QUEENSLAND COURTS

CORONERS COURT OF QUEENSLAND

FINDINGS OF INVESTIGATION

CITATION:	**Non-inquest findings into the death of Mr R**
TITLE OF COURT:	Coroners Court
JURISDICTION:	BRISBANE
FILE NO(s):	2014/2489
DELIVERED ON:	7 September 2017
DELIVERED AT:	Brisbane
FINDINGS OF:	Christine Clements, Brisbane Coroner
CATCHWORDS:	Suicide of patient following Deep Brain Stimulation procedure for Parkinson's disease

Introduction

1. Mr R was 63 years of age when he died on 11 July 2014. He was semi-retired at the time of his death.

2. Mr R died by suicide when (according to an eye witness) he leapt from the 8th floor of a hotel building in Brisbane.

3. His death occurred three days after his discharge from St Andrews War Memorial Hospital in Brisbane (the 'Hospital') where he had undergone Deep Brain Stimulation ('DBS'), for the relief of the symptoms of Parkinson's disease.

4. DBS surgery involves implanting a thin, insulated lead into the brain (most often in the subthalamic nucleus or the globus pallidus, which are part of the basal ganglia system.) The lead is then connected via an insulated extension to a device called an implanted pulse generator ('IPG'). This is similar to a pacemaker. The extension runs below the skin from the head down the side of the neck behind the ear to the IPG which is usually implanted under the skin in the chest. When switched on, the IPG produces electrical impulses that are sent to the brain to stop or reduce the electrical symptoms that cause the symptoms of Parkinson's disease. The impulses can be adjusted using a patient programmer. Patients may still need to take medication for Parkinson's but the doses may be lower.

5. His family raised a number of concerns about Mr R's treatment. These included:

    - A lack of an appropriate consent process for the DBS and particularly, a failure to advise Mr R that suicide and reversible changes in mood were risks associated with DBS surgery;
    - Lack of communication by the clinicians with Mr R's family;
    - Post-operative DBS complications;
    - Management of his physical concerns in Hospital;
    - The management of his mental health;
    - The appropriateness of his discharge from Hospital;
    - Appropriateness of the qualifications of the treating psychiatric registrar and his assessments of Mr R and role in the decision to discharge Mr R from Hospital.

6. The investigation into Mr R's death was therefore informed by information obtained from the Hospital and statements from the treating team. An independent opinion was also sought from an expert neuropsychiatrist.

History of Mr R's diagnosis with Parkinson's disease

7. On 13 May 2009, Mr R contacted his general practitioner ('GP') with symptoms of paresthesia. He described constant numbness in the soles of his feet which on occasion spread to the lateral lower leg. He described stabbing joint pain in his wrists, elbows, hips, knees and shoulders mostly at night. He noted that his manual dexterity was reduced with his mind identifying tasks but his hand not responding. He also described that his head would pull to the side when he was walking or driving his car. He was referred to a neurologist.

8. In November 2009, Mr R was diagnosed with Parkinson's disease. Mr R questioned the diagnosis and sought a second opinion from another Neurologist. By November 2010, Mr R had the full gamete of features to suggest he had idiopathic Parkinson's disease.

9. In January 2012, Mr R and his family requested a further opinion and he was referred to a third neurologist. It was considered that Mr R had an unusual presentation of Parkinson's disease with a suggestion of generalised dystonia (a separate neurological condition involving sustained muscle contractions).

10. Between January and March 2012, Mr R was hospitalised twice to undergo testing and trial various medications. During the second admission, he was also examined for epigastric and upper quadrant abdominal pain though no cause could be found. Mr R was treated with standard dopaminergic therapy though the medications were poorly tolerated by Mr R and it was difficult to optimise his medications.

