B'
- [Ms C's] dental records, 5 pages , marked 'C'
- Associated exhibits, contained in an envelope, as listed:
  - Two teeth extracted and supplied by [Dr D]
  - Pre-extraction radiograph for tooth 47 dated 26/10/01
  - Radiographs dated 24/5/02
  - Authorising letter from [Dr D] dated 17/3/03
  - Original complaint letter dated 17/9/02
  - Radiograph dated 16/5/02 showing root canal filling
  - Photographs of teeth 37 and 47
- Interview notes with [Ms C] and her mother, 2 pages, marked 'E'
- NZDA Code of Ethics, NZDA Code of Practice on Patient Information and Records, and NZDA Code of Practice on Informed Consent

Expert Advice Required

To advise the Commissioner whether, in your opinion, [Dr B] provided services of an appropriate standard and, in addition, to answer the following questions:

- What particular standards apply in this case?
- Did the care provided by [Dr B] reach those standards and, if not, how were the dental services inappropriate?

- Is there any evidence that [Dr B] treated tooth 47 on 9 June 2000 or 26 October 2001?
- Is there any evidence that [Dr B] treated tooth 37 on 9 June 2000 or 26 October 2001?
- Was the root canal treatment performed on 9 June 2000 of an appropriate standard and, if not, how was it deficient?
- Was the dental treatment performed on teeth 15 and 16 on 26 October 2001 of an appropriate standard?

Any other matters which, in your opinion, should be brought to the Commissioner's attention.

What particular standards apply in this case?

The Code of Ethics of NZDA outlines that the primary obligation of service to the public shall include the delivery of quality care, competently and timely, within the bounds of the clinical circumstances presented by the patient.

The Code of Practice on Patient Information and Records advises that patient records should include such information as presenting complaint, relevant history, clinical findings, diagnosis, treatment options, and the treatment plan agreed to.

The Code of Practice on Informed Consent outlines the ethical responsibility a dentist has to inform his/her patient on treatment options available to help the patient arrive at the most appropriate treatment plan.

Also the funding for payment of this treatment was provided under contract with a Dental Benefits funder. The type of contract can not be established with the information provided. However there would be a definite standard of care associated with the contract that would expect the patient to be provided with a treatment plan to ensure that the appropriate level of dental fitness was achieved following initial enrolment and treatment.

Did the care provided by [Dr B] reach those standards and, if not, how were the dental services inappropriate?

The standard of care provided by [Dr B] did not reach the above outlined standards. Following the initial record and treatment plan of 9 June 2000 there is no evidence of any informed consent procedures being provided.

The level of record keeping is not sufficient to be considered of an acceptable standard.

The initial appointment outlined the dental work considered necessary and this included root therapy to tooth 24, fillings to teeth 37 and 47, and fissure sealant to teeth 17, 16, 26 and 27.

[Dr B] proceeded to treat tooth 24 over the subsequent appointments and did not provide any of the other treatment as deemed necessary on 9 June 2000. After [Dr B] had completed root therapy and placed a restoration on tooth 24 the patient was placed on recall to be seen in June 2001.

The root canal treatment to tooth 24 was completed using calcium hydroxide paste in the canal. This is a root canal medicament that is used as a short to medium term treatment protocol and not as a definitive long term root canal filling material. According to the records this dressing was left as the definitive root filling material and a final amalgam restoration placed in the coronal portion of the tooth.

In October 2001 at the recall appointment [Dr B] performed an examination and took one posterior bitewing radiograph. There seems to be no reason why a radiograph of the contralateral side was not taken at the same time. The treatment notes identified the need for restorations to be placed in teeth 15, 16 and 37. It was noted that tooth 47 was fractured but there is no information as to what was to be planned for this tooth.

The radiograph taken on 26 October 2001 is of such poor quality that no clinical information can be obtained from it.

Again the treatment provided in October and November 2001 from the initial examination on 26 October 2001 did not include all the treatment that was identified as needed. Tooth 47 received no treatment although it had been identified as being fractured.

Therefore although a claim was issued for the treatment provided this patient could not be described as dentally fit at this time.

On 14 November 2001 the patient attended an appointment for a sensitive tooth. There is no indication as to which tooth was sensitive with the records only showing that the patient would be seen again following her examinations. There is no record of any appointment being made following this.

In May 2002 the records indicate that the mother phoned and requested that the patient be seen by another dentist as she felt very uncomfortable with [Dr B].

Is there evidence that [Dr B] treated tooth 47 on 9 June 2000 or 26 October 2001?

