Dentist, Dr B Dental Service

A Report by the Deputy Health and Disability Commissioner

(Case 14HDC01695)



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Executive summary

- On 12 December 2012 Mr A consulted Dr B at a dental service (the clinic) requesting crowns¹ on his front teeth and a tooth implant to replace a denture² on another tooth. Mr A told Dr B that he wanted "all his teeth fixed" before he travelled overseas in the new year. Mr A agreed to receive specialist CEREC³ technology treatment, which enabled crowns to be made by Dr B immediately rather than being made at a laboratory.
- 2. Dr B agreed to carry out the work but cautioned that lengthy appointments would be required. At the initial consultation, Dr B took three pre-treatment X-rays including a posterior bitewing⁴ and a periapical film of teeth 11 and 21.⁵ The following day, Dr B sent Mr A a treatment plan outlining the work to be done. Mr A replied via email accepting the treatment plan, and paid for the first stage of treatment.
- 3. At the first treatment consultation on 19 December 2012, Dr B performed root canal re-treatment on tooth 21 and placed ceramic crowns on teeth 21 and 11. One further X-ray was taken. Dr B did not use a rubber dam when re-treating the root canal. Mr A told HDC that he left the clinic with two white crowns alongside his remaining "very stained" teeth. Dr B told Mr A that tooth bleaching would occur after all other treatment had been completed.
- 4. At the second treatment consultation on 24 December 2012, Dr B performed crown work on teeth 14 and 24 and placed an on-lay on tooth 36. Mr A told Dr B that he was not satisfied with the crown shape, but Dr B advised Mr A to "leave things as they were for a few weeks to allow time for adaptation". Mr A also asked whether his existing denture (on tooth 22) could be matched to the colour of his new crowns. Dr B proposed a composite (veneer) be placed on the denture as a temporary solution. The treatment plan was not updated to reflect these discussions.
- 5. At the last consultation on 7 January 2013, restorative treatment was completed and Mr A's teeth were bleached. Mr A said that Dr B was not constantly present during the bleaching process, and after bleaching there was still a mismatch of shades between the crowns and the rest of his teeth. The composite (veneer) placed on Mr A's denture was described by Mr A as appearing bulky and unnatural. Dr B said that he used the best professional bleach available to bleach Mr A's teeth and, in his view, the results were acceptably good.

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¹ A crown is used to cover or "cap" a damaged tooth entirely. Besides strengthening a damaged tooth, a crown can be used to improve its appearance, shape or alignment.

² A prosthetic device used to replace missing teeth. Dentures are supported by the surrounding soft and hard tissues of the oral cavity.

³ Chairside Economical Restoration of Esthetic Ceramics (CEREC) is a method of dentistry for creating dental restorations using computer-aided design and manufacturing. CEREC allows dentists to construct, produce and insert individual ceramic restorations directly at the point of treatment in a single appointment.

⁴ Taken to visualise the crowns of posterior teeth. Also known as the "bitewing" view.

⁵ Teeth are numbered using the Universal Numbering System, which is a dental notation system for associating information to a specific tooth.

Findings summary

- 6. By failing to take an X-ray of all teeth that he was planning to crown, Dr B failed to provide services to Mr A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).
- 7. By failing to use a rubber dam when re-treating Mr A's root canal on tooth 21, Dr B failed to provide services to Mr A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.
- 8. By failing to record details of the treatment options discussed, advice given, what he encountered clinically, or further treatment provided, and failing to update the treatment plan, Dr B failed to comply with professional standards and, accordingly, breached Right 4(2)⁷ of the Code.
- 9. Adverse comment is made that Dr B did not perform a full mouth X-ray and obtain images of better quality.
- 10. Adverse comment is also made that Dr B did not recognise the risks of ongoing colour mismatch given the proposed order of treatment, and did not communicate this risk to Mr A.
- 11. Adverse comment is also made that Dr B did not delay crowning of the front teeth until the implant was ready for restoration.
- 12. The clinic was found not to have breached the Code.

Recommendations

13. It was recommended that Dr B provide a written apology to Mr A and undertake training on drafting treatment plans, documentation, and performing X-rays, with assistance from the Dental Council of New Zealand.

Complaint and investigation

- 14. The Commissioner received a complaint from Mr A about the services provided by Dr B. The following issues were identified for investigation:
 - Whether Dr B provided an appropriate standard of care to Mr A between December 2012 and January 2013.
 - Whether the clinic provided an appropriate standard of care to Mr A between December 2012 and January 2013.

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⁶ Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

⁷ Right 4(2) states: "Every consumer has the right to have services provided that comply with legal, professional, ethical and other relevant standards."

- 15. An investigation was commenced on 13 August 2015. This report is the opinion of Meenal Duggal, Deputy Commissioner, and is made in accordance with the power delegated to her by the Commissioner.
- 16. The parties directly involved in the investigation were:

Mr A Consumer/complainant

Dr B General dentist

Clinic Provider

Dr C Oral and maxillofacial surgeon

Dr D General dentist
Dr E Endodontist

17. Information was also received from:

Ms F Dental assistant
Ms G Receptionist

18. Independent expert advice was obtained from a dental practitioner, Dr Susan Gorrie (Appendix A).

Information gathered during investigation

Initial consultation

- 19. On 12 December 2012 Mr A attended the clinic and consulted dentist Dr B⁸ requesting crowns⁹ on some of his front teeth and a tooth implant to replace a denture¹⁰ on another front tooth.
- 20. Dr B had been the principal dentist at the clinic for many years.
- 21. Mr A said that he told Dr B that he wanted "all [his] teeth fixed". There was a discussion about the work required. Mr A said that it was "mostly Dr B saying what work was required" at the initial consultation.
- 22. At this initial appointment Dr B took three pre-treatment X-rays including a posterior bitewing 11 and a periapical film 12 of teeth 11 and 21, 13 which revealed an inadequate root filling and periapical radiolucency 14 of tooth 21.

⁸ Dr B obtained a Bachelor of Dental Surgery and has been registered in the scope of general dental practice for many years. Dr B is the principal dentist of the clinic and the director of the clinic.

⁹ A crown is used to cover or "cap" a damaged tooth entirely. Besides strengthening a damaged tooth, a crown can be used to improve its appearance, shape or alignment.

¹⁰ A prosthetic device used to replace missing teeth. Dentures are supported by the surrounding soft and hard tissues of the oral cavity.

¹¹ Taken to visualise the crowns of posterior teeth. Also known as the "bitewing" view.

¹² Periapical X-rays highlight only one or two teeth at a time and show the entire length of a tooth, from crown to root.