11. On 29 February 2012, the treating neurologist wrote to Neurologist Professor Peter Silburn requesting a second opinion in regards to any alternate diagnosis and whether any advanced therapies would be indicated for him. Mr R and his family were keen to pursue a second opinion with an expert in movement disorders. Professor Silburn practices at Neurosciences Queensland ('NSQ') as part of a multidisciplinary team treating patients with Parkinson's disease.

12. In April 2012, Mr R reported to his GP that he was feeling depressed in himself and did experience suicidal ideation but had no plan. He identified some tensions with his wife and her ability to understand that it is a progressive, incurable disease with limited treatment options. In consultation with his treating neurologist, it was decided to commence Citalopram (antidepressant) 20 mg once daily.

13. Mr R first saw Professor Silburn in May 2012. Professor Silburn's primary focus at that time was on optimising the drug therapy for Mr R. He was commenced on Azilect to which he initially had a good response.

Mr R's initial Deep Brain Stimulation surgery

14. In early 2013, Mr R experienced significant progression in his Parkinson's disease. Mr R saw Professor Silburn on 8 April 2013 about DBS. Professor Silburn says that he advised Mr R that DBS can help with motor symptoms such as tremor, stiffness and slowness. Professor Silburn says that he advised Mr R that the potential risks of the DBS surgery include death, permanent disabling stroke, infection of the brain or the IPG, seizure disorder, and reversible changes in mood. Mr R was also told that DBS therapy may not help his symptoms. Mr R's daughter says that she was present during this meeting and disputes that Mr R was told about reversible changes in mood.

15. Professor Silburn says that he explained to Mr R what the surgery involved and how the DBS system works. Professor Silburn stated that it is his standard practice to advise patients that if they get an infection in the IPG it will require removal of the device. Professor Silburn stated that the risk of infection in the brain lead is less than 1% and the risk of infection in the lPG is about 3%. Professor Silburn advises his patients that the normal (battery) life of the DBS system is about 3 to 5 years.

16. On or about 12 April 2013, Mr R was provided a consent form about DBS and a DVD and booklet containing DBS therapy information.

17. On 20 May 2013, Mr R was admitted to the Hospital for bilateral subthalamic nucleus DBS.

18. Neurosurgeon Dr Terry Coyne met with Mr R prior to his surgery. He discussed the option of continuing on without surgery, the nature of the surgery, the potential benefits, limitations and risks (i.e. infection). These risks were documented on the consent form.

19. The surgery was performed without incident on 22 May 2013.

20. On 3 June 2013, he was reviewed by Neuropsychiatry Registrar Dr Phillip Mosley. Dr Mosley noted that Mr R was feeling "bloody fantastic". Mr R was excited about the marked improvement in his motor ability and decrease in disability. He had already been commenced on a small dose of Quetiapine so this was continued with a plan to monitor any change in his mood, sleep, activity, impulsivity with increases to the device stimulation.

21. Prior to his discharge from Hospital, Dr Coyne informed Mr R that he was to contact him if he had any concerns regarding his surgical wounds, such as pain, redness or swelling.

22. Mr R was discharged on 6 June 2013.

23. When reviewed by Professor Silburn and his GP post-operatively, Mr R reported being very pleased with his quality of life. He had returned to work, driving and social activities.

24. Mr R attended Professor Silburn, on 18 February 2014 and it was noted that “there are marital issues at home upon which he was reluctant to elaborate”. Professor Silburn also noted he had quite prominent pigmented scarring in the border of his device (upper right chest). This did not have the appearance of infection. It was not painful, itchy or irritable. The plan was to monitor it closely and review him in six months' time.

25. Mr R attended his GP Dr Rogers on 3 April 2014 for travel advice as he was heading off on a trip around Australia. Dr Rodgers checked the skin over the right pectoral muscles. No change since the last visit was noted.

26. On 5 May 2014, Mr R returned to Professor Silburn with erosion of his IPG (in his chest). During his trip around Australia, Mr R noticed the breakdown of the skin. Mr R had been dressing the area himself and started an antibiotic he had with him as part of his travel medications. Swabs from Mr R’s chest showed a heavy growth of staphylococcus.

