

Chapter 7



THE SLOWDOWN

MAY 17 TO
SEPTEMBER 1994

The anaesthetists' memorandum of May 17 led to an immediate slowdown in the Health Sciences Centre Pediatric Cardiac Surgery program. Initially, only low-risk cases were done. The slowdown lasted until the end of July, when medium-risk cases were permitted, and in September of 1994 the program returned to doing high-risk cases. The slowdown should have given the HSC administration an opportunity to identify and address the shortcomings that surrounded the program's restart in February 1994. However, as the events outlined in this chapter indicate, that did not happen. As a result, the program experienced another half-year of turmoil and tragedy before it was completely suspended.

On May 17 and May 18, the HSC departmental leadership responded to the anaesthetists' withdrawal of services. These two days were among the most crucial days in the history of the program. Decisions made at that time led to the creation of what became known in the hospital as the Wiseman Committee. That committee was supposedly mandated to address the problems raised by the anaesthetists' action. It met throughout the summer of 1994 and it was on the recommendation of this committee that the Pediatric Cardiac Surgery Program returned to full capacity in September 1994. This chapter reviews the operations that were undertaken from May 17 to early September. Special attention is paid to the deaths of two children. In addition, this chapter examines the creation and functioning of the Wiseman Committee during this period.

THE MEETING IN BISHOP'S OFFICE

On the morning of May 17, on arriving at her office, Dr. Agnes Bishop, the head of the pediatrics department, was told that the pediatric anaesthetists had withdrawn their services from the Pediatric Cardiac Surgery Program. Given the assurances she had only recently received from Dr. Nathan Wiseman, that the issues being raised about the program were not shared by all the anaesthetists, she was understandably surprised and even angry.

In early May, it will be recalled, Bishop had asked Wiseman to gather information about complaints that had been made to her about the program. She had spoken to Isobel Boyle, the director of pediatrics and child health nursing, about the concerns of the nurses and to Dr. Suzanne Ullyot about the anaesthetists' concerns. Ullyot had told her that the anaesthetists had agreed to establish a liaison with Dr. Jonah Odum and Dr. Niels Giddins. Yet, when Bishop called Odum and Giddins that morning, she was informed that neither had been approached by the anaesthetists about their concerns with the program. It was obvious to Bishop that the team was communicating at an extremely poor level.

Her immediate concern on learning about the anaesthetists' withdrawal was for the patients who were scheduled for cardiac surgery that day and later in the week. If those patients could not be operated on in Winnipeg, arrangements would have to be made to offer their families options, including the possibility of deferring the procedure or transporting the child to another facility. In addition, to prevent the spread of rumours, she wanted to ensure that the HSC gave all parents a coherent explanation of why cases were being delayed.

Bishop called Dr. Doug Craig, head of the Department of Anaesthesia, Dr. Robert Blanchard, head of the Department of Surgery, Ullyot, Odum, Giddins and Wiseman to attend a meeting in her office that morning. She did not invite Boyle, nor any of the nurses involved in the program, because in her view, the meeting was meant to deal with the medical implications of the anaesthetists' action. Dr. Ann McNeill also attended the meeting, at Ullyot's invitation.

At the outset of the meeting, Bishop expressed her dismay at the withdrawal of services and the fact that it had been undertaken on such short notice. In response, McNeill and Ullyot explained that the anaesthetists had become concerned over the fact that deaths in the program were apparently not being systematically reviewed, and that the anaesthetists were not confident that events within the program were going to be reviewed.

However, they did not voice their concern over the ability of the pediatric cardiac surgery team and, in particular, the surgeon, to perform the operations that the program was undertaking. When asked to explain during her testimony why the anaesthetists were hesitant to state that concern explicitly, McNeill said they were not certain that they were qualified to pass judgment on Odum's skills and abilities, but they wanted someone to do so. She explained that she was particularly hesitant to criticize Odum since she was not a surgeon. She felt, however, that if a review was undertaken, any surgical problems would be identified and would lead to an appropriate resolution.

During the meeting, it was revealed that the anaesthetists had not spoken with either Odum or Giddins about their concerns. Giddins testified that, aside from the comments made to him earlier by Joan Borton and Wiseman, this was the first time he had been made aware of the anaesthetists' concerns with morbidity and mortality.

Craig wondered if his assumption that there were appropriate lines of communication between the pediatric cardiac anaesthetists and Odum had been correct. It was becoming apparent to him that there had been little, if any, communication between the anaesthetists and Odum and Giddins about the anaesthetists' concerns. However, at the meeting Craig kept those concerns to himself. Both McNeill and Ullyot felt that Craig was supportive of the anaesthetists' actions at the meeting.

Both Blanchard and Bishop expressed their concern that they had not been made aware of the extent of the concerns held by some members of the program. When McNeill expressed the view that the anaesthetists were concerned about deaths in the program, Blanchard asked, perhaps facetiously, if the anaesthetists had thought that there would be none.

Odim testified he was shocked by the decision to withdraw services. While there had been some operating-room friction to that point, he put it down to personality differences. He indicated in his evidence that he too had been concerned about the deaths:

It was of some concern that we certainly had some bad luck, had some tough cases, and had some children that we didn't anticipate would die who died in the post-op period. And obviously those were concerns. And all along I was formulating ways in which we could help and improve the situation both from the surgical point of view, from the pre-surgical point of view and post surgical point of view in terms of developing a more efficient team. (Evidence, pages 25,027–25,028)

He testified that he had tried to encourage members of the team to attend post-operative Morbidity and Mortality Rounds, where individual cases would be reviewed, but there had been a significant lack of attendance at those sessions. He felt that the members of the team had been given several opportunities to bring their concerns about individual cases to his attention, as well as to that of other members of the team, at the pre-operative conferences. He said he was frustrated by the other team members' lack of co-operation.

However, at the meeting Odim also kept those opinions to himself. He did so because he felt himself to be “on the hot seat” at the meeting and did not take part in the discussion. It is interesting that he would see himself as the centre of attention, given the lack of specific comments directed at or about him by the anaesthetists, who themselves felt that they were under the gun to justify what they had done.

It is also noteworthy that, despite the fact that Odim seemed to think that the anaesthetists were targeting him, he refused to read the memo they had circulated to Wiseman and others following their May 16 meeting. Odim testified that he did not read the memorandum until just before appearing for this Inquest. It is difficult to understand why he would not have read the memorandum earlier. This fact does not speak well of him.

THE DECISION TO CONDUCT A REVIEW

It was apparent to all at the meeting that the program was in serious trouble. As a result, a decision was made to create a review committee. This was known as the Pediatric Cardiac Review Team, or the Wiseman Committee, since it was chaired by Wiseman. The committee held its first meeting on May 18. In his testimony, Craig noted that in all his years in health care he had never seen a major problem addressed as quickly as this problem was. In retrospect, however, the committee may have been struck too hastily, as some important matters were not addressed.

The written direction given to the committee was to “deal with on-going issues related to the Pediatric Cardiac Surgery program in an effort to best serve the needs of the pediatric patient.” (Exhibit 20, Document 278 B) It was understood that the committee would review the cases that had been performed to that point in the program, and would also work to address the concerns of team members. What was not clear was how and when the committee was to report back, and to whom it was to report.

The decision to establish the committee precluded referring the matter to at least two existing bodies: the Pediatric Operating Room Committee and the Children's Hospital Management Advisory Committee. These bodies were described in Chapter Four of this report. This decision was not unreasonable. The personnel on the Wiseman Committee had more direct knowledge of the issues under discussion than did the members of the Pediatric Operating Room Committee, while the Children's Hospital Management Advisory Committee was a product of the mid-year reorganization of the HSC. Its membership would not have had direct knowledge of events in the program; nor would they have had expertise in the field.

However, because the committee was created outside existing processes, it lacked a clear structure and rules of procedure. It was not clear what authority the committee had to change existing procedures or seek advice from outside experts.

WHAT TO DO ABOUT THE EXISTING CASES?

There remained the question about what to do about the cases that had been scheduled for surgery. In taking the action they had, the anaesthetists had forced the delay or transfer of potentially all open-heart pediatric cardiac surgical cases that would normally have been done at the Children's Hospital. Once the review had been agreed to, Bishop and others broached the question of performing some operations while the review was being undertaken.

Giddins and Odum (among others) supported the view that low-risk open-heart operations could still be performed during the review. McNeill testified that originally the anaesthetists had wanted a moratorium on all open-heart cases, including low-risk cases. Following the creation of the Wiseman Committee, she testified that "we left with having agreed that we would not withdraw entirely, and you know, that we would set up a review process to address things that were going on in the program." (Evidence, page 13,262) Since a review of the program had been set in place, the anaesthetists felt that it was impossible for them to refuse to participate in all open-heart operations. However, they maintained their concern about the degree of complexity of the cases that were being considered or undertaken. At the meeting, McNeill and Ullyot agreed that the anaesthetists would participate in less-complex, low-risk open-heart cases but that they would not participate in cases of higher risk until the review was complete.

INFORMING HSC SENIOR MANAGEMENT

None of the three department heads at the meeting reported on the withdrawal of services to Dr. Ian Sutherland, the vice-president to whom each of them reported. Blanchard testified that this was not the result of a conscious decision and acknowledged that it should have been done, if for no other reason than out of courtesy.

Craig testified that "telling the vice-presidents about something like this, you know, they should know, but it's not really that relevant to solving it on the clinical side. At some point we would need the vice-presidents' involvement and support, but it's not going to help solve an issue right today, of this type." (Evidence, pages 34,506–34,507)

Bishop testified that while she did not brief Sutherland on the issue, she did speak with her new vice-president, Helen Wright, about the developments in the program. Bishop was not sure when that took place. Under the reorganization that took place on June 1, 1994, the Department of Pediatrics and Child Health began to report to Wright. However, until the time that she left the HSC, Bishop's superior was not Wright but Sutherland. Wright testified that she was informed of the existence and working of the Wiseman Committee, but not of the anaesthetists' withdrawal of services.

The issue was also not raised at the meeting of the Medical Advisory Committee of the hospital that was held in June 1994. This committee was the senior patient-care committee responsible for advising the HSC board on all matters concerning medical policy and issues. Blanchard, Craig and Bishop were all members of the committee. The events in the program certainly fell within its mandate. Throughout all of 1994, however, the committee was never informed of the problems within the program.

MEMBERSHIP ON THE WISEMAN COMMITTEE

The pediatric cardiac review team was to be chaired by Wiseman. It was to comprise McNeill, Odum, Giddins, Dr. Murray Kesselman from the PICU, and Michael Maas, the senior perfusionist. A recommendation from Ulyot that the review team include nurses was accepted. Carol Youngson, in her position as the senior cardiac operating-room nurse, was asked to be on the committee. It appears that there was no consultation with Boyle as to how nursing should be represented. Nor were nurses themselves asked about how they wished to be involved, and they had no input into the selection of their representative.

Wiseman was chosen to head the team both because of his position as head of pediatric surgical services and his experience and knowledge of the people involved. Bishop said she supported Wiseman as the head of the committee because he was the head of pediatric surgery, was not personally involved with the program and was seen as someone with whom all the main actors could work.

It was never made clear if the members sat on the review committee as individuals or if they were responsible to a larger constituency. Certainly, none were ever selected by any constituency since, except for Youngson, they were selected at the initial meeting without reference back to any constituency. When members could not attend meetings, they often arranged to be replaced by someone from their employment area: a nurse substituted for Youngson, an anaesthetist for McNeill and a perfusionist for Maas. This suggests there was a sense that the members were in some way representative of a broader community. However, some communities were not represented at all, while others, such as nursing, were under-represented.

There was no one, either a doctor or a nurse, on the team from the neonatal intensive care unit. It was only after the committee began to consider relieving the NICU of its responsibility for treating neonatal cardiac surgery patients post-operatively that the head of the NICU, Dr. Molly Seshia, was invited to sit on the committee.

Youngson was the only nurse on the committee. As a member of the operating-room nursing unit, her selection meant that nurses from the PICU, the NICU and the VCHC had no direct representation. Youngson, in her evidence, acknowledged that she had little direct contact with her colleagues in those other units, and that she was unclear about exactly whom she represented.

In her testimony, nurse Joan Borton said that she and Lois Hawkins spoke with Giddins about the possibility of one of them being on the committee. Borton said they were told that there was no reason for them to be members. In her testimony, Feser noted that the PICU nurses were not consulted about the creation of the committee; nor did it consult them during its existence.

There was never any requests to our unit from a nursing perspective to have any insight on what was going on, or what our thoughts were on the whole program. (Evidence, page 29,986)

Everyone involved in the Pediatric Cardiac Surgery Program endorsed the importance of teamwork. However, the actions of the program's leadership make it clear that they believed that some team players were more important than others. Nurses were no longer being told to 'see and be silent,' but their input was not actively sought. By failing to have representation from the PICU, the NICU and the VCHC nurses, the committee was cut off from important sources of information.

Finally, the team membership was deficient in that it included no outside source of pediatric cardiac surgical expertise. There was no one who could, as McNeill had anticipated, be in a position to state whether or not any of the deaths arose from surgical shortcomings. This would have required that outside expertise be on the committee.

ASSESSING THE PROBLEMS

Wiseman made notes of the May 17 meeting. These notes served as the basis for the committee's approach to reviewing the Pediatric Cardiac Surgery Program. These notes were not minutes as much as a summary of issues, and reflected Wiseman's assessment of the issues. According to the notes, the following points were discussed.

- 1 Program results to date (Morbidity and Mortality).
- 2 Need for a format for program members to vent their concerns and to discuss issues relevant to the program's success.
- 3 The setting for post-operative care of all patients.
- 4 The need to relate outcome data to the complexity of the anomaly.
- 5 The need for the whole team to be able to share in the grief and disappointment which results from an unsatisfactory outcome.
- 6 The need to recognize that interpersonal differences exist and should not be allowed to affect the program.
- 7 The need to improve communication in a variety of ways.
- 8 The need to have a baseline with respect to realistic expectations in the management of specific problems, especially in regards to more complex anomalies.
- 9 Finally, it was recognized that there is a need to establish a "Pediatric Cardiac Program Team". (Exhibit 20, Document 278 B)

There are a number of comments that need to be made about the list that Wiseman created following the meeting.

First of all, besides the initial mention of morbidity and mortality, several of the points on the list suggest that the problem that needed to be addressed was the unwillingness of members of the team to accept the fact that some children in the program were going to die. Points 4, 5 and 8 all reflected this assumption. These points suggested that it was necessary to give team members a realistic baseline that would remind them that some children who underwent high-risk surgery would die.

Secondly, some points suggested that some team members needed special assistance in coming to terms with these tragic results. Points 6 and 7 suggested that some team members had allowed themselves to become enmeshed in personality conflicts and had lost sight of the program's overall goals. Through improved communication and by overcoming personal animus, this problem could be resolved. Point 2, with its stress on the need for a forum where team members could vent their concerns, also reflected this analysis.

Point 1 is simply cryptic: it spoke to the need to review the surgical outcomes, but it did not speak to who should have conducted such a review or what the existing concerns about those results were. The failing on this score is particularly dramatic when one considers the conclusions the College of Physicians and Surgeons of Manitoba's Paediatric Death Review Committee reached when it finally reviewed the five deaths that had taken place in the program to this point. The PDRC, which included Wiseman as a member, concluded that two of the five deaths that occurred by the time the anaesthetists withdrew their services were possibly preventable. The Wiseman Committee, however, came to no such conclusion.

Point 3 apparently spoke to the belief that post-operative care should be consolidated. However, it did not hint at the problems that the PICU and the NICU staff had with post-operative care.

In short, the notes reflected a view that there was nothing particularly wrong with the surgical outcomes. Rather, they suggest that a number of members of the team were seen to have unrealistic expectations and were unable to cope with the deaths of five children. As a result, they focused their hostility on the surgeon.

Not surprisingly, this analysis reflects many of the conclusions that Wiseman had earlier reached in his discussion with members of the surgical team before May 17.

Thus, the review would not have any external input and would not examine questions of surgical competence because it appears Wiseman had concluded that competence was not an issue. This meant that the committee would not address the very question that had led to its establishment in the first place.

WERE THE ANAESTHETISTS JUSTIFIED IN THEIR ACTION?

In declining to provide service to the program, the anaesthetists made it clear that one of their major concerns was that there did not appear to be any monitoring of surgical outcomes. It is legitimate to ask if they were correct in this perception.

There were M & M Rounds, where cases were reviewed, particularly those that ended with the death of the patient. However, as outlined in the previous chapter, these rounds had not proven to be effective forums for an overall monitoring of results.

If one asks “were those persons to whom Odium reported monitoring his surgical results?” the answer would have to be “No.” No single person ever testified to this Inquest that he or she believed himself or herself to be responsible for monitoring the results of Odium’s operations. Giddins said it was not his job to do so, Unruh said it was not his responsibility, Wiseman said it was not his, and Blanchard said he thought Giddins was doing it. Yet each of these persons had some responsibility to do so. The fact that they did not perceive themselves as having this responsibility was clearly reflected in the fact that none of them was expressing any concern about results by May 17, and also in the fact that no one else saw them taking steps to address what were seen as poor results.

The question can be asked in yet another fashion: “Were there events that should have been detected and addressed as the result of vigilant monitoring?” The answer, based on the testimony presented to this Inquest, suggests that there were several disturbing events that took place in the Pediatric Cardiac Surgery Program between February 14 and May 17 that a quality assurance program should have identified.

Five children died during this period. While fatalities are to be expected in this sort of program, the circumstances that surrounded the deaths of those children clearly suggested that problems in the way the program was being run, procedures performed, and decisions made, might have contributed to those deaths.

As noted in the previous chapter, Dr. Christian Soder indicated in his report for this Inquest that “[T]he **skill and dexterity of the surgeon performing these operations were insufficient for the challenge of successfully repairing infant hearts with complex malformations.**” (Boldface in original) (Exhibit 345, page 8) Soder wrote that surgical factors were prime determinants of death in four of the first five deaths in the program. These factors included lengthy bypass times, the need to redo surgical repairs, the failure of repairs, problems with decannulation and excessive bleeding. These were issues that any quality assurance program could have detected.

There was also evidence from the operating nurses, the PICU nurses and the NICU nurses on the lack of planning, both for the restart of the program and for individual procedures. In addition, there is evidence that Odium did not understand a number of important HSC protocols—nor did he abide by them once they had been brought to his attention.