The evidence shows that although [Dr B] noted tooth 47 as requiring restorative work on 9 June 2000 he did not provide such treatment during the treatment phase following that examination. Tooth 37 was also identified as needing treatment, which again was not provided.

In the records for the treatment identified as needed on the 26 October 2001 teeth 37 and 47 were again identified as needing restoration. Tooth 37 was treated but 47 was not.

Is there any evidence that [Dr B] treated tooth 37 on 9 June 2000 or 26 October 2001?

Tooth 37 was noted as in need of restoration in the initial outline written on 9 June 2000. The treatment provided following this date indicates that tooth 37 was not restored on any of the treatment dates following.

On 26 October 2001 tooth 37 was again identified as in need of treatment and this was provided during that treatment period on 31 October 2001.

Was the root canal treatment performed on 9 June 2000 of an appropriate standard and, if not, how was it deficient?

The root canal treatment to tooth 24 was provided over a period of time on 9, 16 and 20 June 2000. There are no accompanying radiographs to determine the root canal process and there is no indication within the notes to show that radiographs were taken. It would be expected that the use of radiographs would be essential to ensure the appropriate standard of care was attained.

Also the final root canal material used is identified on 20 June 2000 as being calcium hydroxide. This material is considered to be a short to medium term root canal medicament and is not considered to be appropriate as a long-term root canal filling material.

Root canal therapy does have an associated failure rate yet there is no evidence that this was discussed with the patient as would be expected under informed consent procedures. Also the use of a poor final root canal sealant could contribute to the failure.

The lack of radiographs makes it difficult to determine whether rubber dam was used and how the working length measurements were attained. The notes do not indicate what irrigants were used.

The standard of root canal treatment would appear to be well below an acceptable level for all the above reasons.

Was the dental treatment performed on teeth 15 and 16 on 26 October 2001 of an acceptable standard?

The radiograph taken on 26 October 2001 is of a poor standard and it is not possible to determine the size of the carious lesions in teeth 15 and 16. Following the change to another practitioner the subsequent radiographs show that the restoration in tooth 16 has an overhang associated with the mesial proximal box which is an indication that the restoration is not of an acceptable standard. There is no evidence related to tooth 15 that would indicate that restoration is not acceptable.

In relation to the outlined complaint it is quite clear that [Dr B] did not provide treatment to tooth 47 either at the time of examination on 9 June 2000 or 26 October

2001 or on any of the subsequent treatment appointments associated with those examination dates.

[Dr B] did not treat tooth 37 on 9 June 2000 or on any of the following treatment dates associated with that examination. However he did provide treatment to tooth 37 on 31 October 2001 which was a treatment date associated with the examination on 26 October 2001.

The root therapy provided for tooth 24 on and subsequent to 9 June 2000 was not of a suitable standard. There is no evidence of the use of radiographs at any stage either prior to, during or at the completion of treatment. The final root filling material used was calcium hydroxide, which is not recognised as being suitable as a final root filling material.

The treatment to tooth 15 does not appear to be of substandard level but the restoration of tooth 16 on 29 October 2001 was not up to an acceptable standard as it has an overhang on the mesial proximal box.

The standard of record keeping would also be considered to be below an acceptable standard.

It is quite clear from the evidence viewed that [Dr B] provided a standard of dental treatment below an acceptable level. The major concern is the failure to complete treatment needs as identified on at least two separate examination appointments and the failure to achieve a level of dental fitness that the patient could be expected to have provided. This lack of treatment would have doubtless contributed to the loss of one or more teeth.

Finally the standard of care associated with this adolescent would seem to indicate that the funding authority might well have reason to be concerned as to the quality of care that they are purchasing."

Additional advice
The following additional advice was received from Dr Scott:

"**Medical/Professional Expert Advice – 02/16651/…**

Additional Report

Following further information being supplied including:

- Interview notes from [Dr D]
- Original letter from [Dr D] to [Dr A] 17 September 2002 with photographs and 1 radiograph
- 2 radiographs dated 16 June 2000
- 1 radiograph dated 16 May 2002 taken by [Dr D]
- 3 periapical radiographs dated 29 August 2002

- 3 radiographs – 1 dated 26 October 2001
  – 2 dated 24 May 2002

further comments required related to the following:

'Whether it is acceptable dental practice to use amalgam to fill a root canal and, if not, what is acceptable practice and how did [Dr B's] treatment differ.'

There is clear documentation within endodontic texts to show that amalgam can successfully be used as a root filling material. The difficulty with the clinical notes related to this case, is that it is not possible to determine whether the amalgam was intended as a root filling material, or whether the calcium hydroxide placed within the canal was intended as the root filling material and the amalgam was used to restore the tooth tissue.