Surgery to replace the DBS device

27. On 5 May 2014, Mr R was readmitted to the Hospital for replacement of his DBS. The hardware and the adjacent leads were removed on 8 May 2014.

28. Dr Coyne opined that in cases such as Mr R’s, there is no other treatment option but to remove the infected/eroded IPG in order to allow the wound healing to occur. The IPG can then be replaced when the wound has healed.

29. Upon removal of the device, Professor Silburn says that Mr R was physically intolerant of the return of his Parkinson's symptoms. He therefore reinstated dopamine therapy with the plan to give him some functional relief until the battery pack could be replaced.

30. Professor Silburn says that there was the option, once the battery pack had been removed, of not replacing it and discontinuing the DBS treatment. However, this would have meant that Mr R’s symptoms would have continued. His condition would have gradually deteriorated in accordance with the natural progression of the disease. The only other alternative to reinsertion of the IPG was for Mr R to continue on medication (with or without lesioning). However, Mr R had not been able to tolerate any of the medications he had tried previously, aside from Azilect, the effect of which had waned. Mr R was reportedly very keen to have the replacement surgery.

31. On 22 May 2014, Mr R was discharged from the Hospital to a nearby respite nursing home facility where he could have high dependency care pending re-admission for the reinsertion surgery.

32. On 17 June 2014, Dr Coyne performed the surgery to replace Mr R's IPG. Dr Coyne says that the surgery was uneventful and Mr R's surgical wounds healed well.

33. On 23 June 2014 at 12:10, Mr R indicated to nursing staff that he had experienced suicidal thoughts and that for the past four days had thought about nothing else but ending things. He reported wanting to make sure it was permanent and that this was the only reason he had not acted on his thoughts.

34. He was immediately assessed by Dr Mosley who noted that Mr R had experienced 72 hours of suicidal thoughts but had no plan to act on them. The medical records indicate that Dr Mosley elicited a number of sources for the distress:

    - Mr R was experiencing severe pain as a feature of his Parkinson's disease. This was not well controlled as his DBS device had only recently been reactivated and was not yet functioning at optimal levels; and

    - Mr R had divorced his wife and was reportedly involved in a legal battle about property. He was also noted to have financial difficulties and a limited local support network.

35. Dr Mosley considered that his behaviour in the year following his initial DBS procedure may have reflected a sustained phase of hypomania. Dr Mosely's impression was that Mr R presented with a mixture of dysphoric/depressive and hypomanic symptoms. He says that he also suspected the DBS stimulation may also be contributing, particularly in view of the history of post-DBS hypomania. Dr Mosley was concerned regarding the statements of suicide but Mr R was willing to engage in treatment. He was able to communicate his thoughts to staff and stated he had no intention of following through on his suicidal thoughts.

36. It was recommended that Mr R continue as an inpatient. Dr Mosley commenced Quetiapine, advised that his bed should be located close to the nurses station and that he should not leave the ward.

37. Later on 23 June 2014 at 14:40, Mr R, the nursing notes reflect further concern about Mr R's suicidal thoughts. He was placed on 15 minute observations and his bed was moved to the front near the nurse's station. Psychiatrist Dr Rod Marsh was contacted.

38. On the morning of 24 June 2014, Mr R was seen by Professor Silburn who increased his DBS stimulators.

39. Sometime after 11:55 on 24 June 2014, Mr R was seen by Dr Marsh. Mr R described severe painful dysesthesia as the primary problem driving his recent behavioural disturbance. He was noted to be remarkably settled with the change to device settings and Quetiapine. He denied suicidal thoughts and was discussing plans for his future.