Before May 17, nurses and anaesthetists had concluded that speaking to Odium was futile. Those who had spoken with Giddins had perceived that he felt that there was no problem. Those who spoke to Wiseman had concluded that he also seemed to feel there was no need to be concerned about surgical results. While Bishop had asked Wiseman for information after Boyle and Ulyot had spoken with her, she had received information from Wiseman that suggested the problem lay with the complainants and not with the surgeon. While Bishop had asked Wiseman for more information, it was not apparent to either the nurses or the anaesthetists that she was doing anything about their concerns.

These events led the anaesthetists to conclude that the program was not being properly monitored. They decided that they were unable to provide services to the program because they felt that it might not have been providing an appropriate level of service and was not being properly monitored. This conclusion justified them in taking the action that they did.

The question of medical ethics is always a murky field to enter, and there are relatively few absolutes. However, something that comes closest to being absolute is the obligation of a doctor not to engage in con-

duct that he or she feels would be detrimental or dangerous to a patient. The anaesthetists had legitimate questions about the program and those questions had been put to people whom they perceived to be in positions of authority for the program—and their concerns were not being addressed. While they could have spoken with Giddins and Odum about their concerns, it was clear that Giddins did not agree with them, and that he, as well as Odum, were perceived as being part of the problem. The anaesthetists saw Giddins's workload as preventing him from paying appropriate attention to the monitoring that the program needed. The anaesthetists felt that there were questions of surgical competence that could not be addressed directly with the surgeon involved. All of this apparently caused them to conclude that the program might be doing more harm than good to patients, and that in order to address that concern, a review was needed. The only way they felt they had to bring the matter to a head was to address the issue as they did.

OPTIONS NOT TAKEN

What was clearly needed in May 1994 was an external review of the program, one that would be conducted by people who could assess the professional competence of all team members, as well as the team itself.

Soon after the program's problems began to appear, Odum and Giddins ought to have consulted with their department heads and put a proper review in place. That they failed to do so reflects poorly on their judgment.

By way of comparison, one can look at the evidence of two of the consulting witnesses who appeared before this Inquest. Dr. Gary Cornel and Dr. Walter Duncan were both active in the pediatric cardiac surgery program at the Children's Hospital of Eastern Ontario in Ottawa. Cornel is a surgeon there, while Duncan, for a time, was its senior pediatric cardiologist.

In Ottawa in 1992, six children died of what appeared to be respiratory failure after surgery. Cornel said that he found this to be a disturbing cluster of deaths. As a result, he consulted a coroner and slowed the program down to what he called a virtual stop. A review of the program was then carried out.

The review consisted of going over in detail everything about those cases with the pathologist, and trying to find common threads. In addition, we asked Dr. Bob Freedom from the Hospital for Sick Children to come and review the cases independently. And we asked him, especially because he is, as well as being a pediatric cardiologist, is recognized as a cardiac pathologist. So he was uniquely qualified to review the cases.

Having done the review and so on, we really didn't find any real common cause. The organisms involved were different, but pneumonia and infection was an important part of these cases.
(Evidence, page 44,662)

Cornel said, that while no specific cause of the problem was ever identified, the review led to a number of changes and the problem did not recur. Once the review was completed, the program was restarted slowly, with the team restricting itself initially to what Cornel described as simple cases.

On May 17, when Bishop and Blanchard became aware of the anaesthetists' withdrawal of services, they also became aware of their concerns about morbidity, mortality and the apparent lack of monitoring within the program. From that time onward, Bishop and Blanchard had an obligation to ensure that the very

serious issues of competence and patient safety, which such an extreme step as a withdrawal of anaesthetic services implies, were investigated fully.

Instead, they opted for what amounted to a debriefing and team building exercise. The process put in place after May 17, 1994, was intended to appease the anaesthetists, while getting the program back in operation as soon as possible.

BLANCHARD SPEAKS WITH ODIM

After the May 17 meeting had ended, Blanchard spoke with Odim, who he feared might have been emotionally destroyed by the events. Blanchard also feared that Odim might resign on the spot. Blanchard was surprised to hear that Odim himself had concerns about the program.

And that's when he shared with me that he did not feel supported by anaesthesia. I hadn't heard that until then. Maybe I should have, but I hadn't. (Evidence, page 36,510)

Despite the magnitude of the concerns raised by the anaesthetists, Blanchard did not discuss morbidity and mortality issues with Odim at that point.

Well, I was trying to pick him up off the floor. I didn't see any point. We already had a process in place to deal with that. A, I didn't want to interfere with it, and B, I was trying to be some kind of support for the man. (Evidence, page 36,510)

Blanchard declined to get too directly involved in assessing the situation for himself. He did not consider going into the operating room with Odim at this or at any other point in 1994. At the same time, he obviously expected the issues to be resolved by the review team established at the May 17 meeting.

THE ISSUE OF COMMITTEE RECORDS

It is worthwhile noting that while there are documents that are referred to as minutes for many of the Wiseman Committee meetings, these are not true minutes in the sense of an officially agreed upon record of events. Ullyot testified that the minutes often came out late, or not at all, and were not reviewed at the next meeting by the committee members. Wiseman, who usually kept the minutes, acknowledged that they were really his dictated notes from the meetings and were not intended to be minutes. He acknowledged that he also did not make notes for each of the meetings, that he often wrote them some time after a meeting had been held and that occasionally they might not have been circulated in a timely manner.

He also said that the meetings were conducted with a view to seeing if a consensus would develop on each of the issues that were being discussed. Ullyot, McNeill and others said that they were of the view that the question of when or if a consensus had been reached was not one into which members of the committee had any input and that Wiseman himself seemed to be the sole judge of that. The very spottiness of the committee records underlines its lack of rigour in this area. The following discussion of the activities of the Wiseman Committee is therefore limited by the lack of a detailed record.

THE FIRST MEETING

All the committee members attended the first meeting on May 18, including Ullyot, who had become an additional member. Wiseman proposed the following terms of reference for the committee:

The team is to maintain an on-going review of the progress of the Cardiac Surgery Program with respect to quality of care, review of results, and to foster a spirit of comradery [sic] and good inter-personal team relationships in an effort to best serve the pediatric cardiac surgery patient. (Exhibit 19, Document 241)

The committee undertook to review all open-heart procedures that had been carried out from the beginning of the reactivation of the program in February 1994. Members were asked to prepare a written list of items that they felt needed to be reviewed and that were “relevant to their own area of participation.” The committee agreed that:

The review items will be compiled and a case review will be carried out by the team, specifically looking for areas where problems may have been encountered in the past and to attempt to answer these problems in an equitable manner which is to be generally agreed upon by the team members. (Exhibit 19, Document 241)

Members were also asked to list problem areas so that the operating-room team’s functioning could be improved. They were asked to produce a list of problems to be “discussed in an open format in an effort to resolve any and all issues that may have come up in the past. This is to be done in an effort to build a solid and unified team with a common goal.” (Exhibit 19, Document 241)

Ullyot testified that she found it difficult to distinguish between the two sorts of issues on which Wiseman was requesting information, namely those areas that related to people’s own area of participation and those areas where team functioning could be improved. This uneasy balance between areas of individual expertise and joint concern was to be a continuing stumbling block to the committee’s work.

After considerable discussion, it was decided that for the coming six weeks, cases of a more complex/high-risk nature would be deferred. Patients who could not be deferred were to be transferred and, in particular, all babies with neonatal anomalies presenting as emergencies were to be referred to Saskatoon. Ullyot testified, however, that despite Wiseman’s notes from the meeting, she did not believe the committee members had agreed that the hiatus would be limited to six weeks.

The May 18 meeting also laid out the ground rules for the committee’s work. A number of the participants who testified had concerns about the limits on debate that emerged during the review.

One of the issues related to the instruction issued by Wiseman that committee members come up with issues to be reviewed from their own area of participation. McNeill said she felt that this instruction came from a desire to reduce tensions.

At this point in time, there was a lot of tension, there was a lot of prickly feelings amongst, particularly between surgery and anaesthesia, okay, nursing and surgery as well, less so perfusion and other people.

There was a great deal of emphasis put on the issue of communication. Communication being a major part of the problem, and if we can, you know, as they say, foster a spirit of camaraderie, that that would go along way to improving outcomes for the program.

So, the meeting, initially the meetings were I think all people, Dr. Wiseman set the tone, but most of us were aware that there were prickly feelings, if you will, and not to be confrontational, that that may not be very constructive to be confrontational.

And so I think that part of this comes from, I am trying to get at that this comes from that as a background, that people were encouraged to talk about what they were the expert in and not to necessarily comment on things outside their area of expertise, for the obvious reason, that they may be mistaken or that there wasn't a sort of a third hand, a third person corroborating or being able to validate their critique or their concerns. There was—so, that's where that I think comes from, that was my understanding of where that came from. (Evidence, pages 13,267–13,268)

McNeill said she also believed that the committee would also look at broader issues, but that this would be done in a general fashion.

What I am saying is that rather than coming in and saying on such and such a day you did such and such, and I don't think it was right, coming into the committee and talking about the issue of inadequate pump flows in two or three cases, or of post-operative bleeding in two or three cases. To bring an issue that had applicability across more than one case, and with the view to finding a response to that problem that would then benefit all the other patients in the program, coming to the program. (Evidence, page 13,269)

The decision requiring participants to comment on issues only within their area of expertise would place some restrictions on potential conflict at committee meetings—although the meetings were far from being conflict-free. However, it also meant that significant issues of concern to many members of the surgical team would go unaddressed. As will be seen, some committee members raised specific events that touched on areas outside their field of expertise but had alarmed or disturbed them. These persons had no independent means of validating their concerns and were given discouraging responses.

The committee's decision-making process was also flawed. The minutes of the meeting contain one statement about the process by which the committee would go about its work.

It was recommended that individual issues be dealt with so as to reach a consensus with all members of the team participating. It is proposed that specific principles of inter-team relationships would best be developed with this overall approach. It was recognized that there are many variables involved in the overall and complex issues to be dealt with however a uniform approach would help to clarify issues and make individuals better aware of expectations. (Exhibit 19, Document 241)

When McNeill was asked to explain what she understood by this paragraph, she said, "I don't understand a lot of what you just read, like what that means actually." (Evidence, page 13,277) She is correct: it is impossible to determine what sort of decision-making process that statement was proposing. McNeill said she believed that the committee was committed to consensus, as opposed to holding votes on each issue. However, there was no formal agreement or description of how consensus was to be reached. Consensus is not always a virtue, and in some circumstances it is impossible to achieve. If it is used to paper over deep division, it is not only not constructive, but can be destructive, fostering hypocrisy rather than honesty.

The focus on team building in the committee's terms of reference also made it almost impossible to address issues of competence. The review of the quality of care in the program obviously needed to be undertaken in a professional, non-vindictive fashion. However, given the strength of feeling that most of the people brought to the committee, it is easy to see that a discussion of members' concerns might, in the short-term, undermine, rather than enhance, interpersonal relationships.

Following the two-month period during which the anaesthetists and nurses had consistently expressed their concerns about the program's results to those people whom they believed to be responsible for the program, the decision of four experienced anaesthetists to withdraw services should have set off alarm bells in the offices of the HSC department heads concerned with the program. Ulyot had made it very clear in her meeting with Wiseman that the anaesthetists were concerned about deaths.

It is unfortunate that the anaesthetists had not felt able to take their concerns directly to Giddins and Odum before issuing their May 17 memorandum. It is also unfortunate that they had felt compelled to call for an immediate withdrawal of services—although in light of their serious concerns for patient safety, there was merit to that decision.

The anaesthetists had been justified in withdrawing their services. They had been faced with an ethical dilemma: they were expected to provide services to a program, yet they also had an overriding responsibility to the patients who were treated by that program. The questions they raised were valid. However, the process that was put in place could not address the questions that they raised—indeed, they felt constrained from even voicing those concerns in the committee.

Suggesting that a surgeon lacked the skills and experience to perform a particular procedure could hardly be called comradely; nor was it likely to be seen as an exercise in team building. Their withdrawal of services was an act of collective courage. Unfortunately, it did not lead to the kind of review that was required.

PREPARING FOR THE PROCESS

NURSING CONCERNS

On May 19, 1994, the OR nurses met to prepare their list of concerns for the committee. Present were Carol Youngson, Carol McGilton, Celine Weber, Susan Scott, Beatrice Zulak and Irene Hinam.

It is to be noted that nurses from the PICU, the NICU and the VCHC did not participate in this process. Given the manner in which the committee was structured, it is understandable that the operating-room nurses did not include nurses from other units in this process.

The nurses prepared a two-page list of nursing concerns, which was submitted to the committee. They broke these concerns down into three categories: communication, morale and confusion regarding roles.

Communication

Under the heading of communication, the nurses spoke of how they had attempted to arrange a meeting with Odum before the first operation to discuss the equipment he would need. They said that Odum left them with the impression that he was familiar with the equipment they had in stock and would work with the existing equipment. After examining documents Odum had given them that described specific surgical procedures, the nurses had concluded that except for a number of special sutures (which they had placed on order), they had the necessary equipment.

This impression changed with the first pump cases. The nurses concluded that the cannulas were not what Odum was used to working with, after he made several negative comments about the equipment. In

response, the nurses provided him with catalogues from which to order cannulas. However, he said he did not have the time to go through them. This had left the nurses at a loss as to how to deal with this issue.

Morale

Under the heading of morale, the nurses said they fully supported the withdrawal of anaesthetic services. They indicated it had been very demoralizing to lose so many children in a short period of time. They did not state in their document that the deaths of the children had brought about a loss of confidence in the program—however, that should have been apparent from the statement.

Role confusion

Under the heading ‘Confusion Regarding Roles,’ the nurses stated that it was stressful to have Odim asking the scrub nurse about the set-up of cannulas and pump lines, a matter not usually within their purview. To resolve this, the nurses arranged to have a perfusionist stand at the head of the table when the cannulas were being placed. It was noted that this problem could have been worked out in advance with a dry run (Exhibit 20, Document 278 P).

ANAESTHETIC CONCERNS

The two-page handwritten note that Ullyot prepared on behalf of the anaesthetists identified three points: input into the decision-making process, communication and follow-up.

Input into the decision-making process

The anaesthetists wanted to know if the cardiologist, Giddins, declined to refer any patient whom he initially saw to the surgeon, and on what basis such decisions were made. A related question was whether or not the surgeon, Odim, declined to perform surgery on any of the patients Giddins referred to him, and on what basis. The document asked if the anaesthetists could be included in the process of accepting or rejecting patients for surgery in Winnipeg. The anaesthetists recommended that case selection be made by a committee of representatives from cardiology, surgery and anaesthesia, before a decision was made to offer surgery in Winnipeg to the parents. Ullyot testified that during Duncan’s tenure there had been extensive discussion between Dr. George Collins, Dr. Kim Duncan and herself before the first Norwood operation was attempted.

Communication

Under ‘Communication’, Ullyot’s document noted that communication appeared to depend on individual initiative. For example, the anaesthetists had questions about why the intra-operative lines were changed in certain cases. The document contained the recommendation that there be weekly review meetings with an agenda and presentations. One of the issues that the anaesthetists wanted to see resolved in

these meetings was whether X-rays would be taken in the operating room or in intensive care. It had been Duncan's practice to take X-rays in the OR, while Odum preferred to have them taken in the ICU. The anaesthetists preferred the OR, since it allowed for an immediate correction of problems in the OR if necessary. Odum preferred the ICU because it provided an opportunity to check for problems that might have arisen during the transfer from the OR to the ICU.

Follow-up

Under 'Follow-up,' the anaesthetists stated that the Morbidity and Mortality Rounds were "heavy on pathology, light on physiology and do not address morbidity." (Exhibit 203) They were concerned that only cases involving deaths were discussed, while there was ongoing concern about the extent of post-operative care needed for children who survived.

The anaesthetists recommended that each case be reviewed "to look for ways of smoothing the process. Deaths should be carefully examined to see if there were any difficulties with how the case was managed." In addition, they believed that it was important to look at more than the cases in which the patient died, since "not all good outcomes indicate a good approach." (Exhibit 203)

Ulyot testified that she hoped the committee would determine if the mortality and morbidity rates for the program were higher than they ought to have been. This could have been done, she felt, by matching children on a case-by-case basis with similar children who were cared for in other centres. In her testimony she noted that she believed it ought to have been possible to maintain a continuous record that would indicate, among other matters, the mortality rate. Nothing this rigorous was, in fact, undertaken.

It should be noted that this list did not address the anaesthetists' concern with surgical competence. The anaesthetists' reticence on this point continued.

ICU CONCERNS

Kesselman, on behalf of the medical staff of the PICU, prepared a document on June 3, 1994, which identified three areas of concern: surgical equipment, areas of responsibility and communication (Exhibit 227).

Surgical equipment/materials to be available in the PICU for emergency and elective procedures in the PICU

The PICU staff were concerned about the fact that they had not been prepared for the kind of surgical procedures Odum was undertaking in the intensive care unit. The PICU nursing staff had already asked Odum to give them some direction as to what essential equipment he thought should be kept in the unit in anticipation of the procedures he felt he had to perform there. This matter had been raised with him following the Ulimaumi case in March, but had not been resolved before the establishment of the committee. It should be noted that while some of the PICU nurses questioned whether or not it was appropriate to perform certain procedures in the PICU, Kesselman was only asking for more information on the materials Odum needed to perform these procedures. The other two points were linked.

Clarification of areas of responsibility in post-operative management and communication about patient status and proposed changes in therapy, both to the surgeon and from the surgeon.

These points refer to issues that have been discussed in the previous chapter. In particular, it would appear that Odum was still persisting in bypassing intensive care unit doctors and attempting to give medication orders to the PICU nurses. He was also requesting early-morning status reports via phone calls to his residence from nurses, whose schedules of providing nursing care to patients did not allow them enough time to make those telephone calls.

Kesselman testified that he presented these concerns at the committee meeting, and that Odum acknowledged that he would speak directly to the doctors on duty.

SURGERY AND CARDIOLOGY CONCERNS

Neither Odum nor Giddins provided written lists of issues to the committee. Odum said that he did express his concerns to committee members shortly after Wiseman's request. He testified that the issues he outlined were poor teamwork and communication, the need to consolidate the NICU and PICU and the need to reduce the number of anaesthetists. However, those attending that meeting did not recall Odum mentioning these concerns until much later in the summer and fall.