- 23. Mr A said that some of the X-rays taken by Dr B were not properly aligned, and that the X-ray of tooth 21 (which had had root canal work 15 done previously overseas) did not show the whole tooth. Dr B told HDC that he took X-rays only of the "suspect teeth", and that a full mouth survey or a panoramic radiograph would have exposed Mr A to ten times the radiation. Dr B also said that he did not consider that full mouth X-rays were indicated in Mr A's case, and that he did not consider that periapical radiographs, study models and vitality testing of symptomless teeth were necessary in Mr A's case. Dr B said that his approach of taking posterior bitewing X-rays and periapicals of suspect teeth complies with the NRL 16 guidelines.
- 24. Dr B told HDC that he considered Mr A's requirement to have his front teeth looking nicer for his planned trip overseas in early January to be the "emergency phase" of Mr A's treatment. Dr B said: "[A] full assessment of [Mr A's] dentition for continuing treatment (non-urgent) was to be done after the Emergency Phase, that is in the new year. Periapical radiographs, study models and vitality testing of symptomless teeth were not considered necessary for the Emergency Phase."
- 25. Dr B told HDC that Mr A's "overriding concern" was to have his crowns completed before Christmas, as he was planning to travel overseas in the new year. Dr B said he advised Mr A that laboratory-made crowns would be impossible to complete by the new year because the laboratories would be closed over the Christmas period.
- 26. Dr B said that the clinic had specialist CEREC¹⁷ technology, which enabled crowns to be designed and produced immediately, without the need for a technician to be involved. He said that Mr A knew of the technology, requested CEREC crowns, and wanted them completed before Christmas. Dr B said he advised Mr A that CEREC crowns could be prepared but, as lengthy appointments would be needed and Mr A was not an existing patient, a non-refundable "booking deposit" was required. Mr A agreed to proceed.
- 27. Dr B said that Mr A had a denture on tooth 22 that he wanted replaced with a "mini implant". Dr B told HDC:
 - "I ... advised [Mr A] that his expectation of an immediate mini-implant was not clinically viable in his case and that I would need to refer him to an oral surgeon to make an assessment for a proper implant in the New Year. In the meantime, he would need to continue wearing his partial denture, although there would be a

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¹³ Teeth are numbered using the Universal Numbering System, which is a dental notation system for associating information to a specific tooth.

¹⁴ A dark area of X-ray surrounding the apex of the root of a tooth.

¹⁵ Treatment to repair and save a tooth that is badly decayed or becomes infected. During a root canal procedure, the nerve and pulp are removed and the inside of the tooth is cleaned and sealed. ¹⁶ National Radiation Laboratory.

¹⁷ Chairside Economical Restoration of Esthetic Ceramics (CEREC) is a method of dentistry for creating dental restorations using computer-aided design and manufacturing. CEREC allows dentists to construct, produce and insert individual ceramic restorations directly at the point of treatment in a single appointment.

mismatch of colour with the new crowns, which he had requested to be made a whiter colour.

[Mr A] seemed happy with this, although he appeared concerned [with the cost] of having a proper implant placed by an oral surgeon ... [A]n appropriate referral to the oral surgeon [Dr C] was made."

28. Mr A also required root canal re-treatment on tooth 21. Dr B told HDC:

"I advised [Mr A] that re-treatment of failed root canals are usually referred to a specialist by me, as they have special skills and equipment, and it may not be as successful in my hands, however he was not prepared to wait to see an endodontist and asked me to redo it so that his crown could be completed. [Mr A] advised that he was prepared to take the risk that the re-treatment would not succeed."

- 29. Dr B said he advised Mr A that root canal re-treatment should be done by a specialist, "but [Mr A] demanded that I do it so that the cosmetic treatment was not held up and clearly understood that re-treatment by a specialist may be required at a later date". Dr B said that Mr A offered to sign a waiver but said he did not take him up on his offer.
- 30. Conversely, Mr A told HDC that Dr B did not advise him that root canal treatment should be done by a specialist. Mr A said that Dr B was willing to do it himself. Mr A said he did not offer to sign a "waiver" to say that he understood that re-treatment by a specialist might be required at a later date.
- 31. Dr B provided a statement from his dental assistant, Ms F, who stated:

"[Dr B] advised [Mr A] to have a tooth re-treated for [root canal treatment] by an endodontist to give it more of a chance to be successful. [Mr A] insisted [Dr B] do it and inside the timeframe given, even though [Dr B] said it may need retreatment again by a specialist later."

- 32. Dr B also provided a statement from his then receptionist, Ms G, who said that after the initial visit, Dr B asked her to call two endodontists 18 on Mr A's behalf "to see when the soonest appointment was available ... There were no available appointments with either specialist until the New Year. This did not suit [Mr A]. He needed his treatment to be completed by early in the New Year at the latest. [Mr A] was quite adamant about this." Ms G stated further: "I recall [Mr A] pressing me to schedule his appointments within a short time-frame." She also said that she saw Mr A after his crowns had been fitted, and that he "indicated he was happy with the work ... [I]n all dealings with [Mr A], [he] spoke favourably to me regarding his care ..."
- 33. Mr A said he expressed concern that once his teeth were crowned there would be a possible mismatch in colour with his "very stained" natural teeth, and asked if the whitening could be done first.

¹⁸ Mr A told HDC in response to the provisional opinion that Ms G called an oral surgeon twice to make an appointment for an implant, not an endodontist.



- Dr B told HDC he advised Mr A that bleaching of the remaining teeth would not be performed until all treatments had been completed. Dr B said that "because [Mr A] had requested his crowns to be made a whiter colour than his natural teeth, the treatment plan included tooth whitening of the remaining natural teeth. Of necessity, this had to be done after the crown fitting so the correct colour match could be achieved." Dr B said Mr A understood that there would be a period where the colour was mismatched. Dr B also said that had the whitening taken place prior to the placement of crowns, "[Mr A's] requirements would not have been met by the first week of January". Dr B told HDC that root canal treatment and leaky fillings needed to be attended to first before bleaching. He said: "[B]leaching is contraindicated when there are leaky fillings and decay present, as it can cause pulpal irritation."
- 35. Mr A was asked to make another appointment in order to commence treatments.
- 36. Dr B did not provide HDC with any clinical notes that recorded the treatment issues he discussed with Mr A at this consultation, or the risks involved should the treatment not succeed. Dr B said that at the initial consultation options were discussed regarding the types of crown, the anticipated result, staging of treatment, cost, and pros/cons. Dr B said that he did not make notes about this consultation because he did not have time, and he considered it "superfluous" to record all the advice given and detail all the questions that were asked given that Mr A had come to him "knowing exactly what he wanted". Dr B now agrees that it would have been desirable to have some sort of written record.