40. At 11:00 on 25 June 2014, Mr R was seen by Professor Silburn and his DBS stimulators were again increased.

41. At 11:30 on 25 June 2014, the nursing notes reflect that Mr R was “very upset and agitated.” He was noted to be upset that his voltages weren’t “tweaked earlier”. It was explained that he might not necessarily be adjusted every day. Mr R admitted that his Parkinson’s symptoms were not too bad yet but was anxious for further adjustment. He was unsure if the DBS or the stress was causing his mood problems.

42. Later on 25 June 2014, Mr R was again reviewed by Dr Marsh. He was noted to be settled and calm at interview and possibly had a panic attack that morning. He was noted to be very concerned about his ability to function on discharge and where he should live as a result. He reported his mood as down. This had been the case for some months but did fluctuate. Mr R told Dr Marsh he was a “control freak” and was struggling with not knowing what his future holds. He was however eager to discuss issues surrounding his planning for the future. He denied suicidal thoughts. He was continued on Quetiapine 25mg in the morning and 50mg in the evening.

43. On the morning of 27 June 2014, Mr R was again seen by Professor Silburn who recorded that his DBS device was “back to normal settings”.

44. Later on 27 June 2015, Mr R was again reviewed by Dr Marsh who noted that he remained settled clinically and was pleasant and co-operative.

45. When Dr Mosley reviewed Mr R again on 30 June 2014 his primary complaint was a "twisting" abdominal pain associated with constipation. This had been a chronic issue prior to DBS therapy. Mr R perceived it had previously been successfully treated with DBS. Mr R associated the pain with increased stimulation and the morning dose of Quetiapine (which Dr Mosley considered would be unusual and biologically implausible). Mr R also described a burning pain (allodynia) triggered by minimal sensory stimuli. It was noted that he had a return of agitated mood over the weekend and suicidal thoughts. He had looked up euthanasia websites. Dr Mosley’s impression was that the suicidal thoughts were a result of the pain Mr R was experiencing. He commenced laxatives, continued Quetiapine and noted Mr R was to be restricted to the ward.

46. On 1 July 2014, Dr Mosley reviewed Mr R again. It was noted that had had a better day but his pain remained troublesome. He had no agitation or suicidal thoughts. Mr R remained fixated on his postoperative course / device settings. He regretted that he had not regained the level of

functioning. It was considered he had a limited capacity for forbearance. Mr R was adamant that the morning Quetiapine dose made him feel worse although he was quite pleased about the hypnotic effects at night-time.

47. Dr Mosley said Mr R was forthcoming with expressing his psychiatric symptoms but there was a general unwillingness to be a psychiatric patient. He noted that Mr R had expressed a preference to cease psychotropic medication on discharge. Dr Mosely considered there to be some improvement in mood although there were some remaining issues:

    - sensitivity to stimulation (agitation, mood changes);
    - uncertainty regarding his discharge location (currently expressing clear preference to live independently in Brisbane rather than with daughters); and
    - relatively poor engagement with psychiatry team.

48. Dr Mosley considered he was at medium to long-term risk of misadventure/ suicidal behaviour. Dr Mosley therefore recommended that Mr R remain as an inpatient.

49. On 2 July 2014, Mr R was again reviewed by Dr Mosely who noted that his mood was improved and he had no suicidal thoughts.

50. On 7 July 2014, Dr Mosely considered that Mr R had maintained stability from a mood perspective. He described one brief episode of mood deterioration three days prior, however this was not associated with suicidal thoughts. It was noted that Mr R had developed a plan for discharge and discussed this with his family.

51. Dr Mosely telephoned Mr R's brother who confirmed that he could be discharged to his home. It was noted that Mr R's brother would be home during the week to supervise and was aware that Mr R could return to the Hospital at any point if concerns emerge about mood or Parkinsonism symptoms. He noted that he would arrange an outpatients follow up with NSQ and that Mr R could be discharged.

52. A letter was provided to Mr R confirming that he had been booked for an appointment with Dr Mosley two weeks later on 22 July 2014.