Giddins essentially said that he had no concerns that he felt he needed to bring to the committee. His view was that there was no reason to be concerned about what had occurred in the program to that point. He also was of the view that the anaesthetists' action was not appropriate. In response to questioning about what the Committee was asked to do and his view about the issues it was asked to address, Giddins said:

Yes, but I can't—I still, I am still unsure of many of what you are calling concerns. The concerns that you are remarking on, I feel are issues that are inherent in a pediatric cardiac surgical program. Concerns over outcomes, concerns over ensuring the highest possible quality of program, those issues are standard issues as far as I am concerned.

Q. Probably standard issues for any kind of surgery in any hospital anywhere; right?

A. Yes.

Q. You will agree, though, that having medical professionals withdraw services because of those concerns is a fairly unique experience?

A. Yes, but I can't speak for the people or the practitioners that chose to do that.

Q. I am not asking you to. I am just asking if for you this was something new?

A. Yes. (Evidence, page 3,387)

Giddins was the acting medical director of the VCHC and in charge of the PCS program. Considering the state of affairs that existed in the program to that time, the circumstances surrounding the deaths of Jessica Ulamaumi and Vinay Goyal and the concerns expressed by the nurses and the anaesthetists, Giddins's view could easily be seen as an alarming statement. It also helps to understand why other parties were of the view that approaching Giddins with their concerns was an exercise in futility.

Ullyot testified that, as far as she could tell, the lists presented to Wiseman were never collated or directly presented to the committee as agenda items, although a number of the issues were raised tangentially. Wiseman's testimony on this point is unclear, although it supports Ullyot's assertion that the issues on the list were, for the most part, only discussed as and when they might arise in the individual cases that were being reviewed (Evidence, page 40,482).

THE ANAESTHETISTS AGREE TO RETURN

On May 24, 1994 the anaesthetists who were members of the section of pediatric anaesthesia issued a memorandum to Wiseman (with copies to Craig and Blanchard). This memorandum stated that a "workable method of conducting reviews and development" appeared to have been established. It concluded that "We agreed to resume cardiac anesthesia under the conditions discussed by the Committee on May 18, 1994." (Exhibit 19, Document 243) Those conditions included one that specifically required that only low-risk cases be done in Winnipeg until the review was complete, that anything other than low-risk cases be deferred or transferred and that emergency neonatal cases be sent to Saskatoon.

THE WISEMAN COMMITTEE BEGINS ITS DISCUSSIONS

No minutes or notes were kept of the committee's May 25 meeting. According to testimony, Wiseman asked each committee member to present his or her concerns. In putting forward the concerns of her colleagues, Youngson said:

I remember being very apprehensive, very nervous. And I just talked about some of the cannulation issues and some of the air in the cannula type issues, and the fact that I was very uncomfortable having to—don't forget, I am saying this to Dr. Odum. (Evidence, pages 8,465–8,466)

Youngson said she also spoke about Odum's requirement for silence in the operating room during surgery, which was different from Duncan's approach. She said that Odum was pleasant and responsive to her concerns at the meeting. He indicated that he was sorry that she had these concerns, and that where possible he would attempt to rectify matters.

Youngson also testified that Odum asked McNeill if it would not be possible to shorten the induction period. According to Youngson, McNeill explained that this would be difficult, since the HSC was a teaching hospital and residents performed some of the functions undertaken during induction.

What was not discussed directly, according to Youngson was the mortality rate. When asked if anyone brought the mortality rate issue up for discussion, she testified:

I don't think so, no. I didn't really discuss the high mortality rate. I just said that, you know, we were a little upset about what had happened. I don't think I came right out and said, you know, too many children are dying. I didn't put it like that. I said that what had happened up until that point was upsetting for us. (Evidence, page 8,472)

CORPORATE REORGANIZATION TAKES EFFECT

On June 1, 1994, the HSC's corporate reorganization took effect. From this date onwards, the Department of Pediatrics and Child Health and Pediatric and Child Health Patient Services (formerly Pediatric and Child Health Nursing) reported to the same vice-president, Helen Wright. The departments of Anaesthesia and Surgery reported to Susan VanDeVelde-Coke. The situation was further complicated by Bishop's departure on that date. According to documents provided to this Inquest, there were a number of acting heads, including Dr. John Bowman until September 15, when Dr. Brian Postl took over the position of head of Pediatrics and Child Health.

THE WORK OF THE COMMITTEE DURING THE MONTH OF JUNE

Throughout June and July, the committee reviewed cases. Issues such as morbidity and mortality, length of bypass and cannulation were discussed as they arose in individual cases, but not as separate, overarching topics. The meetings were held once a week in the late afternoon and generally lasted for two hours.

Odim said that during the early period of the committee meetings, there was discussion about ways in which the team could reduce the time spent in the operating room. At the same time he testified that attendance at team functions continued to be, in his opinion, poor.

McNeill felt that as time passed, the relations between team members deteriorated. She was pleased with the success that was being achieved with the low-risk operations, but felt there was growing pressure to move the program back to full service, a move with which she was not completely comfortable. As a result, relations between herself and Giddins and Odim, particularly at committee meetings, were marked by animosity. Giddins and Odim were eager to return to a full-service program, while McNeill resisted. Ullyot said that by a certain point in the committee's proceedings, there was conflict on this issue at nearly every meeting. Ullyot said that for the most part, Wiseman, Kesselman, Maas and Youngson did not participate in these discussions.

Kesselman said that he believed the committee was addressing problems that were situated in the OR.

This is an issue with the surgeons and with the anaesthetists and the nurses there primarily, and that if they can agree that the program should be escalated at this point, for our part, we are able to comply with that and we can manage the patients. And my view really was more from that point of view, that I was willing to go along with that so long as they were able to agree on it. (Evidence, page 34,043)

Wiseman testified that at the outset the committee members clustered themselves into three camps: the surgeon and the cardiologist in one camp; the anaesthetists and the nurse in another; the perfusionist and the intensivist in a third. The last camp was seen to lie between the other two.

Wiseman said that at times he felt there was a need for freer communication on the committee than existed. He also noted that team building could not take place until honest communication took place; without that communication, the team would be built on false pretences. He did not, however, seem to have taken any steps to address this issue.

THE TRIP TO SASKATOON (JUNE 13–14)

At its first meeting on May 18, the committee had recommended that:

The issue of an interim plan for the management of major emergency neonatal anomalies was raised. It was recommended that for the next 6 weeks the team transfer these infants to Saskatoon and participate in their management in the transferred setting. It was recommended that the cardiac surgeon, anaesthetist, and possibly one of the operating room nurses travel to Saskatoon and be involved in the infant's care. (Document 241)

While committee members were not involved in the management of all the cases that were referred out of province, in mid-June Odim, Swartz and Youngson travelled to Saskatoon to participate in the care of three patients. Odim even scrubbed in and assisted Dr. Roxanne MacKay, the pediatric cardiac surgeon in Saskatoon, with two of the operations.

Youngson said that she kept notes about any equipment used that was different from the equipment in Winnipeg. Odim had complained in the past about the pacing wires in Winnipeg, and she noted that a different wire was used in Saskatoon. While Odim said he did not want to use the wire that was used in Saskatoon, he did say that he would prefer to use the sort of needle driver that MacKay used. (A needle driver is a piece of equipment that the surgeon uses in suturing. The needle driver is used to grasp the tiny needles that are used in the suturing process.)

Youngson said that Dr. MacKay was very quick and proficient and that the team worked well together. In conclusion, though, Youngson testified:

I don't think that there was anything really noteworthy that anybody saw, that was really any better or any different than what we have here in Winnipeg. (Evidence, pages 8,493–8,494)

Odin said that he hoped the exposure to different practices would encourage other team members to be less rigid in their approach to operating-room practice. He said the trip was not beneficial to him personally.

I don't think that I learned much, because I shared the same sort of philosophy and concepts that the surgeon that I was visiting shared.

Question: Dr. MacKay?

Odin: That's right. She was in charge of her ship, she had an unified team and a small number of players. And I don't think our philosophies or beliefs in terms of how to develop a pediatric cardiac surgical team was radically different. So, personally, what it did, I did have some questions for her in terms of how she went about it, in that environment, and her concerns about the various components. (Evidence, pages 25,151–25,152)

Swartz indicated that in her view there was something to be learned from the Saskatoon experience, and that on her return she had waited for an opportunity to share it. She felt that the surgeon and the other team members had developed a close working relationship and they had a clear understanding of each other's roles. She thought that MacKay was a very fast surgeon and that one of the major differences between the Saskatoon and Winnipeg programs was the shorter period of time the Saskatoon patients were under CPB and in the operating room. She also noted small differences in the manner in which the anaesthetist performed his duties in the OR, but overall felt that the manner of anaesthetic delivery was not significantly different between the two programs.

She had wanted to share these thoughts with other committee members, but was frustrated by the fact that Wiseman did not place the matter on the agenda. Finally she asked for an opportunity to address the committee about the trip and was permitted to do so at a committee meeting in July. The committee devoted one meeting to listening to the members who went to Saskatoon and discussing their observations. Odim did not believe that the visit had any impact on the Manitoba program. He did say he believed that during this period, the people in the Winnipeg program were capable of doing high-risk cases.

THE CASE OF VM

VM was a five-year-old child who underwent a repair of an ASD on June 27, 1994. During the course of the operation the cannula inserted into VM's inferior vena cava became dislodged and fell out.

Odim testified that while he was explaining the child's anatomy to a student, the cannula rotated out of the inferior vena cava into the open right atrium. Hancock confirmed that in the process of showing the student the patient's anatomy, Odim manipulated the cannula to expose VM's defect. With the movement, the cannula tip flipped out of the IVC. However, Hancock testified, the cannula was still attached to the atrium wall. At that point there was a considerable amount of bleeding from the vein and if the cannula was not quickly reinserted and the bleeding controlled, there was potential for a serious negative outcome.

In this situation, normal surgical practice is to initiate what is termed 'sucker bypass', whereby bypass catheters that have suction capacity are used to take blood from the operative field back to the bypass machine. These catheters are usually used in surgery to remove blood from the surgical field, and normally the blood suctioned away from the field is not returned to the bypass machine. However, when sucker bypass is initiated, the suctioned blood is returned to the bypass machine to minimize blood loss.

There is a conflict in the evidence as to whether or not Odim notified the team of the cannula coming out and also as to who instructed the perfusionists to initiate sucker bypass.

McGilton testified that Odim did not inform the team that the cannula was out. Youngson testified that she was alerted to the problem by a perfusionist, who announced that the blood flows were down. In her testimony, Youngson said that Odim may have indicated that the cannula was out. Reimer, who was the anaesthetist for the operation, said that he did not recall Odim informing the team that the cannula had come out, although he soon became aware of the event.

Youngson testified that she expected Odim to tell the perfusionists to initiate sucker bypass. According to McGilton and Youngson's testimony, Odim did not give any instruction to initiate sucker bypass. Instead, according to McGilton, Youngson gave the instruction, which McGilton repeated to Todd Koga, the perfusionist. Hinam, the anaesthetic nurse, also testified that the instruction to go on sucker bypass came from Youngson, not Odim. McGilton put the suction cannula in place to take the blood away from the operative site.

Odim, however, testified that he instructed the team to go on sucker bypass. He did not recall Youngson suggesting they go on sucker bypass. Instead he recalled her yelling that they were on sucker bypass. He took this to be a message to the perfusionists that the suction cannulas were giving the return.

Throughout this process Odim was having difficulty reinserting the cannula. After attempting unsuccessfully to reinsert the initial cannula for a number of minutes, Odim successfully recannulated the child, using a different type of cannula. Once the cannula was replaced, the team continued with the repair.

While no known damage to VM arose from this event, the incident should have been recorded. In addition, an incident report should have been filed. However, there was no record of the event in Odim's operative report; nor did any member of the OR team complete an incident report. Additionally, the VM case was not reviewed by the Wiseman Committee.

Following this operation, McGilton started to make notes about operations in which she was involved. She speculated in her notes, as Youngson did in the notes she was keeping, that it appeared that Odim was not aware of the option of going on sucker bypass in such a situation.

THE JUNE 29 COMMITTEE MEETING

The evidence suggests that there were weekly meetings of the committee from May 25 to June 29. However, there are no notes or minutes from any of the meetings between those two dates. Additionally, the witnesses who were on the committee were unable to recall the discussion from those meetings with any degree of specificity. However, it is likely that during one of those meetings, the committee discussed the death of Gary Caribou. The first of the 12 deaths recorded in the any of the committee's notes and records, however, is that of Jessica Ulimaumi, whose case was discussed at the June 29 meeting.

On that day the committee met, with Dr. Heinz Reimer in the chair. Neither McNeill nor Wiseman could attend. McNeill had arranged to have Reimer sit as her replacement because he had been the anaesthetist for a portion of the Ulimaumi case, which was to be reviewed at the meeting.

One other case was discussed. This first case was that of KK, a four-and-a-half-year-old boy with an ASD. It was concluded that the operation had been straightforward and had not led to any concerns from nurses, anaesthetists or the ICU staff.

The second case was that of Jessica Ulimaumi. In reviewing the case, Odim told the committee that when he had first read her chart in the spring of 1994, before seeing her, he had been surprised to discover that she had not undergone surgery at an earlier date. He said that when he had examined her, however, he concluded that her clinical state was better than suggested by the information in the chart.

The course of the operation was reviewed. Reimer noted that there had been increasing difficulty in ventilating the patient during the lengthy bypass. According to Reimer's notes of the meeting:

Some discussion took place as to whether the patch leak should have been repaired immediately as was done vs. waiting a few days for the myocardium to recover and then coming back to close the leak. Dr. Odim stated that his training was that if there was a mechanical problem it should be repaired immediately, and that this was done at the institution where he trained. Dr. Reimer pointed out that in that institution the total duration of cardiopulmonary bypass even with a re-repair was probably shorter than the duration of bypass for this child with the first repair alone. Dr. Reimer also stated that at the time the decision was made to repair the patch leak he could have been more vocal in pointing out the degree of inotropic support the baby was then on and generating more discussion as to whether the leak should have been repaired immediately or later. (Exhibit 67, HSC 81)

The child's stay in the PICU and the removal from ECMO were also reviewed. The minutes state that:

During the cannulation one limb of the venous cannula was removed and not clamped. The child rapidly lost blood through this cannula and arrested.

Dr. Odum acknowledged that he should have placed a clamp on the cannula. (Exhibit 67, HSC 81)

In her testimony, Youngson said that Mike Maas had not been present at the previous committee meeting. She had phoned Maas to alert him to the fact that the Ulimaumi case was going to be discussed at the next meeting. As a result, Dave Smith, the perfusionist who was present in the PICU when Ulimaumi died, attended the meeting. Youngson said there was a discussion of the events in the PICU. During that part of the discussion, Odum explained what he did, but made no mention of the fact that the cannula that had been removed from the child, had not been clamped and that blood had escaped through it. She testified that the following exchange took place.

Dave, bless his heart, suddenly said, well, Dr. Odum, what exactly happened? I was behind my machine, I couldn't see what was going on at the bedside?

And Dr. Odum sort of sat back for a second, and he said, well, actually, what happened was I forgot to clamp off the IV—I can't remember if it was the SVC or the IVC cannula, one of the cannulas that is attached to this Y. He pulled it out, and the patient bled to death out the other cannula before anybody noticed that this had happened.

Question: Dr. Odum explained that's what happened at that time?

Youngson: Yes. He said as well that there was a lot of activity around the bed, B. J. Hancock apparently was there. She wasn't, my understanding of what he said, she wasn't standing where she normally was standing in the operating room, and that she always clamps these lines before they are pulled out, and that she hadn't clamped this line, or he hadn't realized that she hadn't clamped this line, and he had pulled it out not realizing it wasn't clamped.

Again, I sort of sat back, and I thought, aren't you nice, you are trying to blame B. J. for this. (Evidence, pages 8,475–8,476)

Youngson said that she believed Odum was familiar with the clamps under discussion, because he always referred to them in the operating room as slash clamps, while other HSC physicians referred to them as tubing clamps.

This was followed by a discussion about whether the decannulation should have been performed in the PICU or in the OR. Reimer was of the view that it would have been appropriate to have both operating-room nurses and an anaesthetist present for the decannulation. Odum told the committee that he had not requested operating-room nurses because they were reluctant to work weekends. Youngson said that this in fact was not the case. The operating-room nurses had never complained about working weekends. She insisted that if they had been called, they would have attended. She pointed out that on a number of occasions, operating-room nurses had been called in to perform surgery on weekends. They recognized that it was part of their responsibility.

Reimer also noted at the meeting that up to that time two children in the program:

had suffered fatal outcomes largely due to the fact that they had VSD patch leaks which required re-exploration. Dr. Odum replied that the problem that had occurred in both patients was difficulty in exposure of the top portion of the VSD such that there was an actual fold in the VSD which had resulted in his interrupted sutures being placed wider apart than desired. He also said he had dis-

cussed this with his assistants and was implementing a different type of retraction which would result in better exposure and hopefully circumvent the problem in the future. (Exhibit 67, HSC 81)

These minutes and the testimony about this case form the most extensive documentation about the committee's review of a case. It is apparent that this meeting was at times very tense and confrontational. However, it is not clear what, if anything, was resolved by this review. The meeting merely provided an opportunity for the key participants to give their interpretation as to what happened, instead of determining why problems had occurred and how things could be prevented in the future. It would appear that there was no discussion as to whether or not the team members, either individually or collectively, had sufficient experience to attempt this operation. It would appear that this would be the manner in which all of the reviews ended.

CONFLICT OVER OUT-OF-PROVINCE REFERRALS

Over the weeks following the first meeting of the Wiseman Committee, Giddins consulted with members of the Department of Anaesthesia to determine which cases were appropriate to take to surgery and which cases were to be classified as medium to high risk. Odum said that he did not participate in these discussions. The committee met weekly from mid-May through June. It is apparent that the question of whether a child was to be operated on in Winnipeg or sent out of province came to dominate many of the committee's discussions during this time. It is a sign of the rushed nature of the start-up of the committee that while it had a protocol stating that low-risk cases would be done in Winnipeg, there was no definition of low risk.

Odum testified that as the case reviews proceeded, there was an underlying and ongoing conflict over whether a child should be sent out of province or operated on in Winnipeg.