Treatment plan

- 37. On 13 December 2012 Dr B emailed a treatment plan to Mr A. Mr A acknowledged receipt of this email the same day and thanked Dr B for the treatment plan. ¹⁹ Dr B said that there had been insufficient time to complete the plan on the day of the initial consultation. Mr A told Dr B in his reply email: "[The treatment plan] gives me better indication on what to expect and prepare [for]."
- The treatment plan (**Appendix B**) states that a crown was to be applied to teeth 11, 14, 21 and 24, root canal re-treatment work applied to tooth 21, "Inlay/Onlay Cerec Milled Porcelain" applied to tooth 36, "adhesive restoration" on teeth 13, 17, 27 and 46, and that there would be an oral hygiene session.
- 39. In his email attaching the treatment plan, Dr B stated that the plan did not include the implant crown on tooth 22 "as you indicated you might have this done [elsewhere]" and that "if you require tooth bleaching we will do that for half price, i.e. \$450". Mr A said in a reply email: "Yes, I want the teeth bleaching. It will look funny with white crowns and stained adjacent teeth. Can you do that on the same day?" Dr B did not reply to that question on email or update the treatment plan to include bleaching.
- 40. Dr B told HDC that he was "very clear" about the treatment plan and financial arrangements which were discussed in person at the initial consultation. He said that Mr A accepted the plan and payment arrangements and was happy to proceed. In

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¹⁹ Email sighted by HDC.

contrast, Mr A told HDC that he did communicate his acceptance, but "didn't know much about what had been planned".

41. Dr B provided HDC with a technical chart depicting the condition of Mr A's teeth prior to treatment and the treatment required (**Appendix C**).

Contact after initial consultation

42. Mr A said that Dr B telephoned him "almost immediately" after he sent the quote, and that he felt "pressured to commit to treatments", which gave him "no time to properly consider other options available". In written response to Mr A's complaint, Dr B disagreed that he pressured Mr A or discouraged him from getting a second opinion. Dr B stated:

"I strongly disagree that my behaviour in this regard was anything other than professional ... I always inform my patients of their options, explain these options in full, encourage my patients to ask questions, advise appropriately and provide a treatment plan for [the patient] to take away to consider ... [Mr A was] no exception to this. Furthermore I recall that it was in fact [Mr A] who wanted [his] dental treatment completed in an expedient timeframe."

- 43. Dr B said that further he told Mr A that December was a busy month, and that he could not guarantee that all treatment would be completed within Mr A's "preferred timeframe". Dr B told Mr A that he "felt rushed and pressured" by him. Dr B told HDC that he "in no way forced [Mr A] to make a rushed decision", and that it was Mr A who was "insistent on completing [treatment] before Xmas, and who was putting pressure on my practice to accommodate his wishes".
- 44. Mr A said that when he wanted to seek a second opinion on the work Dr B had proposed, Dr B appeared agitated. Mr A told HDC that "not wanting to make the situation any worse", he paid Dr B \$3,680 for the first course of treatment (consisting of a deposit, the balance of the appointment charge and an initial consultation fee). Dr B said that he explained in person and by email that appointment times are in high demand leading up to Christmas, and he told Mr A that if he booked out most of a day for Mr A then he required a "nominal deposit" to ensure that the appointment was honoured. Dr B said that Mr A accepted the plan and payment arrangements and was happy to continue as discussed.
- 45. In his response to HDC, Dr B said that Mr A wanted the work completed by the first week of January. Dr B said that there was extensive discussion about the possible issues that could arise from attempting to meet Mr A's required timeframe, and "[Mr A's] decision was that it was more important for [him] to have his smile improved before his trip" than wait for the specialists and hygienists to be available and laboratories to re-open in the new year.

First treatment consultation

46. On 19 December 2012 Mr A attended an appointment with Dr B for root-canal retreatment of tooth 21 and the placement of ceramic crowns on teeth 21 and 11. A further X-ray of tooth 21 was taken during this appointment.

- 47. Dr B did not use a rubber dam²⁰ during the re-treatment of the root canal. He told HDC that the rubber dam was "not necessary for the anterior endodontic procedure and is not indicated for crown preparation and cementation (where it would actually impede the procedure)". He said that "there are situations where it is impractical and not as essential" to use a rubber dam, in [Mr A's] case because tooth 21 is a central incisor and "there is no problem with access nor isolation", and therefore it was not necessary. Dr B also said that there was little secure purchase for a rubber dam clamp, and that use of a dam would have "obscured the root angle".
- 48. In relation to the crowns, Dr B told HDC:

"Construction of the crowns went smoothly, uneventfully and on time ... The tooth shape was mocked up in the mouth in a composite material and shown to [Mr A] for approval. When his approval of the appearance was obtained, I acquired infra-red images of the shape and replicated it in the final CEREC porcelain crowns during the design procedure."

- 49. In response to the provisional opinion Mr A told HDC that Dr B designed the crowns on his computer and no approval was sought from him about the design. Mr A said he was asked to leave the treatment room and was called back in when the crowns were ready for placement.
- 50. Mr A told HDC that he was surprised when he got out of the chair after the first treatment consultation and noted two white crowns against his stained teeth. He said that this is when Dr B said that bleaching of the rest of his teeth would take place after treatment had finished.
- 51. Mr A said that when he left the clinic with two A1 shade crowns and his remaining teeth were very stained, he was left in "mental shock". Mr A said he was embarrassed to appear in public, took leave off work, and felt afraid to go to social events.
- 52. Mr A also reported in his complaint that the ceramic crowns were not level. He said that "both had drops in the joints. The[y] were also poorly shaped."

Second treatment consultation

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- 53. Mr A's next consultation was on 24 December 2012. The "Treatment Done Report" provided by the clinic indicates that an on-lay was placed on tooth 36, and crowns prepared for two other teeth (24 and 14).
- 54. Mr A said he told Dr B that he was not satisfied with the crown shape and shade.
- 55. Dr B told HDC that while the CEREC crown could be modified, and it was easy to remove material, the material could not be added back if too much of the crown was removed. Dr B told HDC that he advised Mr A "to leave things as they [were] for a few weeks to allow time for adaptation".

²⁰ A dental dam is a thin, rectangular sheet, usually made of latex rubber, used to isolate the operative site (one or more teeth) from the rest of the mouth.

- 56. Dr B told HDC that in relation to the adequacy of the crown work he performed, he could "not identify any marginal deficiency in the crown fittings. Radiographically they appear to be a very accurate fit, with minimal cement thickness."
- 57. Dr B noted that the material used in the crowns can be "machined in the mouth to smooth the margins [and] alter the contours and they can be polished up to a level similar to the high floss obtained by porcelain glaze ...". He further noted that the final polishing was probably not carried out in Mr A's case as he did not return to the clinic as instructed. Mr A told HDC in response to the provisional opinion that "nothing was mentioned about coming back to do final polishing".
- 58. According to Dr B, during this appointment Mr A asked Dr B whether his existing denture (tooth 22), which was to have an implant crown, could be matched to the colour of his new crowns. Dr B said that as the difference in colour was "only a temporary situation until his implant was done, the simplest procedure would be to veneer the denture tooth with composite material, to which [Mr A] agreed". The treatment plan was not updated to reflect these discussions. Placing of the composite (veneer) was done at the final consultation (see below).
- 59. According to Dr B, it was not a major concern to colour match the porcelain crowns to the bleaching.
- 60. On 4 January 2013 Mr A made a payment of \$1,057.50 for the outstanding work set out in the treatment plan, and paid a further sum for teeth whitening.