53. Dr Mosely stated he considered that Mr R was psychiatrically fit for discharge for the following reasons:

    - He reported that his pain symptoms were now adequately controlled;
    - There had been partial resolution of his social stresses with Mr R now able to stay with family members (his brother in Brisbane);
    - There had been no expressed suicidal ideation for over one week;
    - On mental state examination there were no features to suggest a current mood disorder in either the depressed or manic pole;

- Mr R had neurological follow-up arranged as an outpatient;
- Mr R stated he was agreeable to maintaining close contact with the psychiatrists in the DBS team and agreed to the outpatient appointment; and
- Mr R was discharged to the care of a family member who had arranged to have leave and supervise him.

Circumstances surrounding Mr R's death

54. On 8 July 2014, Mr R was discharged into his brother's care. Following Mr R's discharge, his brother says that he observed improvements in his physical health on a daily basis. He advised that Mr R was taking his short walks in the local area. He says that Mr R's sleeping patterns seemed to be improving as he normally went to bed around 8:30pm. He stated as the week progressed Mr R's movements around the house during the night reduced in number.

55. Mr R's brother says that Mr R did speak about muscle soreness and slight cramps however there seemed to be improvement as he started to move a lot better and was standing more erect.

56. Mr R told his brother that he was taking his normal medication and he had commented that his bowel movements were more regular.

57. Mr R's brother says that Mr R seemed stable, more relaxed and was talking about the future a lot more each day. Mr R was also starting to schedule future activities in conjunction with him and their family members.

58. On the morning of Friday 11 July 2014, Mr R's brother took Mr R to the Airport. Mr R had told him he needed to attend a business meeting. When Mr R's brother collected him from the Airport, Mr R informed him that he wanted to be dropped off at the Hospital because his appointments had been brought forward to 1pm that day.

59. Mr R's brother dropped Mr R off at the front of the Hospital and saw him go inside the administration area. Mr R did not go to the Hospital but instead checked in to the Summit Apartments on Leichardt Terrace in Spring Hill. This occurred at approximately 10:20am.

60. Sometime in the afternoon, Mr R's brother texted him to advise he was 10 minutes away and would meet him outside the Hospital. He didn't get a reply however thought nothing of it given his appointments.

61. When Mr R's brother arrived back at the Hospital, he couldn't find Mr R. Neither the Hospital nor Professor Silburn's rooms had seen him. Nor did they have a record of his appointments being changed.

62. Mr R's brother made multiple unsuccessful attempts to contact Mr R on his phone. At 2:16pm, Mr R's brother received a text message from Mr R. This text message suggests that:

    - Mr R's main concern was his pain;
    - Mr R considered he was put back on Parkinson's medication without appropriate supervision and proper pain control;
    - The treating team did not believe him or properly listen to him;
    - The treating team should have put him on non-constipating medication;
    - He queried whether the battery probes were accidentally reversed or there was an error with the paperwork;
    - If the possibility of such pain had been explained to him, he may not have had the operation (it is not clear whether he is referring to the original surgery or the remedial surgery); and
    - His death could have been prevented had his medical advice and treatment been different.

63. Just after 2.30pm, an eyewitness reported seeing Mr R "leap" from the balcony of his room (8th floor) at the Summit Apartments.

64. Police attended the scene and were met by Queensland Ambulance Officers who advised that Mr R had been declared deceased at 2:35pm.

65. A note was found nearby Mr R's body which requested that no assistance be provided and he be left to pass away.

66. Police attended Mr R's unit and located a number of items including a Black iphone, DBS medical device, small container of Clonazepam 500 mcg and a small box of Quetiapine 25mg.

Establishing the cause of death by autopsy

67. On 15 July 2014, an external autopsy was performed by Forensic Pathologist Dr Rohan Samarasinghe. The report was finalised on 10 September 2014. The cause of death was determined as:

    1(a) multiple injuries, due to or as a consequence of;
    1(b) fall from height.