Therefore it is clear that the standard of record keeping is of a poor level. It is also clear that the standard of care in the restoration of tooth 24 was poor as the root filling was not completed to a sufficiently acceptable standard to ensure a complete clinical seal of the canal. The apical portion of the canal shows no definitive radio-opaque material and the amalgam within the upper portion of the canal would not achieve any successful seal of the canal. If it was intended to use the calcium hydroxide as a root filling material this could only be for an interim period as it is not regarded as a successful long-term root canal filling material. No indication of this was evident from the clinical notes.

My initial interpretation of the information was that the calcium hydroxide placed in the canal was the final filling material and there is no new evidence to change this view. If it was not the final sealant material then the amalgam had to be but that is well short of the apex (tip) of the root which is the level to which root fillings should be attempted.

There are a few other issues that need to be addressed regarding the information supplied.

The clinical notes that were originally supplied clearly indicated that tooth 37 was filled on 31 October 2001. When [Dr D] saw the patient there was no filling in tooth 37 but no evidence to show that a restoration may have been placed in this tooth and subsequently lost. Therefore either the clinical record is inaccurate and no such filling was provided, or the treatment provided to this tooth was of a poor standard and failed well prior to an acceptable timeframe. In either case there is clearly a level of substandard treatment provided.

With regard to the treatment of teeth 16 and 15, my previous report stated that 16 had an overhang in the restoration provided which is not ideal.

However the treatment to tooth 15 needs some discussion as [Dr D] has stated that the filling indicated that a shortcut had been taken. In cavity design the more traditional design of cavity would indeed have included some removal of tooth on the occlusal (chewing) surface. However with the more modern concept of minimal intervention which is commonly utilised today the preparation may well be restricted to the area where the decay is and not be extended beyond this if not thought clinically necessary. It is not possible to make a clinical judgement about the appropriateness in this case without an examination of the patient.

Therefore my original report on the adequacy of treatment to this tooth still stands.

In the interview regarding the x-rays it is important to understand that they should be correctly described as radiographs as the x-ray is the type of radiation used to produce a diagnostically acceptable standard of dental radiograph.

The term 'contralateral' does not mean periapical as mentioned in the interview notes. It refers to the tooth or area on the other corresponding side of the mouth. In the original report I was commenting on the reason why there would only be one radiograph (posterior bitewing) of one side, as commonly one of each side would be taken to help ensure that there is no undetected decay following clinical examination.

In summary the additional evidence provided does not change the substance of the original report. It does add weight to the evidence that the root treatment of tooth 24 falls short of acceptable practice and also further reinforces the evidence that the standard of record keeping was so poor that determining what treatment had been provided and what was intended to be provided was exceedingly difficult."

Code of Health and Disability Services Consumers' Rights

The following Rights in the Code of Health and Disability Services Consumers' Rights are applicable to this complaint:

RIGHT 4
Right to Services of an Appropriate Standard

1) *Every consumer has the right to have services provided with reasonable care and skill.*

2) *Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.*

…

5) *Every consumer has the right to co-operation among providers to ensure quality and continuity of services.*

RIGHT 6
Right to be Fully Informed

1) *Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including –*

   a) *An explanation of his or her condition; and*
   b) *An explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option; …*

Other Professional Standards

The New Zealand Dental Association *Code of Ethics* (1991) states:

"**INTRODUCTION**

The Code of Ethics is essentially a standard of conduct for personal and professional behaviour and is binding on members of the New Zealand Dental Association.

The Dental Act and other relevant legislation also affect behaviour, as do the Rules of New Zealand Dental Association.

…

CHARACTERISTICS OF A PROFESSION

…

Service to the public

The dentist's primary obligation of service to the public shall include the delivery of quality care, competently and timely, within the bounds of the clinical circumstances presented by the patient.

…

Patient Records

Dentists are obliged to safeguard the confidentiality of patient records. Dentists shall maintain full, accurate and legible patient records in a manner consistent with the protection of the welfare of the patient. Only with the consent of the patient, or to comply with legal requirements will Dentists provide information on patient records."

The New Zealand Dental Association *Code of Practice* (1996) states:

"**1 REASON FOR RECORDS**

Information on patients is kept for a number of reasons:

1. A record of each encounter with a patient will improve diagnosis, treatment planning and assist with efficient, safe and complete delivery of care given the chronic nature of dental disease or in the event of another clinician assuming that patient's care.

…"

Opinion: Breach – Dr B

Overview
Under Rights 4(1) and 4(2) of the Code of Health and Disability Services Consumers' Rights (the Code) Miss C had the right to dental services delivered with reasonable care and skill, in compliance with professional and ethical standards.