There always seemed to be a battle between the anaesthesia group and the rest of the Committee on issues and the battle always centered around who to operate on, when to operate on them.
(Evidence, page 25,135)

Odum's suggestion that it was anaesthesia against everyone else on the committee is contrary to the evidence. The conflict over doing higher-risk cases seems clearly to have been between anaesthesia representatives Ullyot and McNeill on the one side and Giddins and Odum on the other.

McNeill gave this description of an exchange between herself and Giddins over one referral:

And he got angry with me and sort of jumped from his chair and leaned across the table straight at me, and raised his voice to me about what he was talking about, and took me aback at the time by, you know, the vehemence, if you will, of his statements. (Evidence, page 13,291)

Youngson testified that she witnessed the event. She said that Giddins "sort of came across the table" and "he just screamed at Ann." Youngson testified: "I just sort of sat back and I thought, well, that's it, I don't want that to happen to me." (Evidence, pages 8,555–8,556)

Odum also testified that it was never clear to him if the committee wanted to restrict operations to low-risk procedures or to low-risk patients. This was an important point that was never resolved.

In every operation, the risk of surgical complications is based on the operation itself, the condition of the patient and the interaction between the patient and the operation. A healthy patient generally presents a

lower risk than one who is in poor health. While any patient having a minor operation would be at lower risk of having a complication, if the patient is in poor health, he may be considered a high-risk patient even if the operation is a low-risk procedure. Another patient, with no other medical problems, in good physical health and undergoing the same minor procedure, would be considered to be a low-risk patient. Therefore, two patients undergoing the same procedure may be viewed as presenting different risk levels.

It would appear that in assessing a patient for selection, Odum and Giddins considered only the risk associated with the procedure, while the anaesthetists also considered the risk associated with the patient's physical condition. Therefore, while from time to time, the surgeon and cardiologist wanted to perform a procedure that they saw as being one of low risk, the anaesthetists would object if they felt the risk was enhanced due to the condition of the patient.

Despite Ulyot's request at the start of the committee process, anaesthetists never became involved in the initial case-selection process. The only two members of the committee who attended the CVT conference continued to be Odum and Giddins. It was at this conference that Giddins presented cases to Odum for his consideration. The other members of the operating team were never invited to these conferences. Why Giddins and Odum never changed their procedures is a matter of speculation.

SWARTZ'S NOTES

One of the major criticisms of the committee process is that it involved a limited number of the people actually involved in the treatment of patients during the spring of 1994. Also, the committee focused on issues of teamwork, to the exclusion of competence and ability. Many of the people involved in the committee were reluctant to be completely frank about their concerns. However, it does appear that one member of the surgical team was prepared to raise these issues, but she was never asked to present her concerns to the committee.

Soon after the institution of the committee, Swartz prepared a four-page document outlining her general concerns with the program. She did this in anticipation of being consulted by the committee, however, the committee never undertook such a consultation, and therefore never heard her concerns.

The document (Exhibit 127) lists numerous concerns with the program that have been outlined in the previous chapter. However, it is worth reprinting Swartz's second point.

Are some cases of a degree of difficulty beyond the training, expertise, clinical experience and judgement (as a result of experience) of our surgeon. It is one thing to read about a procedure, another to see it, another to do it and another to do it well and recognize the difficulties and complications and know how to avoid or solve these problems.

I am referring to our high morbidity and mortality as evidence in themselves in general. (Exhibit 127)

These are strong words. One wishes one could say that it was simply unfortunate that they were never spoken at a committee meeting. But, in fact, it is far more than unfortunate. Swartz's comments represent the very issue that had brought about the anaesthetists' actions to begin with and permeated much of the thinking of some members of the committee throughout 1994. Silence on the point of whether or not competence was an issue allowed the matter to remain unaddressed.

CRAIG AND ODIM MEET

One morning in June, Craig asked to meet with Odim. Blanchard had told Craig that Odim had not felt supported by the anaesthetic group and Craig wanted to find out what Odim was concerned about with respect to the anaesthetists and to see if he could address Odim's concerns. Craig recalled that Odim expressed the view that the number of anaesthetists involved in the Pediatric Cardiac Surgery Program was too high. He felt that there should be fewer anaesthetists doing pediatric cardiac surgery in order to maximize their skills and knowledge. He felt—as did his predecessor Duncan—that with the low number of open-heart cases actually being performed in Winnipeg, having four anaesthetists rotating into the operations diluted their experience and made it difficult for them to develop appropriate levels of skill. Craig says that he listened to Odim voice his view but did not undertake to make any changes.

Craig held a different view as to the number of anaesthetists needed for the program.

I recognize it as a concern, but I don't really see the relevance. If you look at the anaesthetists, including myself, who practice in the teaching hospitals, St. Boniface, HSC, adult, pediatric, I would guess well over half of them aren't full time doing clinical anaesthesia. I think that's good, that some of them are doing research, some of them are working in the ICU. So to me it is the reality of modern anaesthetic practice, same here as elsewhere.

So to say that you have to have an anaesthetist working five days a week in the operating room or they are not a good anaesthetist, or they are not as good as if they were, it doesn't make sense. So I would like to put it in a different context; if somebody wanted to expose to me the logic as to why part time is bad, I would be delighted to look at it, but I don't believe it is. (Evidence, page 34,559)

Craig also testified that he did not believe that the fact that each of the anaesthetists was part-time reflected a lack of commitment on their part, an issue of concern to Odim.

THE CASE OF ARIC BAUMANN

ISSUES

Aric Baumann underwent heart surgery on June 30, 1994, and died on August 21 after spending 52 days in the PICU. His death was due to pulmonary vein stenosis, an undiagnosed congenital defect. It is essentially unresponsive to treatment and usually fatal.

This case gave rise to the following questions:

- Could Aric's pulmonary vein stenosis have been identified before surgery?
- If it could have been detected earlier, could Aric have benefited from a heart-lung transplant?
- Was Aric a high-risk patient at a time when the program was not undertaking high-risk cases?
- Were his parents provided with sufficient information to allow them to give informed consent to the procedure?
- What was the cause of death and was it preventable?

BACKGROUND AND DIAGNOSIS

Aric Baumann was born on December 7, 1993, at St. Boniface General Hospital. He was born prematurely at 36 weeks gestation and weighed five pounds two ounces. He was the second child born to Curtis and Deanna Baumann. Shortly after his birth, Aric was noted to be cyanotic and to have a heart murmur.

Giddins examined Aric at the St. Boniface Hospital soon after his birth. Deanna Baumann testified that Giddins told her and her husband that Aric had a hole in his heart, but that he would likely not need surgery for a number of years.

Giddins subsequently saw the family at the Heart Centre on January 3, 1994. Giddins observed that Aric's chest was clear, although his breathing was shallow with mild in-drawing. Aric's oxygen saturation level was 96 per cent; however, this value dropped when he exerted himself. The results of an electrocardiogram suggested that Aric had:

- enlargement of his right atrium
- hypertrophy of his right ventricle.

These results, together with the clinical findings, suggested that Aric had a partial atrioventricular canal defect with overload of the right side of his heart. A partial atrioventricular canal defect is similar to a complete atrioventricular canal defect, except that the child still has separate valves between the left collecting chamber and the left ventricle and between the right collecting chamber and the right ventricle.

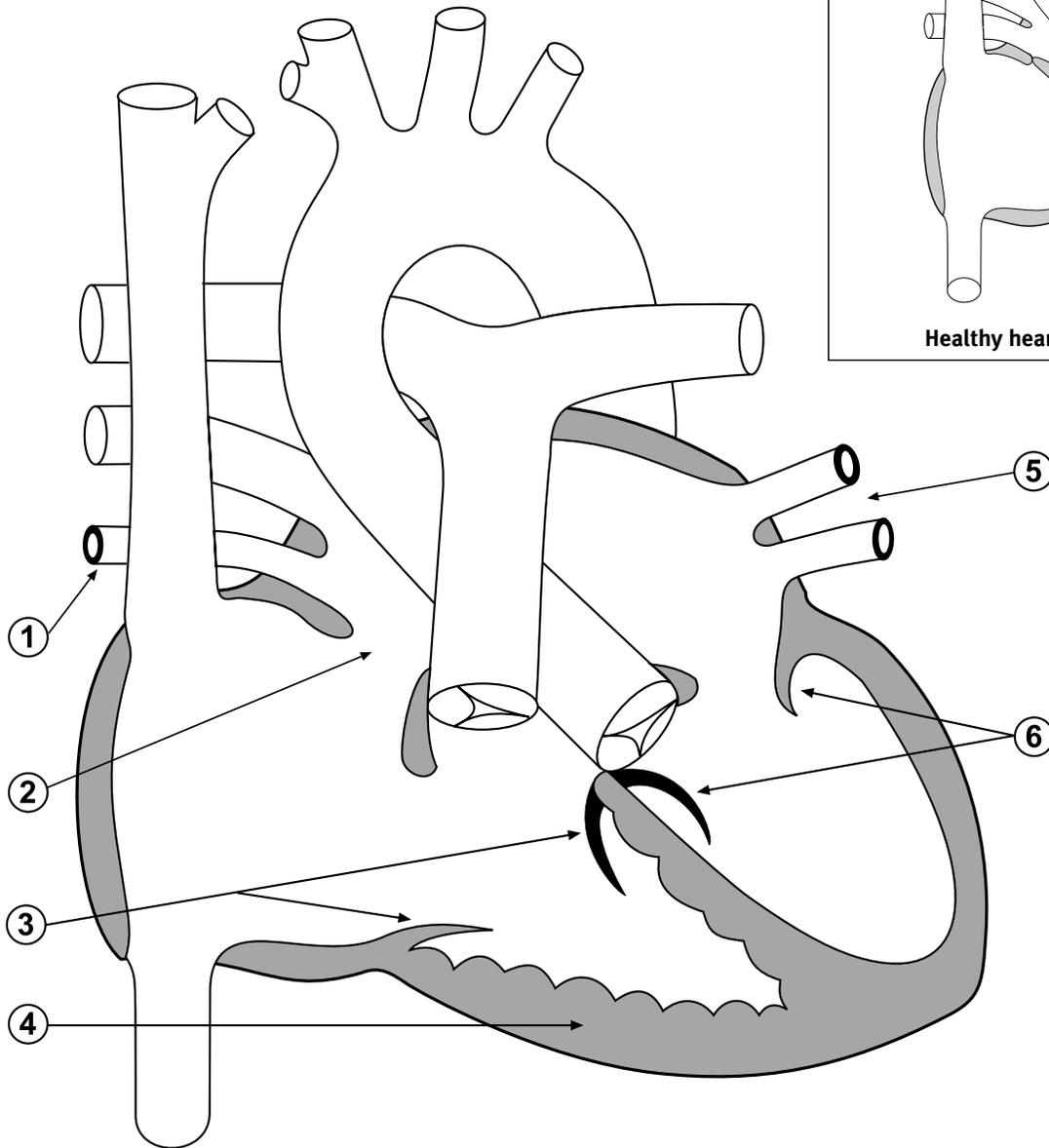
An echocardiogram confirmed the diagnosis of a large degree of atrial shunting, with moderate to severe right atrioventricular valve regurgitation and a moderate elevation of pulmonary pressures. In other words, Aric had what is termed a primum atrial septal defect. This is a hole between the top chambers of the heart. The hole was thought to be large, due to the amount of blood that was shunting. This condition is usually associated with minor valve problems and leakage.

Giddins said it was his approach to attempt to surgically correct the defects that Aric was suffering from when the child was between two and three years of age. Therefore he did not recommend sending Aric to surgery at that time.

In a January 3, 1994, letter to Dr. Cheryl Simmonds, Aric's doctor, Giddins confirmed that Aric had tachypnea (rapid breathing) with mild in-drawing, which were symptoms of mild right-heart volume overload and pulmonary edema. Since Aric was thriving, his liver was normal, and his peripheral pulses and perfusion were good, Giddins advised that there be no specific intervention at that time and that a follow-up visit take place in three months. However, he cautioned that with such a large atrial septal defect and valve regurgitation, a heart catheterization followed by a definitive repair would be necessary if Aric's condition deteriorated.

At Aric's follow-up appointment on April 13, Giddins found Aric's condition to have remained relatively stable, although there had been some deterioration. Aric's oxygen saturation level was 86 per cent. Both ventricles were hypertrophied, and an echocardiogram revealed moderate to severe left atrioventricular valve regurgitation. Considering the changes and the continued atrial shunting, Giddins arranged for Aric to undergo a heart catheterization in May. It was becoming apparent that a surgical repair might be required in the near future.

Diagram 7.1 Aric Baumann – pre-operative heart



- 1 – Right stenotic pulmonary vein (not detected prior to surgery)
- 2 – Partial atrioventricular canal defect (septum primum defect)
- 3 – Deficient tricuspid (right atrioventricular) valve (not detected prior to surgery)
- 4 – Right ventricular hypertrophy
- 5 – Left stenotic pulmonary veins (not detected prior to surgery)
- 6 – Deficient mitral (left atrioventricular) valve (not detected prior to surgery)

Before the catheterization took place, however, Aric became very ill. When his parents took him to hospital on April 30, he was diagnosed with heart failure and treated with diuretics. He also required treatment with antibiotics for ten days for an ear infection. During his stay in hospital, an echocardiogram was done on May 2. This showed:

- a partial atrioventricular canal defect
- a torrential left to right shunt through a large primum atrial septal defect
- severe right atrioventricular valve regurgitation
- moderate pulmonary hypertension.

The shunt was diagnosed as torrential because four hundred per cent more blood was flowing into Aric's lungs than was normal. A cardiac catheterization performed on May 5 confirmed those findings and indicated that there was also mitral stenosis. Aric's heart failure was brought under control and he was discharged home on May 8.

One of the issues in Aric's case was the fact that the defect Giddins identified did not normally create the degree of hypertension that Aric was suffering from, so early in life. Odim attributed the hypertension to the mitral stenosis, and to the hole in part of the atrial septum above Aric's valves.

THE DECISION TO OPERATE

On May 9, 1994, Giddins and Odim identified Aric as a candidate for surgery in the near future, much earlier than had been previously anticipated. A date for surgery was set for mid-June, although the operation was subsequently postponed because Aric was suffering from a mild cold.

CONSENT

On Thursday June 16, Odim met with the Baumann family. He testified that he explained the risks to the family in detail. Deanna Baumann testified that they were told that the operation involved placing a patch over the ASD, a procedure that would take only 15 minutes, although it would take several hours to prepare their son for this repair. She recalled that Odim gave them no indication of any risk, and they were led to believe that Aric would be home within seven to ten days following the operation. Odim testified that he could not recall discussing the slowdown in the program with the Baumanns. He did say that during this period he did inform parents that the program was undergoing a slowdown and reorganization.

During that summer when we were seeing patients in clinic, it was quite often patients wanted to know when they would have their surgery. And the families who were being seen in the clinic, sort of, many of them are anxious to get a surgical date. And during those conferences in the office, I did mention to families that the program had slowed down. I did mention to families that that's why we don't have a particular date, or could not promise them when we might be able to do an operation. I did mention to families that the team was having difficulties and problems, and we are trying to sort that out. (Evidence, page 25,199)

However, Deanna Baumann testified that she and her husband were never told anything about any problems in the Pediatric Cardiac Surgery Program.

While this case had first been presented to the CVT conference before the May 17 program slowdown, the operation did not take place until after the Wiseman Committee had started its deliberations. Giddins was asked if this case was taken to the committee since it involved open-heart surgery. He testified: “No, because atrial septal defects were in the general category of being low risk.” (Evidence, page 3,862) He testified that he had reached this conclusion because there had already been two ASD cases undertaken after the May 17 slowdown. In his testimony, Giddins said he believed that this was a very low-risk operation, with the fatality rate being between zero and five per cent. This sentiment was also expressed by Odim, who said he believed the operation to be low risk.

However, in a letter that he wrote to Simmonds on August 22, after the child’s death, Odim stated:

In light of the torrential left to right shunt, pulmonary hypertension, elevated pulmonary vascular resistance despite oxygen therapy, and relative left-sided hypoplasia, we all knew that Aric would be at a substantially higher surgical risk [underlining added] than the usual ostium primum defect lesion. (Exhibit 2, page BAU 34)

In his testimony, Odim said he still believed Aric to have been a low-risk patient, although the risk was greater than the five per cent risk he would assign to an ASD. He declined, however, to assign a percentage value to the risk. Odim also indicated that he gave the parents the following information about the risk to Aric:

We were very concerned about the issue of the pulmonary hypertension, the issue of the increased pulmonary vascular resistance, and cautioned mom and dad that the post-operative course could be very difficult if the child were to have what we call pulmonary hypertensive crisis, remain intubated for a long time, need additional types of drugs to help with the pulmonary bed. (Evidence, page 25,179)

Swartz had a different view of the risk involved in the case, although she agreed to proceed with the case when it was discussed at the pre-operative conference. She testified:

I thought this was a high risk case, just the very fact that he had pulmonary hypertension. I wondered why we were going ahead with it. I might even, you know, I can’t remember, I can’t remember exactly if I talked to Dr. McNeill. (Evidence, page 15,892)

From the testimony presented to this Inquest, it would appear that Aric Baumann’s lesion might justify calling this a low-risk case, as indicated by Odim and Giddins. However, the seriousness of his pulmonary hypertension and increased pulmonary vascular resistance suggest that the risks associated with this case were much higher. While he might not be a high-risk patient, at the very least he was on the high-end of the low-risk rating.

There is a significant difference in the testimony of Deanna Baumann and Odim as to the amount of information that was provided to the Baumanns about both the particular level of risk in the case and the state of the overall program. On this point, Deanna Baumann’s evidence is to be preferred.

ADMISSION TO THE HOSPITAL

Aric was admitted to the Children’s Hospital on Wednesday morning, June 29, for elective surgery the next day. The examinations conducted on admission found his chest clear with mild in-drawing. That evening, Deanna Baumann gave her written consent for surgery.

THE OPERATION—JUNE 30

On the morning of June 30, Aric underwent a repair of a partial atrioventricular canal defect. This was accomplished by placing a patch closure over the septal defect. There was no ventricular component to this A-V canal malformation. In his operative report, Odum noted that the atrioventricular valves were malformed.

The operating team is set out in the accompanying table.