68. According to the toxicology report Aminoclonazepam was detected at the level of 0.03mg/kg. Alcohol was not detected. No quetiapine or metabolites of Quetiapine were detected in either his urine or femoral blood.

The findings in the inquest into the death of Kenneth Mawby

69. On 18 December 2014, New South Wales Deputy State Coroner Dillon made findings after an inquest into the death by suicide of Kenneth Mawby in Lismore in 2009.

70. Like Mr R, Mr Mawby was under the care of a team of doctors comprising neurosurgeon Dr Terry Coyne (who performed the surgery), neurologist Professor Silburn and psychiatrist Dr Rodney Marsh who was brought in on a case by case basis to manage DBS patients.

71. Coroner Dillon found that Mr Mawby died "by hanging himself while suffering from a mood disorder in the nature of delirium causing behavioural changes including impulsivity following DBS surgery" that he underwent about two weeks earlier. Coroner Dillon also found that this mood disorder "was more likely than not to have been due in significant but unquantifiable measure to the DBS stimulation he was receiving, in combination with the medication he was taking".

72. His Honour noted that except for Professor Silburn, all of the clinicians who gave evidence accepted the general precautionary principle of informing the patient about the potential for serious psychiatric sequelae.

73. Coroner Dillon noted that all NSQ patients are now psychiatrically assessed in the pre-admission process.

74. The findings were handed down on 18 December 2014 and Coroner Dillon made five recommendations directed at trying to ensure:

    - That DBS patients are not prematurely discharged from hospital;
    - That arrangements are made and documented before discharge for their proper care and follow-up; and
    - There are clear arrangements for patients to get help if there are problems after discharge.

Actions taken by the Hospital in relation to the Mawby Findings

75. Throughout the course of the investigation, a response was sought from the Hospital in relation to their implementation of the recommendations arising out of the Kenneth Mawby inquest.

76. The Hospital confirmed that it has implemented the recommendations of Coroner Dillon arising out of the Kenneth Mawby inquest. Of note, is that:

    - An amended model of care now reflects that the neurologist (in consultation with the neurosurgeon, neuropsychiatrist and DBS nurse) approve the patient for discharge;
    - A post-operative discharge checklist (‘the Checklist’) has been implemented to formalise the discharge approval process for DBS

patients. The Checklist requires the DBS nurses ensure they provide the patient with:

i. Emergency protocol and technical support contact numbers;

ii. A 12 month appointment schedule for post-operative appointments at NSQ;

iii. Post-operative review with a Neurologist a month after discharge;

iv. Follow up review with a Psychiatrist three months after discharge or earlier as advised by treating clinicians;

v. List of medications at the time of discharge;

vi. Post-operative wound management information;

vii. Precautions information (i.e. no MRI scans, not to use welding devices);

viii. Airport travel instruction letter;

ix. Helpline card and fridge magnet;

- The Checklist is signed by the patient to indicate they have read an understood the management plan, are aware of the need to stay in the Brisbane region over the next ten days for additional neuromodulation and that they are being discharged home into the care of their next of kin;
- The Checklist forms part of the patient medical record and is retained there. A patient does not meet the discharge criteria if a copy of the Checklist has not been placed in the chart; and
- A clinical review team has been established to review and standardise all clinical inpatient documentation and processes at both Hospital. This review team will provide feedback directly to the DBS Review Board established to ensure the Coroner's recommendations are implemented and clinical processes are evidenced based and best practice.

Expert advice from independent psychiatrist

77. Expert advice was sought from independent Neuropsychiatrist A/Professor Gregory de Moore to comment on the adequacy of the psychiatric/mental health care provided to Mr R.