Final consultation

- 61. At the third and final consultation on 7 January 2013, restorative treatment was completed and Dr B's dental assistant, Ms F, assisted with the bleaching of Mr A's teeth.
- 62. Mr A said that Dr B was not "constantly present" during that treatment. Dr B told HDC that he "continually monitored the procedure" and was within ten metres at all times. He said that he advised Mr A that his "hygienist was on annual leave and if he wanted the bleaching done in that time frame it would be attended by [his] senior clinical assistant, who had done such procedures before, under [his] close supervision". Dr B said that Mr A "agreed to this as he did not want to wait".
- 63. In her statement to HDC, Ms F described the attendances on Mr A during the teeth whitening process:

"[Mr A] agreed that I could sit with him while the bleaching worked. [Dr B] applied the dental dam to protect the soft tissues from the whitening, then applied the whitening gel. The gel sits on for eight minutes a round ... I sat with [Mr A] in the surgery next door to [Dr B's] surgery to keep suctioning and keep [Mr A] comfortable. When time was up to reapply the whitening, [Dr B] was told and he came in to remove the first round ([I] ha[d] to rinse and suction it off). [Dr B] then reapplied the next round while I stayed chairside with [Mr A] again."

- 64. Mr A told HDC that he does not recall asking about the teeth bleaching process, but said he was led to believe that Dr B would complete the tooth whitening process in one sitting, and that he would not be left with a mismatch of colour on his teeth.
- 65. Mr A said that the result of the bleaching was "far from desired with noticeable mismatch of shades between crowns and the rest of [his] teeth. The denture looked very obviously stained. [Dr B] then attempted to place white composite on the denture. It looked bulky and unnatural ..."
- 66. According to Dr B, he used "the best professional bleach on the market" for the bleaching of Mr A's teeth, and in his view "the results were acceptably good". In relation to the composite (veneer) on the denture, Dr B stated that this was a temporary situation until the implant was completed.

Further information

- 67. Mr A told HDC that there was no hygienist appointment scheduled, as set out in the treatment plan, and no follow-up from Dr B about this, despite Mr A's attempts to schedule a hygienist appointment.
- 68. Dr B told HDC that after the final consultation the clinic called Mr A to schedule a hygienist appointment, but that Mr A did not wish to come to the clinic at the times available.

Referral treatment

- 69. After the final consultation, Dr B referred Mr A to an oral and maxillofacial surgeon Dr C for bone grafting and implant in the area of tooth 22.
- 70. Mr A consulted Dr C for a check-up and said that he no longer wanted treatment from Dr B. Dr C referred Mr A to general dentist Dr D to have his front teeth straightened and to receive oral hygiene care.
- 71. Dr D referred Mr A to endodontist Dr E for further root canal re-treatment.
- 72. Dr E saw Mr A on 27 February 2014. She reported her observations as follows:

"Tooth 21 was asymptomatic. The tooth had been previously root filled. The root filling was undercondensed (ie the canal inadequately filled with Gutta Percha which is the root filling material), and there appeared to be a poor coronal seal (not enough composite restoration over the Gutta Percha in the pulp chamber).

There was a periapical radiolucency present, which was larger than it was when it was compared to a previous film supplied by [Dr D]. This indicated failure of the root filling and deterioration of the periapical (surrounding) tissues as a result."

73. Dr E commenced treatment on 3 March 2014, and reported her findings as follows:

"The original root filling was removed at this appointment. The pulp chamber had not been opened out sufficiently. There was retained necrotic pulp present, along with a necrotic smell. The tooth was dressed and a temporary restoration placed."

Further information — Dr B

- 74. As a result of this complaint, Dr B has made a number of changes to his practice, including:
 - Trialling the use of voice recognition software to enable recording of patient notes;
 - Recording notes in handwriting on the back of the patient's history sheet while a consultation is taking place;
 - Requiring a signed waiver, confirming that the patient has been fully advised of pros and cons in cases where patient demands conflict with his recommendations and understanding of best practice, yet fall within the realms of sound dentistry.

Responses to provisional opinion

- 75. Mr A's response to the "information gathered" section of the provisional opinion has been incorporated above where appropriate.
- 76. Dr B told HDC that the provisional opinion is acceptable to him and that he is happy with the proposed recommendation.

Relevant standards

- 77. The Dental Council's New Zealand Code of Practice: Patient Information and Records (2006) states:
 - "2.6 The patient's treatment record **must** contain a record of any and all treatment or service provided within a dental practice, whether it is provided by the dentist or any other health practitioner or other employee of the dentist.
 - 2.7 [The treatment] record **must** include:

. . .

(c) A concise and relevant signed medical history which is updated at appropriate intervals.

. . .

- (f) Detail[s] of any presenting complaint, relevant history, clinical findings, diagnosis, treatment options given, and final treatment plan agreed upon;
- (g) A concise description of any and all treatment for services provided;

. . .

2.8 The record **should**, in the interests of best practice also include:

(i) A description of any procedure, including any materials used, variation from any standard or usual technique, and any general comments on the procedure undertaken. The detail of the description should reflect the complexity of the treatment or the seriousness of the potential outcomes.

. . .

(k) Consents obtained for treatment

. . .

2.10 Written records must be ... accurate, up to date, complete, relevant and not misleading. Information which is subject to change over time should be checked for accuracy and updated at appropriate intervals."

Opinion: Dr B

Introduction

- 78. Mr A consulted dentist Dr B for dental treatment. At an initial consultation on 12 December 2012 there was a discussion about the work required, including root canal treatment, insertion of crowns and a possible tooth implant. X-rays were taken at this appointment.
- 79. Following the initial consultation, Dr B emailed Mr A a treatment plan (**Appendix B**). Mr A agreed to the treatment set out in the treatment plan and returned to the clinic on 19 December 2012 to commence treatment. Mr A had his second treatment consultation on 24 December 2012, and a last consultation on 7 January 2013.

Standard of clinical treatments — Breach

X-rays

- 80. Dr B took three pre-treatment X-rays: a posterior bitewing and a periapical film of teeth 11 and 21. A fourth X-ray (of tooth 21) was taken during treatment. Dr B told HDC that he took X-rays only of the "suspect teeth", and that a full mouth survey or a panoramic radiograph would have exposed Mr A to ten times the radiation. Dr B also said that he did not consider that full mouth X-rays were indicated in Mr A's case, and that he did not consider that periapical or panoramic radiographs, study models and vitality testing of symptomless teeth were necessary in Mr A's case. Dr B said that his approach of taking posterior bitewing X-rays and periapicals of suspect teeth complied with the NRL guidelines.
- 81. Dr B told HDC that he considered Mr A's requirement to have his front teeth looking nicer for his planned overseas trip in early January, the "Emergency Phase" of Mr A's treatment. Dr B said that "a full assessment of [Mr A's] dentition for continuing treatment (non-urgent) was to be done after the Emergency Phase, that is, in the new year. Periapical radiographs, study models and vitality testing of symptomless teeth were not considered necessary for the Emergency Phase."