The New Zealand Dental Association (NZDA) *Code of Ethics* states that patients have the ethical right to quality dental care, provided competently and in a timely manner, within the bounds of the patient's clinical circumstances. The NZDA *Code of Practice* states that dentists must maintain full and accurate dental records, recordings, diagnoses and treatment plans, to assist with efficient, safe and complete delivery of dental care. In my opinion Dr B's overall dental care of Miss C in 2000 and 2001 was not delivered with reasonable care and skill. Dr B did not meet his ethical duty to provide quality dental care and failed to keep dental records that met the standards of practice prescribed by the profession.

Treatment to teeth 47 and 37
Dr B examined Miss C's teeth on 9 June 2000 and identified that she needed dental treatment to teeth 37 and 47. After a number of appointments Dr B recorded that Miss C completed her treatment on 29 June. There is no evidence that Dr B treated either tooth 37 or 47 at these appointments. The recall appointment scheduled for June 2001 did not occur. In October 2001, Miss C consulted Dr B again, complaining of toothache. At this consultation, Dr B identified that teeth 37 and 47 needed treatment. By that time Miss C had, according to the dental records, fractured tooth 47. Again there is no record of treatment to tooth 47. At the October consultation, according to his records, Dr B placed a two-surface filling to tooth 37. He recorded completion of Miss C's treatment in November 2001.

When Dr D examined Miss C's teeth in May 2002, he found no evidence of treatment to tooth 47 or tooth 37 (even though Dr B reported and claimed for a two-surface filling to tooth 37). Dr D found that tooth 37 was acutely infected and drilled into the tooth so he could assess the extent of the decay, but having "opened it up" found the tooth beyond saving because the tooth pulp was infected. He had no option but to remove teeth 37 and 47. Both teeth were recorded by Dr B as requiring treatment in June 2000, two years previously.

My dental advisor indicated that Dr B's failure to provide dental treatment to tooth 47 in June 2000 and October 2001 (having identified the need for such treatment) fell below professional standards. Dr B identified that tooth 47 needed dental treatment in June 2000 but my advisor found no evidence of any treatment. In respect of tooth 37, Dr B identified the need for treatment in June 2000 but failed to provide it. In October 2001, Dr B recorded treatment as having been provided but subsequently (in 2002) Dr D could find "no evidence that Dr B had treated tooth 37".

Further, my advisor indicated that prior to Miss C's treatment in October 2001, Dr B took one "wingbite" radiograph. He could not understand why Dr B took only one X-ray when he needed radiological images of teeth 15, 16 and 37, which he had also identified as needing restoration. The X-ray taken by Dr B is of such poor quality that it had little clinical value. My advisor identified the record of treatment by Dr B on tooth 37. However, as noted above, when Dr D drilled the tooth on 16 May 2002, he found no evidence of previous dental treatment. Dr B claimed from HealthPAC for a two-surface filling to tooth 37.

I am satisfied that Dr B, having identified the need for treatment to teeth 37 and 47, failed to provide that treatment. In so doing, he left Miss C without appropriate treatment for two years, at which point both teeth required removal. This was a significant departure from appropriate standards and a failure to treat Miss C with reasonable care and skill. In these circumstances, Dr B breached ethical standards and Rights 4(1) and 4(2) of the Code.

Tooth 24

When Dr B examined Miss C's teeth on 9 June 2000 he identified that she required root canal treatment to tooth 24. His records show that he completed the treatment on 29 June, using calcium hydroxide paste and amalgam to fill the canal. There is no record that Dr B removed the calcium hydroxide paste before he filled the canal with amalgam.

When Dr D examined Miss C's teeth in May 2002 she was in severe pain with a discharging sinus from around tooth 24. When he commenced work on the tooth, he found very little of the canal filled; the necrotic tissue had not been removed before the tooth was filled and it appeared that amalgam had been used to "stuff" the canal, giving the appearance that the tooth was root filled. Dr D could not determine whether the amalgam was stuffed into a vital or non-vital nerve but eventually pressure built up in the tooth and, having to find a release, formed a discharging sinus in the gum.

Miss C reported she had suffered pain since Dr B completed the root canal treatment to tooth 24 but preferred to suffer the pain rather than have any more dental treatment from Dr B. She asked to see another dentist, Dr D.