78. Dr de Moore reiterated that at the time of Mr R's death, pre-operative psychiatric assessments were not mandatory. Dr de Moore highlighted

that there are several benefits to carrying out a pre-operative psychiatric assessment. These include:

- It establishes a baseline of psychiatric functioning which may be valuable if there are post-operative complications. It allows a comparison of pre-existing and post-operative mental state and offers the psychiatrist a clearer idea of how significant is the post-operative psychiatric change;
- It allows any existing pre-operative psychiatric illness to be treated to the best of the team's ability. Co-existing psychiatric illness in Parkinson's disease is common;
- It introduces the psychiatric member of the DBS team to the patient in a way that (hopefully) normalises this aspect of the care. Ideally it improves rapport by explaining the role of the psychiatrist as a member of the treating team;
- It allows an assessment of factors such as the patient's personality, developmental history, substance abuse, past psychiatric history and attitude to treatment e.g. how realistic are the patient's expectation of improvement. All of these add to the psychiatrist's understanding of the patient's likely post-operative reaction. He noted that in April 2012, Mr R's GP noted he was depressed with suicidal thoughts but with no suicidal plans. This is an example of what might have been picked up through a pre-operative psychiatric assessment; and
- It assists in setting a baseline of cognitive functioning, although this can be more formally done through detailed neuropsychological testing.

79. Dr de Moore noted that prior to the first or second DBS operations, there was no mention of suicide. He advised that the issue of whether suicidal behaviour is increased in the postoperative period is the subject of ongoing research. Self-destructive behaviour is uncommon after DBS, and suicide even less so. Although suicide was not mentioned, Dr Coyne and Professor Silburn did record that possible post-DBS mood changes had been raised with Mr R.

80. Dr de Moore noted that in the initial assessment by Psychiatrist Dr Mosely on 23 June 2014, there was no mention of the possibility of psychosis or delirium, although this was covered later in the admission. Dr de Moore noted there was also no assessment of Mr R's personality which was a subtext throughout all the clinical assessments. Dr De Moore considered that an understanding of his personality might have helped explain his later severe decompensation and might also have assisted with the manner in which he was treated.

81. Dr de Moore observed that given that Mr R had responded well to his previous DBS setting, the treating team elected to observe rather than add

antidepressants. In retrospect, Dr de Moore said it was most likely that Mr R's mood was more depressed that he let on to the psychiatry team. Dr de Moore did highlight that one thing missing from the assessments was a clear articulation of a psychiatric differential diagnosis.

82. Dr de Moore noted that Mr R was assessed on eight occasions with the team responding to all requests by nursing and neurology staff. The clinical documentation was also considered appropriate.

83. Dr de Moore noted that the team made the decision that there was not a psychiatric illness as such but rather opted to continue to observe and monitor symptoms, while moving him closer to the nurses' station. Dr de Moore said that this was a reasonable approach to take. He also considered there were no grounds to schedule him to a psychiatric facility. Dr de Moore said that almost certainly, Mr R would have rejected psychiatric admission.

84. Dr de Moore said that post-DBS is a tricky time of psychological and physiological adjustment. With the settings being changed and with adjustments to new living circumstances the approach taken by the psychiatric team was to wait and observe. This was a reasonable approach. They also considered medication but made the decision to withhold it. This, in the end, is a matter of judgement and can really only be made and assessed by people at the time.

85. Dr de Moore said that the psychiatry team felt that the symptoms exhibited did not constitute diagnoses such as depression, mania/hypomania, psychosis and delirium. The assessment seems to have been one of a patient whose adjustment was complicated by his personality style and ongoing pain.

86. In light of Dr Mosley's findings, Dr de Moore considered that Mr R's discharge on 8 July 2014 was appropriate. He did note however it is not clear whether it was Dr Mosley alone or Dr Mosley in consultation with Dr Marsh who made the decision to discharge the patient from a psychiatric perspective. He would normally expect that any patient ready to be discharged would be discussed with the psychiatrist.

87. Dr de Moore considered that adequate follow up arrangements were in place, in that there was a fixed appointment, plus the open-ended invitation for Mr R to come back at any time if he wished.