TABLE 7.1: Persons involved in the operation on Aric Baumann, June 30, 1994

<i>OR team member</i>	<i>Persons involved</i>
Surgeon	J. Odum
Surgical assistant	B. J. Hancock
Anaesthetists	J. Swartz, S. Goheen (resident)
Scrub nurses	C. Youngson, H. Skomorowski
Circulating nurses	C. Weber, B. Zulak
Perfusionists	C. McCudden, T. Koga

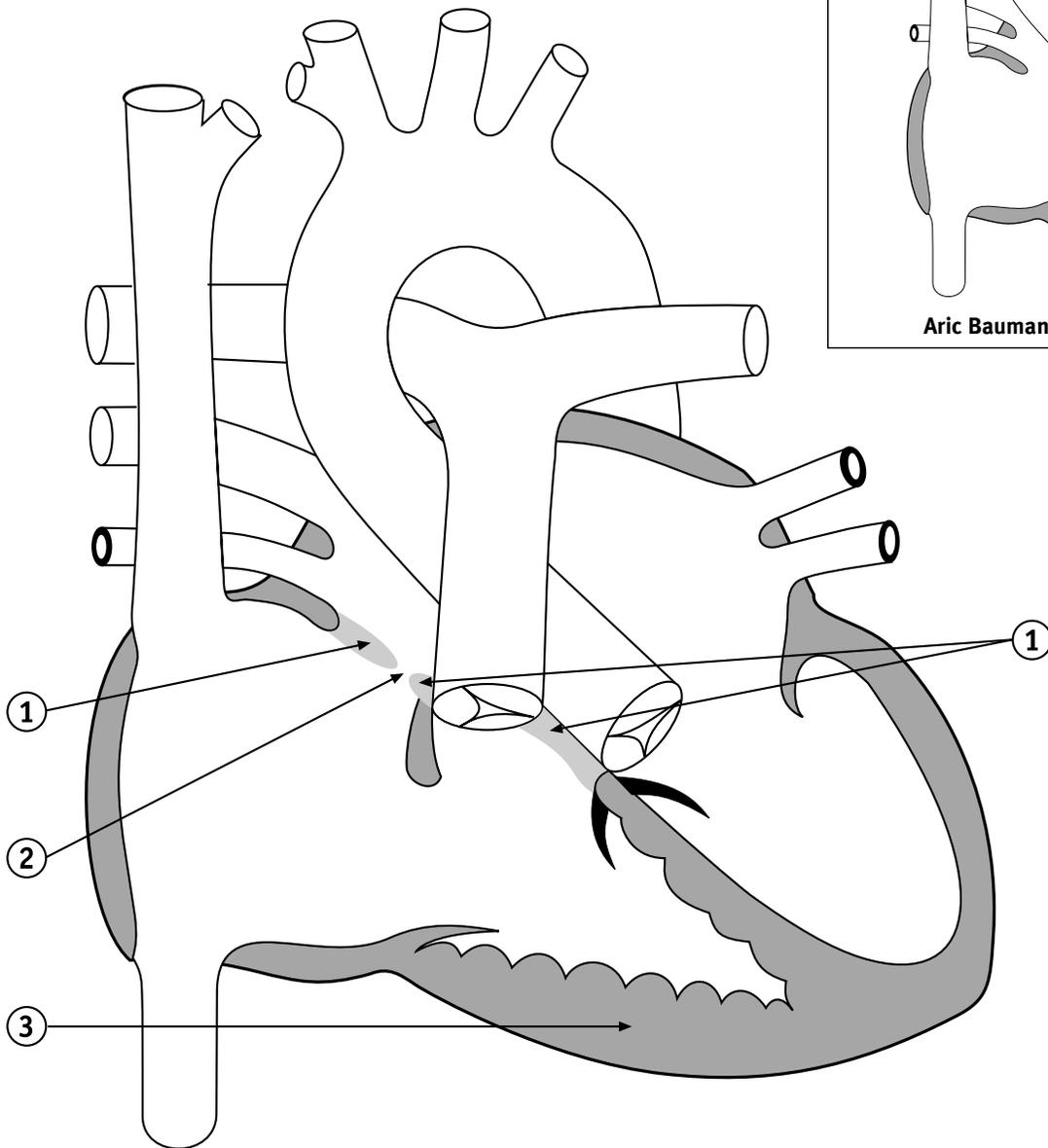
The anaesthetic preparation and induction time was one hour and twenty-eight minutes. There was no indication of problems during this period. The total surgical time, from beginning the incision to closure of the incision, was five hours. There were two periods of cardiopulmonary bypass that totalled two hours and twenty-nine minutes. The aortic cross-clamp time was forty-four minutes.

TABLE 7.2: Length of phases of the operation on Aric Baumann, June 30, 1994

<i>Phase of the operation</i>	<i>Time taken</i>
Induction	1 hour 28 minutes
Bypass	2 hours 29 minutes
Aortic cross-clamp	44 minutes
Total surgical time	5 hours
Total operating-room time	6 hours 53 minutes

In his operative report, Odum said that there were problems during rewarming in getting Aric’s heart to beat in the proper rhythm. Aric experienced third-degree heart block, a lack of synchronization in the contractions of the upper and the lower chambers of the heart. Third-degree heart block is the most serious form of heart block.

Diagram 7.2 Aric Baumann – post-operative heart



Aric Baumann – pre-operative heart

- 1 – Patch closure of partial atrioventricular canal defect
- 2 – Fenestration of patch closure of partial atrioventricular canal defect
- 3 – Cardiomegaly with right ventricular hypertrophy

Because of Aric's problems with heart block, Odim inserted a pacemaker. However the pacemaker failed to capture. Aric was put back on bypass, and all aspects of the pacemaker were rechecked. The pacemaker wires and battery were changed. When Aric was taken off bypass a second time, the pacemaker again failed to capture. However, he eventually developed a normal heart rhythm without the assistance of a pacemaker and was taken to the PICU.

In his report, Cornel wrote, "The decisions made at the time of operation were reasonable surgical judgments." (Exhibit 353, page 48) He stated that Odim was correct not to attempt to address problems with the mitral valve and the tricuspid valve. It was reasonable, Cornel said, to expect that the surgical measures he had taken would provide Aric with sufficient relief.

POST-OPERATIVE COURSE

A child undergoing surgery for an ASD would normally be expected to spend no more than ten days in hospital. This did not happen in Aric's case. Instead, he spent 52 days in the PICU, ultimately dying there. While his condition in the PICU was initially stable, by July 4 his condition was starting to deteriorate.

On Monday, July 4, (Aric's fourth day in the PICU) a PICU resident noted that Aric had had three episodes of pulmonary hypertension in the previous 48 hours. The right upper lobe of his lung had collapsed and he was slightly fluid overloaded. By Tuesday, the right upper lobe of his lung had re-expanded and his oxygen saturation level was 100 per cent. He showed varying degrees of heart block and needed the pacemaker to control his heart rhythm. During this period there were also problems in getting the pacemaker (or possibly the leads) to operate properly. On Wednesday, Aric continued to have problems with heart block. He also had low blood pressure, reduced blood flow to his tissues, a decrease in his oxygen saturation level and a drop in his urine output. In addition, he was suffering from a chemical imbalance. (He was in metabolic acidosis.)

From Thursday, July 7 to Wednesday, August 17, Aric's condition slowly deteriorated. He remained ventilated for his entire stay in the PICU. The major problems he had during this period were:

- Arrhythmias (abnormal heart rhythms): these required frequent manipulation of his pacemaker.
- Pulmonary hypertensive crises (high blood pressures in his pulmonary arteries): these required drug treatment (phenoxybenzamine), which did result in his condition becoming slightly more stable.
- Congestive heart failure, with pulmonary and peripheral edema (decreased heart function with fluid retention in the lungs and in the arms and legs), with worsening of the atrioventricular valve regurgitation: this was treated with large doses of diuretics.
- Episodes of sepsis (serious infections of the blood): these were treated with antibiotics.
- Pneumonia and respiratory distress syndrome (lung infections and decreased lung function): these meant that Aric needed to be ventilated by machine.

Giddins testified that it was expected that, since the repair had been successful, the high pressures in Aric's pulmonary arteries should have been reduced. However, this did not happen. Aric had ongoing problems with the vessels that carry blood to the lungs.

This was a very trying period for the Baumann family. For the entire time he was in the PICU, Aric had a tube down his trachea and was connected to a ventilator to assist his breathing. At one point in mid-July, the family was told that it looked as if Aric would only last another 48 hours. The distraught family arranged for baptism at that time. However, Aric rallied and survived for another month.

At the same time, the medical staff continued to search for the cause of Aric's deterioration. One of the people involved was Dr. Cameron Ward, a cardiologist who had started working with the Heart Centre in July. Ward suggested that there was a constriction of the pulmonary veins. This is also known as pulmonary vein stenosis. Over time, the pulmonary veins of patients suffering from this congenital disease become progressively narrow. It is not known what causes this process to start, nor do doctors know how to stop the process. Witnesses testified that while the condition is often fatal, there are instances of the condition arresting on its own. In some cases a patient might be left with one functioning lung and one non-functioning lung. The only definitive treatment was a full lung and heart transplant. However, this was rarely feasible with patients of Aric's age and size.

A cardiac catheterization was conducted on August 18. When compared with a catheterization conducted in May, the results indicated that Aric did indeed have pulmonary vein stenosis. Giddins testified that when he had examined the catheterization results in May he had not looked for signs of pulmonary vein stenosis; nor had he seen any. Following the diagnosis of pulmonary vein stenosis, he re-examined the May results and testified that he could see some signs of vein narrowing. However, this narrowing was much more extreme in the August catheterization.

Giddins testified that if he had diagnosed pulmonary vein stenosis in May, he would have still recommended proceeding with Aric's surgery. He said that the stenosis did not increase the surgical risk to the child. Furthermore, he said that he would not have recommended any change in Aric's post-operative care if he had known of the stenosis.

Odim testified that during the course of the operation, he could not see any sign of pulmonary vein stenosis. He also testified that, had he known of the stenosis, he would have still recommended proceeding with the operation.

Aric's pulmonary vein stenosis was extreme by the time the condition was diagnosed in August. Giddins, in consultation with Ward and Odim, concluded that the problem was not treatable. In a letter written to Simmonds after Aric's death, Odim wrote, "This was a rather unfortunate anatomic arrangement which was not entirely appreciated at the outset. The prognosis for this type of problem is very poor with the only option to date being a combined heart lung transplantation which in this age group continues to be an experimental venture." (Exhibit 2, page BAU 35)

Giddins, Dr. Fiona Fleming and Hawkins met with the family on August 20. It was explained to the Baumanns that a transplant was not possible in this situation and that there was no other treatment for Aric's condition apart from comfort care. The parents agreed to a recommendation to stop treatment once all of the family had been called together. Aric died in his grandmother's arms at 1134 hours on August 21, 1994.

AUTOPSY

On August 22, 1994 Dr. Joseph de Nanassy performed an autopsy. A preliminary report was issued on September 7, 1994, but the final autopsy report was not completed until February 14, 1995. As a result, the Baumanns did not receive the autopsy report until mid-February. The delay in the completion of the autopsy report in this and a number of subsequent cases will be discussed in Chapter Nine. At the family's request, the autopsy was restricted to an internal examination of the chest and abdomen.

De Nanassy confirmed that, while the surgical repair was intact, Aric suffered from pulmonary vein stenosis. This was greater on the left side. The pathologist concluded that the pulmonary vein stenosis would not have been amenable to corrective measures. In his report, Taylor indicated that there was a tiny hole or fenestration in the patch. However, he testified that he could not identify when or how the fenestration was made, noting that in some cases, surgeons will make such a fenestration to ease pressures. The fenestration did not contribute to Aric's death.

FINDINGS

The evidence presented to this Inquest gave rise to the following questions:

- Could Aric's pulmonary vein stenosis have been identified before surgery?
- If it could have been detected earlier, could Aric have benefited from a heart-lung transplant?
- Was Aric a high-risk patient at a time when the program was not undertaking high-risk cases?
- Were his parents provided with sufficient information to allow them to give informed consent to the procedure?
- What was the cause of death and was it preventable?

These are also the questions that the Baumann family wished to see addressed.

Could Aric's pulmonary vein stenosis have been identified before surgery?

Cornel questioned why the pulmonary vein stenosis was not identified pre-operatively. In his evidence, he stated that he was aware that pulmonary vein stenosis can be difficult to detect and may not manifest itself as a serious condition until the child is older. However, generally, with close observation, the onset of the disease can be identified relatively soon. Cornel also felt that the condition could have been identified sooner than it eventually was. If it had been, the difficulties experienced by the family in watching their son deteriorate might have been alleviated.

He agreed with Giddins and Odum that the fact that Aric had pulmonary vein stenosis would not necessarily have meant that the operation should not have proceeded. Cornel stated that, although it can be a fatal condition and is not treatable, sometimes pulmonary vein stenosis can stop progressing on its own for no known reason. He felt that the decision to operate on Aric, even in the face of that information, would not necessarily have been an incorrect one.

Giddins indicated that in retrospect he could detect signs of the stenosis on the May 1994 catheterization. In contrast, Dr. Walter Duncan stated that after reviewing the pre-operative reports, he could not find any evidence that would have led him to conclude at that time that Aric had pulmonary vein stenosis.

- Finding

It would have been desirable, particularly from the parents' perspective, to have been aware of the stenosis. However, it appears from the evidence that it was not unreasonable for Giddins to have failed to detect the stenosis in May. Furthermore, it also appears that medical staff would have recommended the course of treatment that was carried out, even if the stenosis had been identified.

Would Aric have benefited from a heart-lung transplant?

On this point Duncan and Cornel stated that "This would have been a difficult judgment call with regard to operability. Only other option would have been no treatment or heart and lung transplantation – {virtually not available in Canada in this age range....}" (Exhibit 354, page 10) In his testimony, Giddins said that such transplants are still very experimental.

- Finding

It does not appear that a transplant would have been a realistic option in this case.

Was Aric a high-risk patient at a time when the program was not undertaking high-risk cases?

- Finding

Questions of risk are not easy to quantify. Aric underwent a relatively low-risk procedure. However, he was a higher than usual risk patient. Both Odum and Giddins maintain this was, relatively speaking, a low-risk case. Given the circumstances of the program and the circumstances of the patient, Giddins should have consulted with McNeill about whether or not to transfer Aric to another heart centre. However, no consulting witness has identified any surgical issues that led to Aric's death or suggested that this was a high-risk case. While the risk may have been higher than for a simple ASD, it is fair to conclude that this was not a high-risk case.

Were Aric's parents provided with sufficient information to allow them to give informed consent to the procedure?

- Finding

While it may have been appropriate to undertake this operation in Winnipeg, the Baumanns ought to have been clearly informed of all risk factors involved in this case before being asked to consent to surgery. For there to be informed consent they would have had to have been told of the specific risk in Aric's case and of the slowdown in the program. The evidence tends to suggest that Aric's parents were not provided with sufficient information to allow them to give informed consent to the procedure.

What was the cause of death and was it preventable?

■ Finding

In this case, there is no dispute over the cause of Aric's death. He died as a result of pulmonary vein stenosis. In his report, Duncan stated simply that this was an unavoidable death and not a surgical or management issue. Dr. Christian Soder felt that the cardiac condition from which the child was most at risk (the pulmonary vein stenosis, which was only identified in retrospect) was inoperable.

Aric's death was not preventable.

KIM DUNCAN'S VISIT

In July 1994 Dr. Kim Duncan visited Winnipeg and met with Youngson, Giddins and several of the perfusionists. He recalled that they spoke to him of the tensions within the program. Following those discussions, he met with Dr. Helmut Unruh, the acting section head of cardiovascular and thoracic surgery. Duncan testified that:

My comments to Helmut Unruh were, was there any way, or was it possible for him to observe, or possible for somebody else to observe or participate in order to see if there were, in fact, problems. I didn't—

Q. You asked Helmut if it was possible—

A. My comment to him was, if you have four people, who I think are quite credible people, saying there are some difficulties in the operating room, then there is probably at least reason for somebody to look into it. (Evidence, page 30,595)

Unruh testified that he could not recall the details of this conversation. Duncan also spoke with Odim. The two men agreed that the program should be serviced by a small number of anaesthetists. However, Odim left Duncan with the impression that he felt the program was running well.

THE CASE OF SK

SK was born on April 13, 1984. At three years of age, she was diagnosed with an atrial septal defect. Odim saw her on June 7, 1994. At that time he determined surgery was in order. An echocardiogram showed an atrial septal defect, with left to right shunting and significant volume overload.

On July 7, 1994, SK underwent surgery to close her ASD. In the notes that Youngson prepared after the operation, she wrote that there had been problems with the cannulation. In particular, Youngson wrote, it was necessary for Odim to replace a number of sutures that had been cut or torn during cannulation. Youngson concluded, "This is something that happens on a regular basis — purse string sutures are cut or torn when Dr. Odim is cannulating, often damaging the vessels." (Exhibit 20, Document 278 D)

In his testimony Odim said that he could not remember difficulties with cannulation or tearing the vessel in this case. There is no mention of any such incident on the medical chart.

THE CASE OF KZ

KZ was born on March 29, 1987. At one year of age, she was diagnosed with an atrial septal defect. Surgery was delayed until her seventh year.

On July 11, 1994, KZ underwent a suture closure of her atrial septal defect. Her oxygen saturation level was low during the first attempt to take her off bypass. Initially Odum thought that the problem may have arisen as a result of the anaesthetist having difficulties ventilating the patient. Dr. Harley Wong, who was the anaesthetist for this operation, indicated that KZ was receiving 100 per cent oxygen and that her lungs were being well-ventilated. Odum then determined that KZ had a left to right shunt. As a result, he determined that it was necessary to go back on bypass and reopen her heart. Odum discovered that he had mistakenly sutured KZ's eustachian valve to her left atrium. According to Odum, the eustachian valve is

... a valve that is used normally in utero to channel blood to the left side of the heart, because as you all know, the lungs aren't being used so there is not a great demand to have blood going to the right side of the heart into the lungs to pick up oxygen. So it takes the placenta return from mom, in the child, and channels some of that oxygenated blood directly over to the left side.

When children are born, many a times this structure involutes, it is not readily apparent, and in some children it is actually quite prominent and you can see it, in many you don't see it and it is not there. Again, it is a white veil like tissue structure.

And in the setting of a hole that's really at the mouth of that lower IVC, you can mistake that lower rim for your ASD when, in fact, it could be part of this valve. (Evidence, pages 25,212–25,213)

By trapping the eustachian tube in his stitch, Odum obstructed the inferior vena cava and oxygen starved blood was misdirected into the left atrium. Odum corrected his error and the atrial septal defect was again closed. KZ recovered and was discharged home on July 15, 1994.