My dental expert advised that Dr B's root canal treatment to tooth 24 did not reach acceptable professional standards for several reasons. First, he used calcium hydroxide paste to fill the root canal and completed the filling with amalgam. Calcium hydroxide paste is not recommended for long-term use such as that required for a root canal filling. There is no record that Dr B removed the paste, which is only recommended for short to medium term use. Secondly, Dr B's failure to take radiographs during the treatment process was not acceptable. It is essential to take radiographs before, during and at completion of root canal treatment to determine working measurements. It appears that only one bitewing radiograph was taken. It would be usual practice to take another radiograph on the other side to identify previously undetected decay. Thirdly, the restoration of tooth 24 was not of an acceptable standard. Radiographs of the canal show no radio-opaque material and amalgam was used in the upper portion of the tooth and as a final seal. The use of amalgam as a final seal would contribute to its failure rate and is substandard practice.

It is clear that Dr B's dental treatment of tooth 24 was not of an appropriate standard. As my advisor noted: "The standard of root canal treatment would appear to be well below an acceptable level." Accordingly, in my opinion, Dr B breached Rights 4(1) and 4(2) of the Code.

Teeth 15 and 16

On 26 October 2001 Dr B identified that Miss C needed restoration treatment to teeth 15 and 16. Dr D reported that, having assessed Miss C in May 2002, in his view both teeth were filled "poorly with overhangs". Dr D re-filled teeth 16 and 15 on 29 October and 7 November respectively.

My advisor said that the X-ray taken by Dr B on 26 October 2001 was of such poor quality that he could not determine the size of the carious lesions in either tooth. The follow-up X-rays taken by Dr D show an overhang associated with the mesial and proximal box in tooth 16, which is evidence that the tooth restoration is not of an acceptable standard.

My advisor explained that the method described by Dr D is the traditional method used to prepare the tooth, but a more modern approach favours minimal intervention; the preparation may be restricted to just removing the decay rather than extending beyond it into the healthy part of the tooth. In relation to tooth 15, my advisor commented that there was no evidence to indicate that the restoration was not acceptable.

My advisor concluded that it was "quite clear" Dr B's dental treatment was below an acceptable standard. He commented that "the major concern is the failure to complete treatment needs as identified on at least two separate examination appointments and the failure to achieve a level of dental fitness that [Miss C] could be expected to have been provided". Dr B's treatment "doubtless contributed to the loss of one or more of her teeth". I concur with these conclusions.

In my opinion, Dr B's overall dental treatment fell well below an acceptable standard. Not only did he fail to provide treatment he had identified as required, but the treatment he did provide was of a poor standard, necessitating ongoing dental care. Accordingly, in my opinion, Dr B breached Rights 4(1) and 4(2) of the Code in relation to his treatment of Miss C's teeth 16, 24, 37 and 47.

Record-keeping
Dentists have an ethical duty to keep full, accurate and legible dental records. It is acknowledged by the profession in its *Code of Ethics* as fundamental to good professional practice. Good records improve co-operation and help ensure consistency between providers – a means of ensuring quality care, as recognised in Right 4(5) of the Code.

My advisor commented that Dr B's record-keeping is not of an acceptable standard. The *Code of Ethics* defines the standard of practice that the public expects and deserves. In terms of dental record-keeping, important information includes the presenting complaint, relevant history, clinical findings, diagnosis, treatment options and the treatment plan.

It is clear that Dr B's dental records did not reach this standard. Accordingly, he breached ethical standards and Right 4(2) of the Code.

Other comment

Patient information
Although Miss C did not explicitly complain about the lack of information provided to her in relation to her treatment, I acknowledge my advisor's comment that "following the initial record and treatment plan of 9 June 2000, there is no evidence of any informed consent procedures being provided". Under Right 6 of the Code Miss C was entitled to an explanation of her condition and a reasonable level of information about the risks of the proposed treatment. There is no evidence that Miss C received such information. I would recommend that Dr B review his practice in relation to this important aspect of dental care.

Proposed actions

- This matter will be referred to the Director of Proceedings in accordance with section 45(f) of the Health and Disability Commissioner Act 1994 for the purpose of deciding whether any proceedings should be taken.

- A copy of this report will be sent to the New Zealand Dental Council, the New Zealand Dental Association, and the Ministry of Health (HealthPAC Audit and Compliance).

- A copy of this report, with identifying details removed, will be sent to the New Zealand Dental Association, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes, upon completion of the Director of Proceedings' processes.

Addendum

The Director of Proceedings issued proceedings before the Dentists Disciplinary Tribunal. Pursuant to s 54(1)(c) of the Dental Act 1988, the Tribunal found Dr B guilty of professional misconduct, and imposed a penalty of censure and a fine of $5,000 plus 30% of the cost of the disciplinary process. The Tribunal also ordered a suspension of Dr B's registration as a dental practitioner for a period of three months, with effect from 1 September 2005.