88. Dr de Moore considered that Mr R's prescription with Clonazepam and Quetiapine had no relevance to his death nor would they have exacerbated suicidal behaviour or depression. It seems clear that Mr R stopped the medication after discharge. He would not expect, nor does there appear to have been any suggestion of medication withdrawal effects.

89. Dr de Moore said that the cause of suicide is almost never attributable to a single event. The DBS surgery was in the first instance and for approximately one year reported to be an overall success. It would therefore be inaccurate to say that DBS caused his suicide.

90. Dr de Moore considered that it was Mr R's mood was most likely a combination of the direct impact of the DBS, his reaction to the failure of the first operation, his personality style, and multiple other stressors (such as his living arrangements, finance and marriage) beyond the DBS.

91. Dr de Moore said that predicting suicide in an individual at a given time is virtually impossible and he knows of no definitive clinical or investigative procedure that establishes that a person will go on to take their life. In certain circumstances e.g. if a patient is clearly psychotic and expresses such thoughts there is no hesitation in admitting that person to hospital, even against their will. Likewise if someone had a profound and pervasive low mood with unremitting expressed suicidal thoughts, they would not be discharged.

92. In Mr R's case, Dr de Moore says that subsequent events strongly suggest that his suicide was planned (perhaps even before discharge), and that Mr R gave little or no indication of these plans in the days leading up to his death. The evidence suggests marked determination, planning, and elaborate deception. His brother who was with him after discharge felt that Mr R was improving and that Mr R gave no hint of his impending suicide. There was no alcohol or illegal drugs which suggests that his suicide was not a result of clouded thinking that led to disinhibited or reckless behavior.

93. In Dr de Moore's experience, suicide thinking can be masked particularly if a patient is a methodical, obsessional man, and the evidence suggests this was the case here.

Conclusion

94. Mr R suffered with the debilitating and incurable condition of Parkinson's disease for which he elected to be treated with DBS. His therapy was initially very successful and he experienced marked improvements in his symptoms. Approximately a year after the initial surgery, Mr R experienced one of the known complications of DBS surgery. That is, infection of the IPG. Mr R elected to have the IPG re-inserted and unfortunately did not gain the same level of functioning/improvements in his symptoms by the time of his discharge.

95. In deciding whether to hold an inquest into Mr R's death, the expert advice from Dr de Moore has been considered. Dr de Moore has advised that suicide after DBS is uncommon. He opined that Mr R's inpatient management and discharge was appropriate and that there was adequate follow-up in place.

96. The Hospital/ NSQ has now implemented all the recommendations that arose in the Kenneth Mawby inquest. The findings in that matter were handed down after Mr R died and therefore the changes were not in place at the time of his death. Notably, patients are now psychiatrically assessed in the pre-admission process. This has distinct benefits as described above. In the circumstances, it is not considered that holding of an inquest is likely to provide any new information, or result in any preventative recommendations being made over and above those already discussed.

97. The findings are also published on the Queensland Coronial website. The dissemination of information in this way is the most appropriate and likely means to raise awareness of such an unexpected death.

98. My sincere condolences are extended to Mr R's family.

Findings required by s. 45 of the *Coroners Act 2003*

The identity of the deceased:	Mr R
How he died:	Mr R died by suicide when he jumped from the 8th story of a Hotel building. His death occurred following a procedure to re-insert a Deep Brain Stimulation device for the management of his Parkinson's disease. His mood was most likely a combination of the direct impact of the DBS, his reaction to the failure of the first operation, his personality style, and multiple other stressors (such as his living arrangements, finance and marriage) beyond the DBS.
Place of death:	Summit Apartments, Leichardt Terrace in Spring Hill, Queensland.
Date of death:	11 July 2014.
Cause of death:	Multiple injuries due to or as a consequence of a fall from height.

Christine Clements
Brisbane Coroner
BRISBANE
7 September 2017