- 82. In relation to the posterior bitewing, my expert advisor, dentist Dr Susan Gorrie, notes that Mr A appeared to have difficulty biting down, evidenced by the left-hand side X-ray being retaken. She notes that the film is "not ideal" on either side, but shows the teeth adequately "and can be used for the purpose of diagnosing dental decay". In relation to the X-ray of tooth 21 taken during the re-treatment procedure, she notes that some of the tooth has been missed, but that the important aspect, the apex, is visible.
- 83. Dr Gorrie advised that a full mouth X-ray is not standard practice for a new patient examination, but said:

"In my opinion a comprehensive treatment plan [for] a new patient requiring multiple crowns and fillings would benefit from a full mouth X-ray ..."

- 84. Dr Gorrie considered "the quality and lack of X-rays a moderate departure from accepted practice".
- 85. I accept Dr Gorrie's advice. I am concerned that the X-rays taken by Dr B were not of ideal quality, and that he did not perform a full mouth X-ray. Mr A was a new patient presenting with significant dental treatment requirements. Obtaining a full mouth X-ray would have enabled Dr B to assess the treatment required fully. However, I note that Dr B was attempting to meet Mr A's timelines for improvement of the appearance of his teeth, and has stated that non-urgent treatment, including further radiographs and models, was to be done in the future. I note also that, while not ideal, the X-rays taken were of sufficient quality for diagnosis and treatment.
- 86. Dr Gorrie also noted that periapical X-rays were not taken of all the teeth Dr B intended to crown (only of teeth 11 and 21). She advised that it would be standard practice to take periapical X-rays of all teeth that were to be crowned. I accept Dr Gorrie's advice that prior to carrying out crown work a clear X-ray should be taken.

Root canal re-treatment

- 87. Dr B agreed to undertake root canal re-treatment of tooth 21. Dr Gorrie observed that endodontic (root canal) re-treatments carry a high rate of failure and are often referred to a specialist. However, she advised that it would be appropriate for a general dentist to carry out the procedure if the dentist felt confident to do so. Dr Gorrie said that the accepted treatment would be to redo the root filling prior to crowning the teeth.
- 88. Dr B said that usually he refers re-treatment of failed root canals to a specialist, and strongly advised Mr A that the root canal work should be done by a specialist. Dr B said that Mr A was not prepared to wait and see an endodontist, and asked Dr B to redo the root filling so that his crown could be completed and the cosmetic work was not delayed. Dr B also said that he made certain that Mr A understood that the work could fail and might ultimately require specialist care, but he declined an offer by Mr A to sign a waiver. Ms G and Ms F also state that attempts were made, at the request of Dr B, to make an appointment with an endodontist, and that Mr A told them that Dr B would complete the root canal treatment because it would not work for him (Mr A) to wait until the new year.

- 89. In contrast, Mr A said that Dr B did not tell him that root canal treatment should be done by a specialist, and said that he did not offer to sign a waiver.
- 90. It is unfortunate that there is no record of what advice was given to Mr A. However, taking into account the above recollections, I find it more likely than not that Dr B did make it clear to Mr A that he recommended that root canal re-treatment should be undertaken by a specialist.
- 91. As to the quality of the work undertaken, Dr Gorrie advised: "[I]t is hard for me to comment on the adequacy of the root canal treatment." She noted Dr E's observations of the tooth in February and March 2014. Dr Gorrie advised that the periapical X-ray, taken by Dr B following the root canal re-treatment, showed that the root filling performed by Dr B was "an improvement over the presenting condition" and, given that there were no symptoms following treatment, Dr Gorrie considered that it could have been a success.
- 92. While I note the need for re-treatment of the root canal 15 months later, and the observations made by endodontist Dr E, Dr Gorrie has stated that it was difficult for her to comment on the adequacy of the root canal treatment. For this reason, I am unable to make a finding as to whether the root canal re-treatment carried out by Dr B was inadequate.
- 93. Dr Gorrie did, however, advise that it was a "significant departure" from accepted practice not to use a rubber dam for root canal procedures. In response to this advice, Dr B said that, in his view, there are "situations where [use of a rubber dam] is impractical and not as essential", Mr A's case being one of them. Dr B said that because tooth 21 is a central incisor he saw no problem with access or isolation, and there was little "secure purchase" for a dam clamp. He also submitted that the use of a rubber dam would have "obscured the root angle".
- 94. In response to Dr B's reply to her earlier advice, Dr Gorrie advised that she remained of the view that a rubber dam is essential for the protection of the patient, and that this is particularly important for root canal re-treatment where there is a "lower success rate". She advised that a rubber dam helps to prevent saliva recontamination and secondary infection, and helps to prevent instruments from dropping down the patient's throat.
- 95. I agree with and accept Dr Gorrie's further advice. In my view, the safeguards for the patient afforded by the use of a rubber dam outweigh the practicalities of not using one, particularly, as in this case, where Dr B was re-treating a root canal.
 - Conclusion Standard of clinical treatment
- 96. By failing to take an X-ray of all the teeth he was planning to crown, and failing to use a rubber dam when re-treating Mr A's root canal on tooth 21, Dr B failed to provide services to Mr A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Teeth bleaching — **Adverse comment**

- 97. At the first treatment consultation, Dr B inserted A1 shade crowns prior to bleaching Mr A's existing teeth. Dr B said that because Mr A wanted his crowns to be a whiter shade than his natural teeth, teeth whitening had to occur after fitting the crowns so that the correct colour match could be achieved.
- 98. Dr B told HDC that, at the initial consultation, options were discussed regarding the types of crown, the anticipated result, staging of treatment, cost, and pros and cons. He said that Mr A understood that the colour of his crowns compared to his natural teeth would be mismatched for a period.
- 99. In his email to Mr A attaching the treatment plan, Dr B stated: "If you require tooth bleaching we will do that for half price, i.e. \$450." Mr A said in a reply email: "Yes, I want the teeth bleaching. It will look funny with white crowns and stained adjacent teeth."
- 100. Mr A told HDC that he was surprised when he got out of the chair after the first treatment consultation and noted two white crowns against his stained teeth. He said that this is when Dr B said that bleaching of the rest of his teeth would take place after the treatment finished.
- 101. Mr A told HDC that the end result of the bleaching was "far from desired with noticeable mismatch of shades between crowns and the rest of [his] teeth". Dr B said that, in his view, the results of the bleaching were "acceptably good".
- 102. Dr Gorrie advised that "the accepted standard of care would be to bleach teeth first, allow the colour to settle and then go ahead with crowns to match the new colour". By not following this procedure, Dr Gorrie advised that Dr B's practice represented a moderate departure from the accepted standard of care.
- 103. In response to Dr Gorrie's advice, Dr B agreed that bleaching prior to placement of crowns was standard procedure; however, he stated that "if sequenced in this way, [Mr A's] requirements would not have been met by the first week of January". Dr B also stated that it was not a major concern to colour match the porcelain to the bleaching.
- 104. Dr B also told HDC that "bleaching is contraindicated when there are leaky fillings and decay present, as it can cause pulpal irritation".
- 105. Dr Gorrie acknowledged that bleaching would not be undertaken in the presence of decay or leaky fillings, and that an "accepted sequence of care sees disease and decay treated first before cosmetic procedures i.e. bleaching". She also advised that bleaching cannot be done to a particular shade.
- 106. In relation to the order in which bleaching and crowning occurred, Dr Gorrie acknowledged that the New Zealand Dental Association code of practice stated that "patients have the right to make treatment choices and the dental practitioner must respect these even if they disagree with them or believe that the patient's choice is not in the best interest of the patient". She stated that, in her opinion, "the consumer's