Wong viewed the suturing of the eustachian valve as a serious matter. He mentioned it to McNeill, who brought it up for discussion at the Wiseman Committee. While Wong did not attend the committee meeting, he said McNeill reported back to him that Giddins and Odum had explained that this was a recognized complication in this sort of surgery. Wong had never heard of the complication. He examined Dr. Carol Lake's textbook, *Pediatric Cardiac Anaesthesia*, and could find no mention of suturing over the eustachian valve as being a known complication.

In her testimony McGilton said that she had never heard of this problem in cardiac surgery before. In fact, she testified that up until that point, she had never heard of a eustachian valve.

Giddins, Hancock, and Odum asserted that suturing a eustachian valve was a recognized complication of repair of ASDs when there was a prominent eustachian valve. However, neither Giddins nor Hancock had ever known of a case where this had happened. Odum said he had seen it happen in every institution he had worked in, but could give no indication of how often it happened. This Inquest was also given excerpts from one textbook and two journal articles that discussed this issue.

It would appear from that material that oversewing the eustachian valve is a rare but recognized complication in the repair of ASDs. In the case of KZ, oversewing the valve did lengthen the operation, although the patient's health was not compromised. However, the event did little to allay the nurses' and anaesthetists' concerns about Odum's surgical abilities.

THE JULY 13 WISEMAN COMMITTEE MEETING

On July 13, 1994, Giddins chaired a meeting of the committee, which was attended by Maas, Odim, McNeill and Youngson. The case of JM (outlined in the previous chapter) was discussed that day. It involved a successful Fontan operation that was carried out on a three-and-a-half year old boy. The key issue in the operation was the anaesthetist's decision to insert a line into the right internal jugular vein. Anaesthetists regarded such lines as being of considerable importance in monitoring their patients. However, in this patient, Odim had had the line relocated because he was worried that such lines could lead to a narrowing of the vein. This was a particular problem in patients undergoing Fontan-type procedures, since the veins might be needed undamaged for future surgery. As a result, the anaesthetists agreed not to place internal jugular lines into patients undergoing Fontan-type procedures. (Exhibit 20, Document 278 E)

THE JULY 27 COMMITTEE MEETING

The committee met on July 27. Unfortunately there are no minutes available of that meeting. In many ways, this appears to have been a pivotal meeting in the committee's history. It was at this meeting that Giddins proposed that the program was ready to resume full capacity. The committee had been in place for a little over two months. However, it had not produced any statistical review; nor was there any consensus as to whether or not the team should return to full operation.

McGilton, who attended the meeting in Youngson's place, opposed going to higher-risk cases because of concerns arising from the VM and KZ cases. She testified:

So I said that, no, as a group we do not feel comfortable in moving on—

Question: Okay.

McGilton:—to higher risk cases. And Dr. Giddins and Dr. Odim said why. So I said that even though things had been going well, that the children were doing well, things hadn't been smooth in the OR and we had concerns with that. So, again, they wanted to know what. So, I gave the example of [VM], the cannula coming out and Dr. Odim—

Question: Having to go on sucker bypass?

McGilton: And having to go on sucker bypass. And as I was talking about this, Dr. Odim said, oh, you mean when I was giving the student the explanation about the anatomy. Which to me didn't really make sense anyway, because I didn't understand what the connection was. But that was his response. And I brought that up and I brought the eustachian valve up, and Dr. Giddins got very, very angry, very upset. (Evidence, pages 10,588–10,589)

McGilton testified that she had explained how the eustachian valve had been sutured over, requiring the patient go back on bypass. According to her testimony:

And Dr. Giddins then raised his voice, got very angry and said that he could show me an anatomy book and show me how easy it would be to make that mistake, and it's a common thing to do. And

basically, in so many words, you are just a nurse, what do you know? And Dr. Odim made the same kind of comment, you are not a surgeon, you are a nurse, or whatever.

I just stuck to my guns and said, well, that may well be and, yes, the children did do well, they made it through, that was true, but we just didn't feel that things had gone smoothly and we don't feel comfortable moving on. (Evidence, pages 10,589–10,590)

McGilton said she felt that Odim did not exhibit the anger that Giddins demonstrated. Instead, his comment was more along the lines of a joking statement that a nurse's comments were not worth considering.

McNeill corroborated McGilton's testimony.

But the overall reaction was not very receptive on the part of cardiology and the cardiac surgeon. They questioned her position in terms of, well, her expertise in making the criticisms that she had. And I guess it was sort of like negating her concerns on that basis. (Evidence, page 13,288)

In his testimony, Giddins said he could not recall anyone being told that their opinion lacked validity because that person was not a surgeon. Odim testified that he recalled the exchange, but said that he did not make any comments at the time. McGilton testified that at the end of the meeting, Wiseman told her she was not making things easier. Wiseman said he could not recall making the comment.

It should be noted that the suturing-over of the eustachian valve was a far from minor matter. As noted above, the anaesthetist involved in the operation had also been disturbed by the problem. It was an appropriate topic for discussion and for anyone to raise as a matter of concern.

Wiseman testified that out of deference to McGilton's objections, the decision was made not to return to full service. However, it was clear that pressure was building for a return to such service. In two weeks time, Wiseman himself recommended that the team start doing cases that were of medium risk.

McNeill said that, from her perspective, the pressure to return the program to full capacity came from a number of sources. The first was simply from the fact that there were patients in Manitoba who required pediatric cardiac surgery. There was also pressure from Cardiology and Surgery, departments that wished to see a faster return to full service. Youngson testified:

I think my sense was that there was pressure from somewhere higher up. I always felt there was other meetings going on, of course, that I wasn't a part of. You know, other meetings with department heads and so forth that were going on behind closed doors. That was just my sense, you know, I don't have any facts to back that up, I just had that feeling all the time that that was going on. (Evidence, page 8,565)

On this point, Odim testified:

Certainly at some point in evolution during the Committee there was a sense from Dr. Unruh and Dr. Blanchard of a lack of understanding of what was going on in terms of why the program was stalled so to speak.

Again, it was put to me by Dr. Unruh that the problems that you are dealing with are the same problems the previous surgeon had here so they were privy to things that I was not aware of. So they were surprised that we were stalling the program because, you know, what else is new, so to speak. I can't speak for anything beyond that, except that, you know, early on in the process they were a little perplexed by what was going on. (Evidence, pages 25,356–25,357)

This pressure continued to build and in early August led Wiseman to write an interim report that recommended a staged return to full services.

NURSES AND THE WISEMAN COMMITTEE

The response that McGilton received when she opposed a return to full service at the July 27 meeting gives rise to the more general question of the treatment of nurses at the Wiseman Committee.

Ullyot testified that during the first month of the committee's work Youngson raised some of her concerns about cannulation. Ullyot said Odim was critical of Youngson for raising questions about the type of cannula that Odim was using. Ullyot testified that Odim told Youngson:

That it was his decision to decide on the cannula, that it wasn't her place to say anything about it or to criticize what he had chosen. (Evidence, page 31,382)

Youngson testified that, following a meeting that she had left early, Wiseman contacted her. He told her that after she left, Odim had made a number of critical remarks about her. Wiseman said he was going to have the matter addressed at the next meeting. Wiseman testified that in his recollection Odim had been expressing his frustration with Youngson always comparing his work with Duncan's. Wiseman testified:

I felt it was important, because if something is bugging someone, and it seemed to be bothering him that this was, he was constantly being put against this standard, and he wasn't willing to come out and say it to her directly, because for whatever reason, I don't know what it was, you need some—I was thinking among the experts you need to call in here, you should call in a group psychiatrist. But, nevertheless, I felt that I had to convey that to her, because clearly he wanted to and didn't quite bring himself to do it. (Evidence, page 40,548)

At the following meeting, Wiseman asked Odim if he had any concerns with the nurses that he wished to have discussed. Odim said he had none. Youngson then said that she understood that Odim had some concerns with her specifically. Odim replied by saying that he was not happy with the efficiency of her ordering. He said that the needle driver that he had seen in Saskatoon had not yet arrived. Maas intervened, saying in summer deliveries get bogged down. According to Youngson's testimony:

At that point in time, I remember Dr. Odim turned to me and said, do you really want to do cardiac surgery, Carol? And what I wanted to say was, no, not any more, but I didn't. I said, yes, I do, I still want to participate—or he said, do you still want to participate in cardiac surgery? Because at that point in time, I was so disgusted, because it was my understanding that these meetings were, that was the reason we were having these meetings, for everybody to talk about whatever problems they were having. And I was just completely disgusted that he had waited until I left a meeting, purposefully in my mind waited until I left the meeting, and then proceeded to make a personal attack on me. (Evidence, pages 8,500–8,501)

Within days of this exchange, unit manager Karin Dixon, after speaking with Youngson, met with Odim. Her intent had been to arrange a meeting between herself, Odim and Youngson. However, she came back from the meeting saying that no further meeting was necessary, since Odim said he was happy with Youngson and felt that any initial problems had been resolved.

Odim testified that he did not recall asking Youngson if she had wanted to continue working in cardiac surgery. Nor did he recall her asking if he had specific problems with her. He confirmed that the meeting with Dixon had taken place. He said that this meeting took place after he had spoken to Dixon about "disorganization in the OR vis a vis Ms. Youngson." (Evidence, page 25,240) In particular, he said, this related

to Youngson's instructing other nurses during the course of the operation, a practice he found distracting. Odim said he had also spoken to Youngson about the issue, and felt that there had been an improvement in this area. He testified that since the needle driver he requested had not arrived after a period of two months, he had asked Youngson to check on the order.

When she was asked if she had raised concerns over cannulation issues in any of the cases, Youngson testified that she did not believe she had done so after the May 25 meeting.

It's very hard for me as a nurse to criticize a surgeon, especially when there are several other physicians sitting around him.

Although I did know that I had their support, I still was the only nurse at these meetings; and I just found it very difficult to sort of take a stand. What I would often do is sort of follow Ann's lead. If Ann expressed concerns about a particular case, I would back her up. That's more or less what I felt my role was at that particular time, was to sort of back her up as much as I could. (Evidence, page 8,521)

Youngson testified that after one meeting ended and both Odim and Wiseman had left, Giddins asked her what was going on in the operating rooms. Youngson said that at first she resisted answering since she would be speaking behind Odim's back. But Giddins told her that what she said would be off the record. She spoke of concerns with bleeding and cannulation and described a number of cases. Youngson testified that Giddins replied in the following manner:

Well, he said, you know, Carol, we are very lucky to have Dr. Odim, and he sort of talked about Dr. Odim's background, and he said, you know, he's not just a cardiac surgeon. He's got his Fellowship in thoracic surgery and general surgery, and I don't remember all these other fields of expertise, and very well trained. You know, he came from Boston; and, you know, this is a guy that's got—he's extremely well trained, or words to that effect. You know, he said, he's solidly backed by the Department of Surgery. They are behind him. I got the impression by that he meant the Department of Surgery and the Health Sciences Centre administration was really, you know, anxious to have things work out for Dr. Odim, that they were really backing him up. (Evidence, page 8,526)

Youngson testified that she felt that she had been warned and ought to back off. Giddins said he could not specifically recall this exchange.

Despite the team-building rhetoric that surrounded the establishment of the Wiseman Committee, the evidence suggests that the committee did not provide a forum in which nurses could comfortably state their views. This clearly had a chilling effect on what was said, thereby denying the committee access to important information.

THE ISSUES RAISED BY ODIM

Throughout the spring and summer, the main issues that Odim raised at the committee were communication, attendance at team functions such as meetings and rounds, post-operative care and the number of anaesthetists participating in the care of pediatric cardiac patients.

COMMUNICATION

He said that there were multiple levels to the communication problem.

I felt that communication seemed to be better from the perfusion point of view, because if they didn't hear anything, they would pipe up, and they never took offense to my raising a question because I didn't hear. I didn't get the sense that other members of the team responded in that fashion. When I asked a question, I would get no answer, and it was viewed negatively and not as I just need to know what's going on and all you need to do is acknowledge. (Evidence, pages 25,066–25,067)

Odim said he felt communication with the perfusionists was better because “they seemed to have a better appreciation of the normal conduct in a cardiac operating room.” (Evidence, page 25,067) On other levels, he said information on the clinical course of a patient's treatment was not communicated to every team member.

Odim also said that at times, some members of the team would interpret a question, such as “Have you turned the flow down?” as a challenge or a suggestion that the person being asked was remiss, as opposed to them being asked a simple question. As a result, he said, people might respond by saying, “Well, of course,” as opposed to simply answering the question (Evidence, page 25,085). He also indicated that he had asked members of the team to be quiet. In addition, he spoke of difficulties in getting nurses in the intensive care unit to call him early in the morning to let him know how a patient had passed the night.

TEAM MEETINGS

Odim testified that following the establishment of the Wiseman Committee, he took a number of steps that were intended to improve communication. These involved establishing clinical rounds once a week and encouraging better attendance at M & M Rounds.

The clinical rounds were to be a weekly procedure for reviewing patients at the bedside. Odium said that, despite the efforts that he and Hancock had expended in trying to establish these rounds, it had not been possible to arrange a time that was convenient to all team members.

Odim also testified that other meetings that were poorly attended included the Morbidity and Mortality Rounds. He believed the Rounds presented an appropriate forum to review the cases that were being reviewed by the committee. He felt that, because team members were not attending team functions such as M & M Rounds, they did not fully grasp why certain children had died.

Odim said that rounds were poorly attended. He also testified that, since more members of the team felt that rounds did not provide an appropriate forum for critical discussion, he:

volunteered any other type of time frame or meeting that members would like specifically for that activity, the activity of criticism. They did not take me up on offers in the evening or on the weekends and I put the ball back in their court, come to me with a time that you think will be reasonable for this. I did not get any response. (Evidence, pages 26,383–26,384)

As a result, Odium testified, he had begun to develop concerns over the level of commitment of other team members to the program.

POST-OPERATIVE CARE AND ANAESTHESIA

Odim's personal concerns about post-operative care and anaesthesia in many ways reflected his pre-existing concerns that there should be only one intensive care unit for open-heart pediatric patients and fewer anaesthetists involved in pediatric cardiac surgery.

Odim believed it was necessary to create a smaller, more concentrated team of anaesthetists. In his testimony, he spoke of the need to have anaesthetists who had one hundred per cent commitment to the program. At times he seemed to be speaking of time commitment and the need for anaesthetists to spend more time on pediatric cardiac cases and less time on other work. He also seemed to be implying that some of the anaesthetists were not taking responsibility for the program. His repeated references to the failure of the anaesthetists to respond to his attempts to have them attend post-operative and M & M Rounds suggest that he was of the view that they did not have a sense of ownership about the program.

ODIM RESPONDS TO CONCERNS ABOUT CANNULATION

Odim also testified that he did not think Youngson's concerns about cannulas and cannulation were justified. He seemed to suggest that the problem lay with the nurses.

They did not appear to have the cannulas that I wanted because initially I would ask for straight cannulas and I was being provided with angled cannulas and I would say well, I want to try a straight cannula and so they didn't feel that they had a large number of cannulas that I preferred. (Evidence, page 25,109)

Odim also felt that he did not have any particular problems cannulating and that the comments of others who said they had observed problems were not valid.

THE CASE OF SHALYNN PILLER

ISSUES

Shalynn Piller died on August 3, 1994, three days after undergoing surgery for aortic coarctation. This case gave rise to the following questions:

- Were Shalynn's parents provided with sufficient information to allow them to give informed consent to the procedure?
- Should the program have undertaken this operation at a time when neonates were supposed to be sent out of the province?
- What was the cause of death and was it preventable?

BACKGROUND AND DIAGNOSIS

Shalynn Piller was born at Carman Memorial Hospital on July 20, 1994. The firstborn child of Ken and Sharon Piller, Shalynn had a normal delivery at full term, without complications. However, Sharon had undergone three ultrasound examinations, all after 32 weeks gestation, because of concerns about the small size of the fetus. At birth, however, Shalynn was considered a healthy baby, and was discharged home with her mother on the third day.

On July 30, Shalynn's parents took her to see their family physician, Dr. M. Omichinski, because Shalynn was having problems with feeding and had had episodes of irregular breathing. Shalynn was not cyanotic, but her respiratory and heart rates were rapid. She was taken to the Carman Hospital for further examination and tests. A heart murmur was heard on examination, and a chest X-ray showed an enlarged heart.

Shalynn was immediately transferred to Winnipeg, where at 1330 hours that same day, she was admitted to the Children's Hospital. On examination, she was found to have a loud murmur, an enlarged liver and decreased femoral pulses. The decreased femoral pulses were a sign of poor blood supply to the lower part of the body.

Echocardiography showed:

- two muscular ventricular septal defects, one of which was large (only one was found after Shalynn's death)
- a patent foramen ovale or an atrial septal defect with bi-directional shunting
- moderate tricuspid valve regurgitation
- a bicuspid aortic valve
- mild sub-aortic stenosis
- a significant aortic coarctation.

The aortic coarctation was very narrow; as a result the aorta was obstructed. The ductus arteriosus had closed, as it does in most children during the first ten days of life. However, the ductus had been the channel for blood flow to the lower body because the normal channel, the aorta, was severely narrowed. Shalynn had begun to experience her difficulties with the closing of the ductus. This had left her with marked reduction in blood flow to the lower part of her body.