wishes should not have influenced the bleaching care provided and the timing of that care unless they accepted the risk of an imperfect match".

- 107. I accept that Dr B appropriately delayed bleaching Mr A's teeth until the root canal re-treatment and remedial work had been done.
- 108. I also accept that Dr B undertook the crown work at the same time as the root canal re-treatment in order to meet Mr A's timeframes, and in accordance with the treatment plan. As a result, the period of mismatched colour prior to bleaching was inevitable, and Mr A was aware of this from the first treatment consultation.
- 109. While I accept that Mr A was aware, at some point, that there would be a temporary mismatch in colour between his crowns and other teeth prior to bleaching, I have found no evidence of any discussion about the possibility of ongoing difference in colour as a result of the order in which crowning and bleaching was carried out.
- 110. While again, I accept that Dr B was attempting to meet Mr A's timeline by the order in which he staged the work on Mr A's teeth, I am concerned that Dr B did not recognise the risk of ongoing colour mismatch given the proposed order of treatment, and therefore did not communicate this risk to his client.
- 111. Mr A also complained that the bleaching was carried out by Dr B's dental assistant without Dr B's "constant presence". Ms F stated, however, that it was Dr B who applied the dental dam and applied the whitening gel, and that her role was to "keep suctioning and keep [Mr A] comfortable".
- 112. Dr B said that he advised Mr A that his hygienist was on leave, and that if he wanted the bleaching done in his timeframe "it would be attended to by [his] senior clinical assistant". Dr B said that Mr A "agreed to this and did not wish to wait". Dr B told HDC that he "continually monitored the procedure" and was within ten metres at all times.
- 113. I accept that Dr B was actively involved in the bleaching process. However, given Mr A's and Dr B's differing accounts and the absence of any records stating what was discussed, I am unable to make a finding as to what was discussed, prior to the bleaching, about the role Dr B would play.

Clinical documentation — Breach

114. Dr B did not make any clinical notes of his discussions with Mr A. Dr Gorrie advised:

"I find the standard of documentation poor ... Nowhere in the notes is there mention of the presenting complaint and [Mr A's] concerns; no mention of the discussions had and the informed consent process. [There is] [n]o mention of other special tests such as study models. The treatment plan was just a list and seemed to be primarily [about] defining costs. There was no mention in the notes of the constraints of time or the fact that [Dr B] recommended root canal re-treatment by an endodontist ..."

- of the treatment options he said he discussed with Mr A, including the potential risks associated with Dr B doing root canal work as opposed to a specialist, and what advice was given about the impact Mr A's expected timeframes could have on the success of treatment.
- There is also no record of what was encountered clinically whilst providing treatment, and what further treatment was provided, in addition to the treatment stipulated in the treatment plan. The treatment plan was not updated to reflect the veneer for tooth 22, which was agreed upon after the original treatment plan was sent to Mr A, and there is no reference to tooth whitening in the treatment plan.
- 117. Health professionals are required to keep accurate, clear, legible and contemporaneous clinical records. They are a record of the care provided to the patient and clinical decisions made.
- 118. The Dental Council of New Zealand "Code of Practice: Patient Information and Records" (2006) outlines the importance of recording a patient's treatment. It states:
 - "2.7 [The treatment] record **must** include:

. . .

- (f) Detail[s] of any presenting complaint, relevant history, clinical findings, diagnosis, treatment options given, and final treatment plan agreed upon;
- (g) A concise description of any and all treatment or services provided.

. . .

2.8 The record **should**, in the interests of best practice also include:

. . .

(i) A description of any procedure, including any materials used, variation fro many standard or usual technique, and any general comments on the procedure undertaken. The detail of the description should reflect the complexity of the treatment or the seriousness of the potential outcomes.

. . .

- (k) Consents obtained for treatment."
- 119. In my view, Dr B's record-keeping did not comply with the Dental Council's Code of Practice. By failing to record details of treatment options discussed, advice given, what he encountered clinically, or further treatment provided, and failing to update the treatment plan, Dr B failed to comply with professional standards and, accordingly, breached Right 4(2) of the Code.

Crown work and veneer — Adverse comment

120. Dr B placed CEREC crowns on teeth 11, 14, 21 and 24 as stipulated in the treatment plan. Mr A complained that, once complete, the crowns were not level, had drops in their joints, and were poorly shaped. He also complained that the veneer placed on tooth 22 was bulky and unnatural.

- 121. Dr Gorrie said that it was difficult to assess the adequacy of the crown work undertaken, but noted that "certainly from the pictures supplied by [Dr D] it appears they were monochromatic and of poor form". Dr Gorrie noted that an X-ray supplied by Dr D showed a possible gap at the margin of tooth 24, "and this may well be filled with cement and not be a defect, but [it may represent] a point of weakness". Dr Gorrie also noted that as an implant had been planned for tooth 22, "it would be more acceptable practice to delay crowning the two front teeth until the implant is ready for restoration and the three crowns can be done together, thus ensuring good form and shape between the three [crowns]".
- 122. Dr B agreed with this advice regarding sequencing. However, he noted that "if sequenced [according to Dr Gorrie's advice], [Mr A's] requirements would not have been met by the first week of January".
- 123. Dr B told HDC that in relation to the adequacy of the crown work he performed, he could "not identify any marginal deficiency in the crown fittings. Radiographically they appear to be a very accurate fit, with minimal cement thickness".
- 124. Dr B noted that the material used in the crowns can be "machined in the mouth to smooth the margins [and] alter the contours and they can be polished up to a level similar to the high gloss obtained by porcelain glaze ...". He further noted that the final polishing was probably not carried out in Mr A's case as he did not return to the clinic as instructed.
- 125. In relation to the placing of a composite (veneer) on tooth 22, Dr B noted that this was only a temporary solution. Mr A had been referred to a specialist for further treatment of this tooth.
- 126. Dr Gorrie advised that it would have been more acceptable practice for Dr B to delay crowning the two front teeth until the implant was ready for restoration, so that the three crowns could be done together, thus ensuring good form and shape. I accept Dr Gorrie's advice.
- 127. It would have been preferable for Dr B to have delayed crowning of the front teeth until the implant was ready for restoration. This would also have removed the necessity for a composite (veneer) to be placed on tooth 22. However, I note that the order in which the work was done was in large part designed to meet Mr A's desired timelines. As Mr A did not return to Dr B, it is not possible to determine whether the crowns could have been improved had this occurred.

Pressure to commence treatment — Other comment

- 128. Mr A said that he felt "pressured" by Dr B to "commit to treatments", and was given "no time to properly consider other options" after the initial consultation. Dr B strongly disagreed with Mr A and said that "in no way" did he pressure Mr A or discourage him from obtaining a second opinion. Dr B said that he always informs patients of their options, encourages them to ask questions, and provides a treatment plan for the patient to take away and consider.
- 129. Dr B told HDC that he "in no way forced [Mr A] to make a rushed decision", and that he felt it was Mr A who put pressure on his practice to accommodate his timeline.

- 130. Dr B provided Mr A with a treatment plan via email the day after the initial consultation. Mr A replied thanking Dr B for the plan, and transferred money to cover costs on the same day.
- 131. While the time from initial consultation to receipt of the plan and the first treatment consultation was short, this appears to have been driven by Mr A's timeframes. There is no evidence, other than Mr A's feeling of pressure, that Mr A was pressured by Dr B to commit to treatments.

Opinion: Clinic — No breach

132. During the period under investigation, Dr B was the director of the clinic. In addition to any direct liability for a breach of the Code, under section 72(2) of the Health and Disability Commissioner Act 1994 (the Act), employing authorities are vicariously liable for any breach of the Code by an employee. Under section 72(5) of the Act, an employer is liable for acts or omissions by an employee unless the employer proves that it took such steps as were reasonably practicable to prevent acts or omissions leading to an employee's breach of the Code. In my view, Dr B's errors were the result of individual clinical decision-making and not due to any shortcomings in the policies and procedures of the clinic. Accordingly, I find that the clinic did not breach the Code.

Recommendations

133. I recommend that Dr B:

- a) Undertake training on drafting treatment plans, documentation, and performing X-rays, with assistance from the Dental Council of New Zealand, and provide evidence of having attended the training and the content of such training within three months of the date of this report.
- b) Provide a written apology to Mr A. The apology should be sent to HDC within three weeks of the date of this report, for forwarding to Mr A.

Follow-up actions

- 134. An anonymised copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Dental Council of New Zealand and the District Health Board, and they will be advised of Dr B's name in covering correspondence.
- 135. An anonymised copy of this report with details identifying the parties removed, except the expert who advised on this case, 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.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from a general dentist, Susan Gorrie:

"I have been in private practice for thirty years. I completed my BDS at Otago in 1981 and a postgraduate diploma in restorative dentistry in 1991. I am a fellow of the International College of Dentists. I have an interest in Restorative Dentistry.

I have been asked to review the documents and provide an opinion on the following issues:

- 1. The adequacy of the x rays performed and whether a full mouth X-ray should have been undertaken
- 2. The adequacy of the crown work undertaken
- 3. The adequacy of the root canal performed
- 4. The standard of documentation and
- 5. Any other comments on the care provided.

I have been provided with copies of the following documents:

- complaint
- Provider response
- clinical records from [the clinic] and
- comments and clinical records from subsequent providers

[Mr A] complains that his crowns were not level, were poorly shaped and had drops in the joints, and that his root canal was not performed properly. He complains that some of the xrays [Dr B] took of his teeth were not properly aligned and that not all of his teeth were X-rayed.

[Mr A] attended [the clinic] four times from 12/12/12 to 07/01/13. During that time he had an examination, root canal treatment on tooth 21, two anterior cerec crowns, two posterior cerec crowns, a partial coverage cerec overlay and tooth bleaching. Teeth 17, 13, 27 and 46 were treated with one surface adhesive restorations.

The X-rays taken were PBWs [posterior bitewings] (a standard screening X-ray of both sides ideally showing from the distal of the 7 to the distal of the 3 top and bottom on each side). The patient bites on a film holder while the film is in the mouth. [Mr A] appears to have had difficulty biting down as evidenced by the left hand side one being retaken. The second film is of better quality. The view on the film is not ideal on either side (the bite is still held a little open) but shows the teeth adequately and can be used for the purpose of diagnosing dental decay. A periapical film was taken of teeth 11 and 21. This showed the apices of both teeth revealing an inadequate root filling and a periapical radiolucency associated with tooth 21 which could indicate infection. The accepted treatment would be to redo this prior to crowning these teeth. Endodontic re-treatments carry a higher rate of failure and are often referred to a specialist who would use an operating microscope. Not many general dental practitioners in New Zealand use an operating microscope and yet successfully carry out root canal procedures. If a patient was informed of their choices it would be quite appropriate for a general

dentist to carry out the procedure if he/she felt confident to do so. Only one x-ray is supplied of the re-treatment procedure showing a trial GP point in place confirming the working length. Although some of the tooth is missed from this X-ray the important aspect is the apex which is visible. There is no X-ray supplied of the completed root filling.

[Dr B] has taken three pre-treatment X-rays and one during treatment. There are no periapical views of the other teeth he was going to crown. Although a full mouth X-ray is not standard practice for a new patient exam it would be standard practice to take periapical X-rays of all teeth you propose to crown and in my opinion a comprehensive treatment plan of a new patient requiring multiple crowns and fillings would benefit from a full mouth X-ray. I consider the quality and lack of X-rays a moderate departure from accepted practice.

It is hard for me to assess the adequacy of the crown work undertaken. Certainly from the pictures supplied by [Dr D] it appears they were monochromatic and of poor form. The margins are visible but I would have to run a probe around them to discern any steps or ledges. An X-ray supplied by [Dr D] does show a possible gap at the margin of tooth 24, this may well be filled with cement and not be a defect but point of weakness and I note from [Dr D]'s comments that he is monitoring this and others. The accepted standard of care would be to bleach teeth first, allow the colour to settle and then go ahead with crowns to match the new colour. In my opinion this is a moderate departure from the standard of care. I also note that an implant was planned for the 22 position to replace a partial denture. It would be a more acceptable practice to delay crowning the two front teeth until the implant is ready for restoration and the three crowns can be done together, thus ensuring good form and shape between the three.

Again it is hard for me to comment on the adequacy of the root canal treatment. [Dr E]'s comments cover that. However the periapical X-ray shows the root filling performed by [Dr B] was an improvement over the presenting condition. As there were no symptoms following treatment it could well have been a success. It was judged to need re-treatment because the tooth was going to be crowned again and the best possible outcome was desired. However the use of a rubber dam is regarded as virtually mandatory for all root canal procedures and if not used would be considered a significant departure from accepted standard practice.