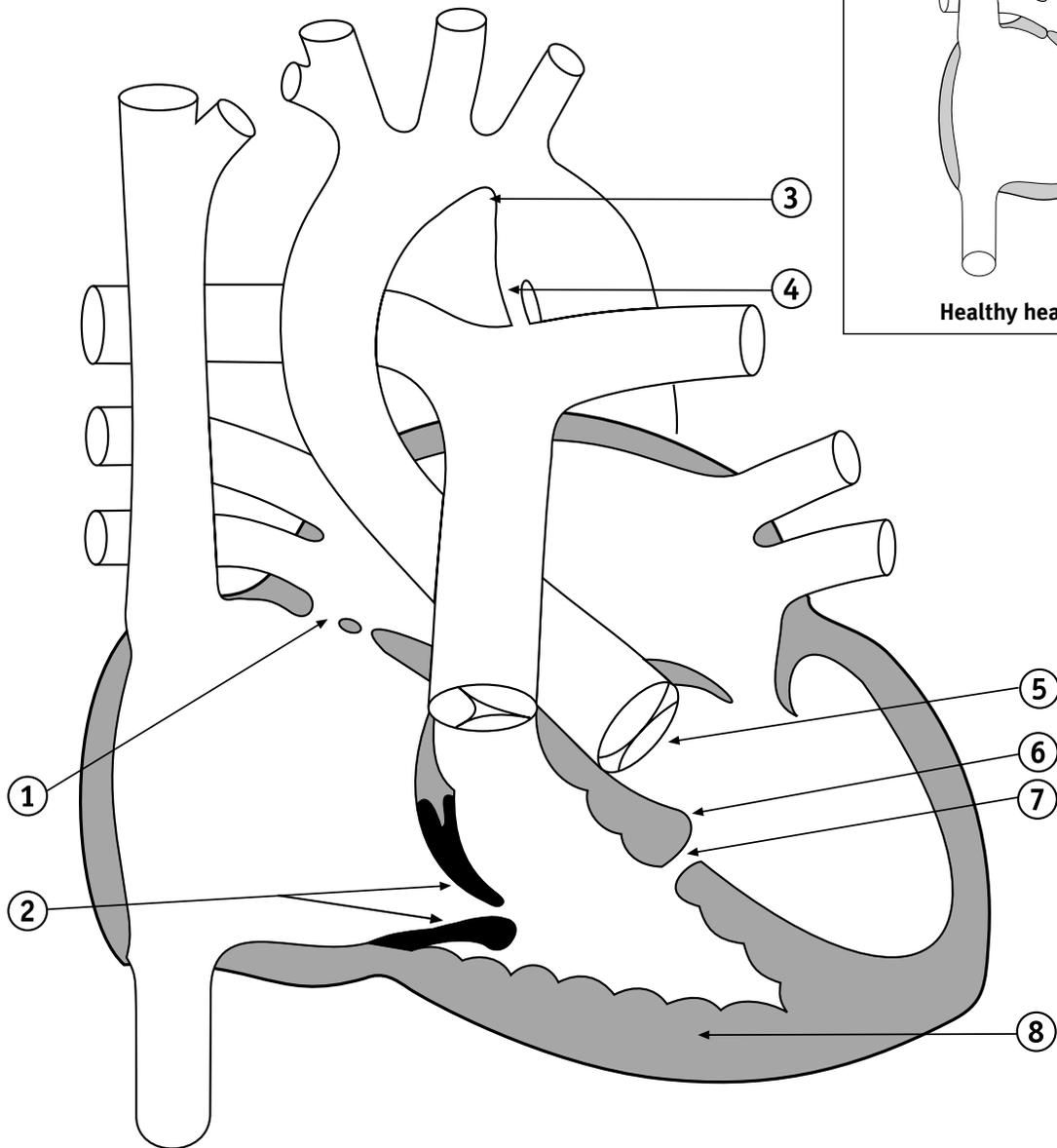
Shalynn also had an abnormality in her tricuspid valve, described as Ebstein's anomaly or malformation. Odum testified that:

That's a spectrum of abnormalities of the valve which can present, at worse, with the two or three leaflets, that is the septal or posterior leaflet of the tricuspid valve being offset, downwardly displaced into that right pump, and the remaining anterior leaflet of the right tricuspid valve being a huge billowing sail-like leaflet. Those babies that present at that extreme have a significantly high mortality rate, approaching 80 percent as neonates. (Evidence, pages 25,269–25,270)

Valves with this anomaly tend to leak, allowing blood to flow back into the right atrium and causing it to swell in size.

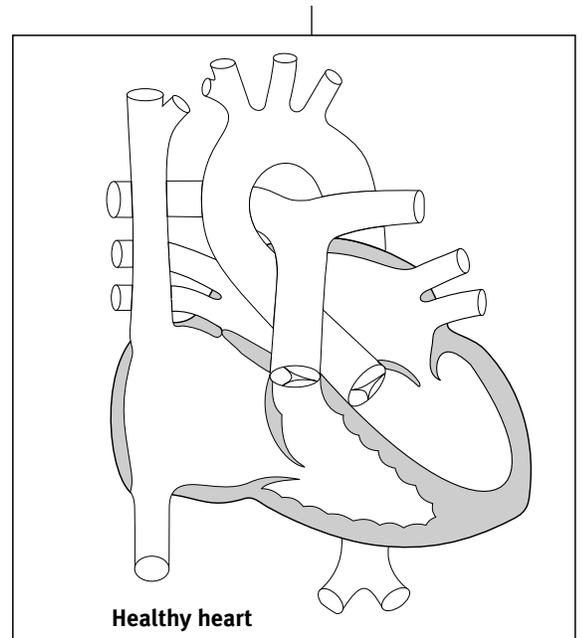
Shalynn was treated with prostaglandin in an attempt to reopen the ductus arteriosus and restore blood flow to the lower part of her body. As Giddins explained in his testimony:

Diagram 7.3 Shalynn Pillar – pre-operative heart



- 1 – Atrial septal defect (or patent foramen ovale)
- 2 – Tricuspid valve with Ebstein's anomaly
- 3 – Aortic coarctation
- 4 – Patent ductus arteriosus
- 5 – Bicuspid aortic valve

- 6 – Maligned ventricular septum with subaortic stenosis (mild)
- 7 – Ventricular septal defect (Although two were diagnosed, only one was found post-mortem)
- 8 – Right ventricular hypertrophy



In situations where there is a narrowing of the aorta, or coarctation of the aorta, opening of the ductus tube not only provides a means for blood to bypass the narrowing, it also has a general opening up effect on the entire region of the aortic narrowing. (Evidence, page 3,923)

Shalynn was admitted to the NICU at 1400 hours. The admitting nurse noted that Shalynn appeared pale and mottled and her limbs were cool to touch, another sign of poor lower body circulation. The doctors also concluded that Shalynn was in congestive heart failure, and started treatment with the diuretic Lasix.

THE DECISION TO OPERATE

After seeing Shalynn that evening, Ward wrote “COA repair [coarctation of the aorta]/PAB [pulmonary artery banding] is believed the best option.” (Exhibit 10, page PIL 37) On July 31, he wrote in her chart that he had discussed the case with Giddins and Odum. The three agreed that at that time the best surgical strategy would be to avoid the inside of the heart and place a band on the pulmonary artery to control the amount of blood flowing to the lungs. Banding narrows the artery and prevents the lung from being flooded. The band thus reduces the effect of the holes in the heart, which would have to be addressed by a subsequent operation.

CONSENT

Ward and Dr. R. Savani outlined Shalynn’s condition to her parents. When Sharon Piller was told that her daughter needed heart surgery, she thought this meant she would have to go to Toronto. However, Savani told her that Odum could do the operation in Winnipeg. Sharon Piller testified that Savani told her that Odum was from the United States and implied that this was a sign of his qualifications. She testified that Ward also spoke highly of Odum’s qualifications.

Odum spoke with the parents about Shalynn’s difficulties on Friday evening. Sharon Piller testified that Odum told her Shalynn’s chances of recovery were 92 per cent. Odum testified that he could not recall providing the parents with a specific estimate of the degree of risk involved in the case. He did tell them that further surgery would likely be needed to correct other defects. He did not tell them of the reduction in the capacity of the Winnipeg program or of any of the problems the program had experienced.

Odum and the Pillers also spoke the following day, July 31. In Shalynn’s chart Odum wrote, “In view of multiple VSDs a staged biventricular approach is preferable: aortic coarctectomy and PA band via left thoracotomy. I have discussed the attendant risks and the family appears to understand and give their verbal and written consent for operation tomorrow.” (Exhibit 10, page PIL 38)

In a letter to Omichinski, Odum explained that because Shalynn had multiple ventricular septal defects, he felt that a complete repair in one operation would be an unreasonable goal. He hoped with time that some of the smaller VSDs would close on their own. At that point, further surgery to close the remaining VSDs and remove the pulmonary artery band would then take place.

In his testimony, Giddins indicated that he believed Shalynn’s was a low-risk case. Because it was closed rather than open-heart surgery, he also said it fell within the Wiseman Committee parameters for permissible surgery in that period. Giddins testified:

The Wiseman committee referred to low risk open, and did not specifically get into issues of grading closed procedures, because closed procedures are a category different from open. And there had been no difficulties with any closed procedures up until that time, so this case fit in. (Evidence, page 3,925)

Because the committee's records were not well kept, it is risky to make categorical statements about what the committee did and did not approve. However, at the May 18 meeting, it was agreed that major neonatal anomalies would be transferred to Saskatoon. Shalynn Piller's case fit the classification of a major neonatal anomaly. According to the consulting witnesses who appeared before this Inquest, hers was not a low-risk condition. In their report, Duncan and Cornel wrote, "VSD and coarctation remains a condition with a relatively high risk. The addition of sub-aortic stenosis produces the potential for obstruction to both outlets – {the right side from the band and the left side from the sub-aortic stenosis}, which is not a well tolerated phenomenon." (Exhibit 354, page 9) In his testimony, Duncan stated that there were major risk factors in the operation (Evidence, pages 41,619–41,620). This leads to the conclusion that the operation should not have been performed in Winnipeg.

PRE-OPERATIVE STATUS

The night before surgery, Shalynn's condition remained stable. Her white blood count was elevated and she continued to receive antibiotics. She also continued to receive medication intended to open her ductus arteriosus. However, there is no evidence that the ductus reopened. Despite receiving sedatives, Shalynn was irritable on handling. At times, she had difficulty breathing, although her air entry remained clear and her oxygen saturation level high. Her extremities remained cool to the touch and her skin colour was pale and mottled. Odim noted that her kidney function was normal, with adequate urine output. She did not have any chemical imbalances.

THE OPERATION—AUGUST 1

On August 1, Shalynn underwent an aortic coarctectomy with a primary end-to-end anastomosis. In a coarctectomy, the coarctated or narrowed section of the aorta is removed. In what is referred to as a primary end-to-end anastomosis, the remaining sections of the aorta are reconnected. Odim also permanently closed the ductus. Finally, he placed a band around the pulmonary artery. Once this band was in place, Shalynn's blood pressure started to go up, indicating that more blood was going to her body.

The operating team is set out in the accompanying table.

TABLE 7.3: Persons involved in the operation on Shalynn Piller, August 1, 1994

<i>OR team member</i>	<i>Persons involved</i>
Surgeon	J. Odum
Surgical assistant	N. McEacheran (Resident)
Anaesthetist	H. Reimer
Scrub nurse	M. Wasney
Circulating nurse	E. Frederickson

TABLE: 7.4 Length of phases of the operation on Shalynn Piller, August 1, 1994

<i>Phase of the operation</i>	<i>Time taken</i>
Induction	1 hour 40 minutes
Aortic cross-clamp	25 minutes
Total surgical time	2 hours 30 minutes
Total operating-room time	4 hours 20 minutes

The total induction time was one hour and forty minutes. The total surgical time, from beginning the incision to closure of the incision, was two hours and thirty minutes. The total aortic cross-clamp time was twenty-five minutes. There was no bypass time, as the operation was closed heart surgery.

Shalynn had several episodes of supraventricular tachycardia (SVT, an abnormally fast heart rhythm originating from the atria) during manipulation of the heart. This abnormal rhythm resolved spontaneously. The operation was uneventful, and she was transferred to the NICU in stable condition at 1300 hours.

In his report, Cornel wrote:

The surgery was properly performed and followed the correct decision path. The combination of atrial septal defect, ventricular septal defect, Ebstein's malformation and coarctation is one I have encountered in the past and it is extremely difficult to manage. I do not believe that an attempt to repair all of the lesions would have been more likely to succeed. (Exhibit 353, page 43)

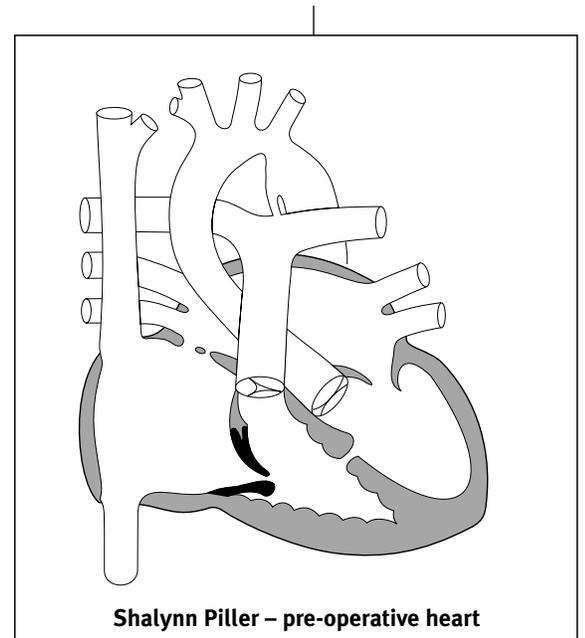
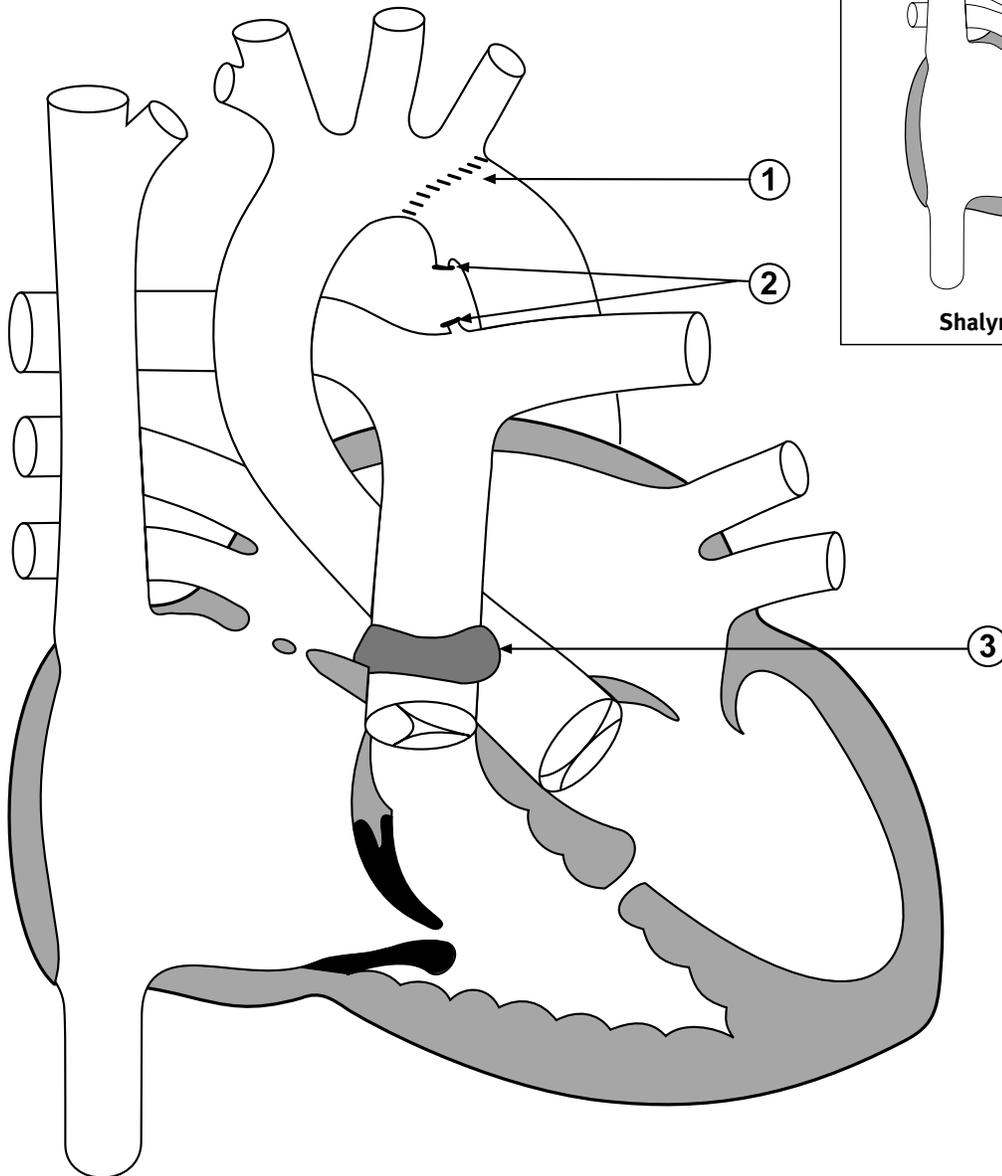
The Pillers had been at the HSC throughout the time of the procedure. At the end of surgery, Odum spoke with them and told them the operation had been successful. The Pillers stayed with their daughter until 2030 hours that evening.

POST-OPERATIVE COURSE

When Shalynn was admitted to the NICU after the operation, she was observed to have warm skin, good pulses in the lower part of her body and satisfactory urine output. Her condition remained stable until that evening.

At 2300 hours, Shalynn became extremely agitated and increasingly cyanotic. She immediately developed a slow heart rate that was unresponsive to the administration of atropine.

Diagram 7.4 Shalynn Piller – post-operative heart



Shalynn Piller – pre-operative heart

- 1 – Coarctation repair of aortic arch by end-to-end anastomosis
- 2 – Ligation and division of patent ductus arteriosus
- 3 – Pulmonary artery band

At 2311 hours she went into cardiac arrest. Closed chest compressions (external cardiac massage) were begun and continued intermittently over the next hour and a quarter, until 0025 hours. She was given multiple doses of atropine and epinephrine, without return of effective cardiac output. She was found to be acidotic and was treated with sodium bicarbonate.

Odim and Shalynn's parents were called to the hospital. Odim testified:

I came in promptly into the intensive care unit to lend assistance, and discovered that, indeed, she essentially had no blood pressure or pulse without chest compressors, despite the fact of having a rate and a rhythm. (Evidence, pages 25,287–25,288)

As resuscitation continued, Odim and Ward (who had also been called to the NICU) conducted tests in an effort to determine the cause of Shalynn's deterioration. Odim thought that there might be some bleeding around the heart. As a result, he inserted a needle into the pericardium in the hope of draining off any blood that might be compressing the heart (a condition known as cardiac tamponade).

An echocardiogram performed at 0130 hours, August 2, also ruled out the presence of any fluid around the heart (or pericardial effusion, a condition similar to tamponade, but not as serious). The echocardiogram showed that the left ventricle was pumping.