I find the standard of documentation poor from [the clinic]. Nowhere in the notes is there mention of the presenting complaint and [Mr A]'s concerns, no mention of the discussions had and the informed consent process. No mention of other special tests such as study models. The treatment plan was just a list and seemed to be primarily defining costs. There was no mention in the notes of the constraints of time or the fact that [Dr B] recommended root canal re-treatment by an endodontist. A patient may want something done but a dentist can always say no they are not able to deliver that or that it may not be in the patient's best interests. The informed consent process appears inadequate and as such is a marked departure from accepted standards."

The following further advice was obtained from Dr Gorrie in relation to [Dr B]'s response to her advice recorded above:

"I have been asked to provide further advice in response to [Dr B]'s reply, in particular his comments about use of a rubber dam 'there are situations where it is impractical and not as essential'.

I would disagree with this statement. There are situations where it is tricky and time consuming to apply but that does not negate its use. Rubber dam prevents the complications that occur with a dropped instrument, and inhalation or swallowing of the irritants used in disinfecting the root canal. It also prevents against reinfection caused by saliva contaminating the root canal during the procedure. Yes it is possible to have good visibility with an anterior tooth and to isolate the tooth with cotton wool rolls but the use of rubber dam remains the standard.

In this case [Dr B] was re-treating a root filled tooth and it is known that the chances of a successful outcome are reduced in this instance, therefore one may want to have everything in one's favour and apply rubber dam, however the lack of a rubber dam may not directly be the cause of failure."

Further advice was obtained from Dr Gorrie in relation to the consumer's wishes and timing of tooth bleaching. Dr Gorrie advised that a consumer's wishes should play a role in planning the care provided, but should not influence the care provided. The dentist can always refuse to proceed. Dr Gorrie observed that leaky fillings and decay were not a presenting issue in the present case, and the fact that canines are darker than incisors should not affect the decision whether or not to bleach. She added that bleaching cannot be done to a particular shade.

The following further advice was obtained from Dr Gorrie on 26 April 2016:

"I have been asked to provide further advice in response to [Dr B]'s reply, and the question you have asked is 'should the consumer's wishes have influenced the bleaching care provided, and the timing of that care? Should [Dr B] have bleached first in any event?'

This follows [Dr B]'s response to my advice stating 'he accepts your advice represents standard procedure however he says bleaching is contraindicated when leaking fillings/decay are present and that the canines are often a darker colour than the incisors naturally, so it was not a major concern to colour match the porcelain to the bleaching'.

In reply, from the NZDA code of practice on informed consent 'Dental practitioners are reminded that patients have the right to make treatment choices and the dental practitioner must respect these even if they disagree with them or believe that the patient's choice is not in the best interest of the patient. A dental practitioner may elect not to provide the care a patient requests.' 'Dental practitioners need to provide information about the known risks of the treatment(s) especially where the risks are likely to influence the patient's decision making.'

In my opinion the consumer's wishes should not have influenced the bleaching care provided and the timing of that care unless they accepted the risk of an imperfect match. An accepted sequence of care sees disease i.e. leaky fillings and decay treated first before cosmetic procedures i.e. bleaching. One certainly does not undertake bleaching in the presence of decay and leaky fillings.

Susan Gorrie"

Appendix B: Treatment plan

| Phase | | Time Min | Item | Tim | es Description | | Too | th | Fee | Amount | Appt Date | Appt Time | Date Done |
|-------|---|-------------|--------|-----|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|---------|---------|--------------|--------------|--------------|
| 1 | 1 | 90 | 623 | - 1 | Cerec Milled Ceramic | : Crown | 11 | | 1380.00 | 1380.00 | 7 | | 19/12/2012 |
| 1 | 1 | 90 | 623 | 1 | Cerec Milled Ceramic | Crawn | 21 | | 1380.00 | 1380.00 | | | 19/12/2012 |
| 1 | 1 | | 415 | 1 | Root Canal Prep - 1 0 | Canal | 21 | | 450.00 | 450.00 | | | 19/12/2012 |
| 8 | 1 | | 417 | 1 | Root Canal Obturation | n - 1canal | 21 | | 400.00 | 400.00 | | | 19/12/2012 |
| 8 | 1 | | 597 | -1 | Post-direct | | 21 | | 350.00 | 350.00 | | | 19/12/2012 |
| | | | | | | Amount for Ph | nase | 1 - | Visit 1 | 3960.00 | Est. R | emaining | 0.00 |
| 1 | 2 | 90 | 623 | 1 | Cerec Milled Ceramic | Separate Annual Printers of Control of Contr | 14 | | 1380.00 | 1380.00 | 24/12/2012 | 09:00a | 24/12/2012 |
| 1 | 2 | 90 | 623 | 1 | Cerec Milled Ceramic | Crown | 24 | | 1380.00 | 1380.00 | 24/12/2012 | 09:00a | 24/12/2012 |
| | | | | | | Amount for Ph | nase | 1 - | Visit 2 | 2760.00 | Est. R | emaining | 0.00 |
| 1 | 3 | 90 | 568 | 1 | Inlay/Onlay- Cerec Mi Surf | iled Porcelain- 2 | 36 | | 1250.00 | 1250.00 | 24/12/2012 | 09:00a | 24/12/2012 |
| | | | | | | Amount for Ph | nase | 1 - | Visit 3 | 1250.00 | Est. R | emaining | 0.00 |
| 1 | 4 | | 531 | 1 | Adhesive restoration- | 1 surf- post | 17 | | 160.00 | 160.00 | 7) | | 07/01/2013 |
| 1 | 4 | | 537 | 1 | Adhesive restoration- | 1 surf- ant | 13 | | 160.00 | 160.00 | | | 07/01/2013 |
| 1 | 4 | | 531 | 1 | Adhesive restoration- | 1 surf- post | 46 | | 160.00 | 160.00 | | | 07/01/2013 |
| | | | | | | Amount for Ph | ase | 1 - | Visit 4 | 480.00 | Est. R | emaining | 0.00 |
| 1 | 5 | 60 | 111HYG | - 1 | Hygienist | | Albod | | 160.00 | 160.00 | | | |
| | | | | | | Amount for Ph | 1850 | 1 - | Visit 5 | 160.00 | Est. R | emaining | 160,00 |
| 1 | | | 531 | 1 | Adhesive restoration- | 1 surf- post | 27 | | 160.00 | 160.00 | | | 07/01/2013 |
| 1 | | | 531 | 1 | Adhesive restoration- | 1 surf- post | 27 | | 160.00 | 160.00 | | | 07/01/2013 |
| | | | | | | Amount for Ph | ase | 1 - | Visit | 320.00 | Est. Re | emaining | 0.00 |

Appendix C: Technical chart