A chest X-ray showed that Shalynn's lungs were clear and her heart was decreasing in size (a sign that the heart's previous swelling was lessening), and indicated the absence of a pneumothorax. (This is a condition in which air accumulates in the space outside one of the lungs, the pleural cavity, compressing the underlying lung, which may then collapse.) The tests also indicated that there was no problem with the surgical repair of Shalynn's heart. After conducting these tests, the doctors still had not found the cause of her deterioration.

Shalynn was given an intravenous infusion of isoproterenol (Isuprel) for approximately thirty minutes, to increase her heart rate and her heart's ability to contract. In addition, she was given an infusion of epinephrine, and continued to receive an infusion of dopamine. Eventually her heart rhythm and blood pressure became normal.

Between 0500 and 0600 hours, Shalynn's blood pressure started to become unstable again. At 0600 hours, she once more appeared agitated and discoloured. Her blood pressure suddenly dropped, and she again needed external cardiac massage, from 0612 to 0635 hours. She was given maximum doses of inotropic drugs (epinephrine and dopamine infusions). An echocardiogram at 0900 hours showed the performance of her left ventricle to be worsening.

There were also serious concerns about the impact that the lengthy period of resuscitation had had on Shalynn. A neurologist, Dr. J. D. Reggin, was consulted. He found that her pupils were fixed and dilated, an indication that she might have suffered brain damage. Her skin was mottled, and the blood flow to her arms and legs was poor. An electroencephalogram (EEG) was done at 0930 hours. The results showed that Shalynn was having brain seizures, for which she was given phenobarbital, to reduce the seizures. The EEG was deemed markedly abnormal, indicating acute brain damage caused by lack of oxygen. In addition, Shalynn was having other major problems, with kidney failure and coagulopathy.

At 1625 hours on August 2, the NICU staff and Odim reviewed Shalynn's condition. They were still hopeful but made a recommendation not to resuscitate her if she suffered another cardiac arrest. They discussed their recommendation with Shalynn's parents, and received their agreement.

The next day, another EEG was performed. The results indicated serious brain damage. According to Reggin, Shalynn would have had a major neurological handicap if she survived. Odim met with the parents and grandparents to discuss Shalynn's condition and prognosis. The family agreed with the decision to stop treatment, and at 1825 hours, Shalynn died in her mother's arms.

POST-MORTEM FINDINGS

Dr. Susan Phillips conducted an autopsy on August 5, 1994. She identified the cardiac surgical repairs as being intact. The right ventricle was dilated and hypertrophied, with widespread myocardial necrosis. The left ventricle was also hypertrophied, with papillary muscle necrosis. The pathologist suggested that the myocardial necrosis occurred after the cardiac arrest. The autopsy provided no explanation as to why Shalynn's condition deteriorated following surgery.

FINDINGS

As noted above, this case gave rise to the following questions.

- Were Shalynn's parents provided with sufficient information to allow them to give informed consent to the procedure?
- Should the program have undertaken this operation at a time when neonates were supposed to be sent out of the province?
- What was the cause of death and was it preventable?

Were Shalynn's parents provided with sufficient information to allow them to give informed consent to the procedure?

■ Finding

Odim's credentials were overstated to the family. The family was not told of the slowdown in the program; nor were they told of the problems that the program had experienced. Additionally, the family was not told that the program was not to do major neonatal anomalies such as their daughter had. The degree of risk presented by their daughter was not properly communicated to them. The evidence tends to suggest that Shalynn's parents were not provided with sufficient information to allow them to give informed consent to the procedure.

Should the program have undertaken this operation at a time when neonates were supposed to be sent out of the province?

■ Finding

The Wiseman Committee's May 18 decision was that neonates with major anomalies would be transferred to Saskatoon for operation. Shalynn should have been referred out of province instead of the team attempting her operation in the summer of 1994. The slowdown on May 17

had been initiated because there were concerns about the team's ability to manage high-risk cases. By definition, emergency operations in neonates were to be treated as high-risk. The evidence suggests that this case should have been referred out of province.

What was the cause of death and was it preventable?

■ Finding

None of the medical witnesses were able to offer a definitive explanation as to what happened to cause Shalynn's death. In their joint report, Duncan and Cornel wrote that "The etiology causing the death of this child is not clearly delineated." (Exhibit 354, page 9) Dr. Walter Duncan testified that he believed the banding might have increased Shalynn's sub-aortic stenosis, by obstructing the aortic outlets and by reducing the shunt. This made the sub-aortic area smaller and thus increased pressures on it. In addition, there would be an increase in the amount of blood leaking through the tricuspid valve. As the obstruction worsened, Shalynn's cardiac output fell. However, Duncan did not take any issue with the surgical approach that was taken in this case.

It is not possible, therefore, to say with any degree of certainty what the cause of death was, nor whether the death was preventable.

PRESSURE BUILDS FOR A RETURN TO FULL SERVICE

Pressure was continuing to build for a return to full service. Ullyot testified that in either late July or early August, Craig asked McNeill and Ullyot why the program had not returned to full operation. Ullyot said Craig implied that he had been told that she and McNeill were the main obstacles to a return to full service. Ullyot told Craig that the committee had not yet reached any conclusions or even developed a report.

On August 5, Craig wrote to Bowman, the acting head of pediatrics, suggesting that he meet with Blanchard and Craig in late August or early September to discuss the Wiseman Committee's work. Craig wrote:

One issue which has emerged is apparent uncertainty about the program objectives. Specifically, there does not appear to be agreement as to whether the program, when fully operational, should be attempting to provide surgical care for all [underlining in original] patients or whether a small number of very complex surgical problems should continue to be referred out. (Exhibit 19, Document 246)

Before any such meeting was held, it was announced that Dr. Brian Postl would take over the position of head of pediatrics and child health in mid-September. As a result, Blanchard and Craig did not meet with Bowman.

However, shortly after the August 5 memorandum was written, Wiseman prepared and presented his committee's interim report. In correspondence to Craig on August 23, Blanchard stated that the interim report was written "apparently on the repeated insistence of the involved Anaesthetists." (Exhibit 19, Document 248) In fact, the anaesthetists had not been insisting that the committee write a report in late

July—they did not believe enough work had been done to justify writing one. However, Ulyot testified that she believed that the report was drafted in response to her and McNeill's opposition to moving on to higher-risk cases before the committee had filed a report.

THE AUGUST 10 COMMITTEE MEETING

At the August 10, 1994 meeting of the committee, four matters dominated the agenda. The first was the case of a young patient with tricuspid atresia. The second was the question of where post-operative care of the pediatric cardiac patients was to occur. The third was a discussion over whether or not to proceed with a specific patient. The fourth was a proposed interim report prepared by Wiseman. Perhaps the most significant recommendation in that report was a recommendation to move to doing cases of medium risk.

Present at this meeting were Wiseman, Giddins, McNeill, Odum, Ulyot, Youngson and Seshia.

THE TRICUSPID ATRESIA CASE

The discussion involving the child with tricuspid atresia focused on the fact that the child had to be returned to the operating room to have a central shunt re-done. The notes of the discussion conclude with this comment:

Some issues were discussed related to the ability to predict the response to the Glenn shunt and it was felt that this was essentially not possible. The issue of returning a child to the unit with significant bleeding per chest tube was also discussed. (Exhibit 20, Document 278 G)

The child subsequently recovered.

POST-OPERATIVE CARE

This was followed by a discussion of the location for the post-operative care of neonates. Dr. Molly Seshia, head of the NICU, was present for this discussion. She was a strong advocate for the position that newborn children had a unique set of problems that did not lend themselves easily to the same care as was provided to older children and to adults. She had long felt that such children should be cared for in the Nursery, as the NICU was called.

The view expressed by Odum and others was that there were not enough pediatric cardiac surgical cases involving neonates for the NICU staff to gain sufficient experience in dealing with the complications that they presented. Seshia was asked to discuss with her staff the possibility of developing a system in which neonates who had undergone open-heart surgery would be handled by the PICU, while the NICU would handle neonates who underwent closed procedures. Although not convinced that there was a problem with the way that matters were being handled, Seshia agreed.

FORTHCOMING CASES

The meeting also dealt with forthcoming cases. The minutes stated that:

The Committee agreed in principle to continue to recommend that the Cardiac Surgical Program continue with cases at the intermediate level of complexity and/or risk. It was strongly recommended that cases not [underlined in original] be vetted at the level of the Committee. In spite of this, a specific case was indeed discussed. This was the case of a patient with an aortico-pulmonary window and an interrupted aortic arch who would require a circulatory arrest procedure which is essentially extra-vascular. It was the consensus of the Committee that this case represented the high risk end of the spectrum and that at the present time this be deferred. (Exhibit 20, Document 278G)

Giddins and Odum argued in favour of undertaking this operation and were opposed by McNeill. She believed that undertaking a high-risk case violated the decision to move slowly to doing moderate-risk cases. McNeill testified that Odum and Giddins felt that the program was losing the opportunity to undertake an 'interesting' case. By 'interesting', McNeill said, she understood Giddins and Odum to mean one that would be challenging to the team and develop its skills.

The minutes state that it was decided that the committee would continue to discuss cases that had been performed and monitor the cardiac team. Meetings were to be every two weeks rather than weekly. It was further agreed that in one month's time, at the September 7 meeting, consideration would be given to moving the program to full activity.

THE DRAFT INTERIM REPORT

The draft interim report was presented to the committee members near the end of the August 10, 1994 meeting. The minutes of the meeting state:

The Interim Report which had been compiled by the Chairman was presented to the Committee and discussed briefly. It was the general consensus that this report was representative of the Committee's position at the present time. (Exhibit 20, Document 278G)

Wiseman prepared the report on his own initiative. He testified that at the meeting before its presentation to the committee, there had been some discussion to the effect that the committee ought to be reporting back to the three department heads. The key recommendation of the report was that the program be returned to full service in a staged manner.

By the time the report was prepared, the committee had met ten times. All but one of the open-heart cases had been reviewed. According to the report:

As a result of the frank and open discussion which occurred a large number of problems [sic] areas were discovered and specific recommendations were made to improve the overall function of the team. Areas where problems appeared to arise included many items relating to team communication. A significant amount of discussion was devoted to improved communication between nursing, surgery, anaesthesiology, and bypass technology. It was felt that this frank discussion resulting [sic] in paving the way for a much improved communication in the future. (Exhibit 20, Document 278F)

In addition, a large number of technical details concerning the intra-operative and peri-operative management of individual patients were discussed and solutions were recommended. Some of the specific areas where changes were recommended included:

1. The effective use of invasive monitoring lines so as to satisfy the requirement of both anesthesiology and to meet the needs for postoperative monitoring.
2. Specific technical details concerning team communication relating to the going on cardiopulmonary bypass and coming off cardiopulmonary bypass.
3. Methodology and communication concerning the administration of anti-coagulation agents and agents for reversal of anticoagulation.
4. Details relating to transfer of patients from operating room to Intensive Care Unit and with respect to this the timing of a postoperative radiogram.
5. Details concerning the use of cardio-plegia solutions.
6. Specific recommendations concerning the timing and ordering of blood products for use at the conclusion of cardiopulmonary bypass. Products to be ordered from the Red Cross for availability immediately coming off of bypass.
7. The recognition that the operating room assistant is a major component to the smooth and safe conduct of the surgical procedure. A group of such assistants familiar with the Children's Hospital personnel and operating theatre is to be gradually developed.
8. The need for an operating room call-back system in the event of re-operation taking place in the Intensive Care Unit. As well the need for instrumentation for re-operation under emergency circumstances in the Intensive Care Unit.
9. The need to recognize that specific cases of greater complexity be not be [sic] undertaken during the early experience of the Program. It was the consensus of the Committee that the early experience included cases of an order of complexity which exceeded the program maturity at its onset. (Exhibit 20, Document 278F)

The report also stated that, by continuing to undertake straightforward cases during the period of the review, the team was able to "work together to gain confidence and during this period of time, significant success was met." (Exhibit 20, Document 278F)

This listing is impressive for what it does not deal with, namely the program's morbidity and mortality. There is no assessment of the program's mortality rate. Nor is there a discussion of the specific issues that led to mortality or morbidity. Soder, one of the consulting witnesses who appeared before this Inquest, cited surgical factors as playing a role in the deaths of four children during the period under review. Other consulting witnesses raised serious questions about the length of surgery and whether or not repairs were properly done. None of these questions were addressed by the report, which was the committee's only report before the program went back to full service.

Most of the issues on the list of matters discussed were of peripheral concern to the anaesthetists, who had called for the slowdown, and to the nurses who had enthusiastically supported the slowdown. The final point, number nine, flirts with these issues when it states that cases at the outset exceeded the program's maturity.

The report lacks concrete recommendations and is maddeningly vague. For example, it is unclear from point 9 as to whether or not the committee had concluded that the team was, in August 1994, sufficiently mature to handle those cases that had exceeded its maturity a few months earlier.

The draft report concluded with the following statement:

It was generally agreed that the Program proceed with cases generally falling into the low and medium risk category, and that at the present time, cases in the high-risk category be deferred. This is recommended to continue for a period of 4 to 6 months. (Exhibit 20, Document 278F)

While this paragraph appears to indicate that the program slowdown would continue for a considerable period of time, the statement in fact opened the way to a rapid return to full service. In the final draft of the interim report, the last sentence reads, “This is recommended to continue for a period of 3 to 6 weeks.” (Exhibit 19, Document 246) McNeill testified that the committee had agreed that four to six months was too long a time, although she thought the period was going to be shortened to six to eight weeks, not three to six weeks.

On the question of the pace at which the program would be accelerated, the draft interim report read as follows:

After considerable Team discussion and with a [sic] some degree of trepidation it was recommended that the overall approach to the Cardiac Program occur with the development of a staging system based upon complexity and risk involved with individual cases. (Exhibit 20, Document 278F)

In the final copy of the report, the word “trepidation” was replaced with the word “reservations” (Exhibit 19, Document 246).

This clearly reflects the lack of consensus over returning to full service. The report stated that patients could be considered as either low, medium or high-risk. It was only at this point in the committee’s history, when the program was on the point of returning to full service, that it set about defining risk categories. Low-risk patients included many of the closed procedures, as well as simple open-heart procedures with short bypass times. These included atrial septal defects and Glenn shunts. Moderate-risk cases included ventricular septal defects, Tetralogys and incomplete atrioventricular canals, and “patients undergoing primary repair of anomalies which occur with a reasonable frequency and are not usually associated with high mortality.” (Exhibit 20, Document 278F) The high-risk cases included both complex neonatal repairs and reoperations on patients with previous palliative repairs. With such a list developed, it was agreed that cases would not be vetted through the committee.

McNeill, Ullyot and Youngson were somewhat taken aback by the presentation of Wiseman’s draft report. They felt it was presented without any prior discussion and did not represent their views. Yet it became adopted as the committee’s interim report, apparently with their approval. This gives rise to some questions about decision-making in the committee.

In her testimony, McNeill gave this description of how consensus was determined in the committee:

It was sort of, we would all discuss something, and then perhaps one or two people would reiterate the idea or express sort of an encapsulation of what we had just said. And somebody may have been arguing against it or critical of it, or having a different opinion, but at the point that the idea is summarized, if they then don’t say anything, that summary becomes the consensus. (Evidence, page 13,312)

In many instances, McNeill said she felt that statements became consensus not because everyone agreed with them, but because they had stopped arguing against them and were simply prepared to let them stand.

Youngson, McNeill and Ullyot had felt almost from the outset that the committee process was not adequately addressing the concerns they had about the program. They had felt that the major issue was the abil-

ity of the surgeon, but had not been able to raise that concern about his abilities very strongly because of their lack of surgical expertise. Youngson recalled the manner in which McGilton's questioning of the suturing of the eustachian valve in the KZ case had brought about such a strong reaction from both Odum and Giddins and how McGilton's views had been dismissed as coming only from a nurse.

McNeill had also felt all along that Giddins, Odum and, to a certain extent, Wiseman had viewed her as being obstructionist and unco-operative in her assessment of the levels of care the program was able to provide for cardiac patients. She, too, felt that even though she was a trained anaesthetist, she was unable to argue forcefully that there were valid surgical issues that had not been addressed during the process up to that time.

She had felt that the committee suffered from a lack of members with pediatric cardiac surgical experience who could assess and comment on any of the surgical issues that were raised or needed raising. At the meetings, whenever a surgical matter had been raised, she felt that Odum's view was invariably accepted and that there was little room for dissent, especially since no one at the table could match Odum's credentials in matters of pediatric cardiac surgery.

Youngson, Ullyot and McNeill were not confident at all that the program was ready to proceed to operating on all children. However, they were all hesitant to speak out against the contents of the interim report, since their true concern was their lack of confidence in the surgeon—a position they felt unable to express at the committee or to articulate convincingly.

McNeill testified:

I think that we didn't sometimes actually speak clearly, forthrightly and critically about incidents that we felt were—that had occurred or we had concerns about.

Question: Why not? Why not?

McNeill: On my part, I think that, or I know that it was a combination of feeling that there was expectations of me to be part of a healing process almost, if you will. There was a definite intent that was reiterated by the people who set up the committee and by department heads that this should be a mechanism for improving the general tenor of relationships.

So with that sort of background and that message being delivered to me, I felt that if I had an issue that I wanted to discuss, I should try to do it in as least a confrontational manner as possible, and if possible, to avoid being directly and personally critical and try to address the issue from a more unbiased and perhaps from a farther back perspective. So I had the sense of expectation of my behavior, if you will.

I think another factor that played a large role in it is, it is difficult to confront somebody, it is difficult to say, I think you did or did not do this. Even in a forum that was, you know, set up with that sort of a purpose in it, it isn't always easy to do. And I know I avoided doing it at times for those reasons. (Evidence, pages 13,296–13,297)

Ullyot testified that during August, she and McNeill had concluded that a return to high-risk cases was almost inevitable.

I think we had just sort of come to the conclusion that if the push was on to increase the complexity that we weren't going to have a real problem with that in managing the cases, that we just perhaps should just let this start to happen. Even though we weren't particularly happy about it, even though we had objected to it occurring, that we weren't the only people in that committee, we weren't the only people deciding that the cases should proceed and that we should start doing medium risk

cases, and that we had a responsibility to object, but that if the committee as a whole decided that's what we would be doing that we would go along with that. (Evidence, page 31,413)

Ullyot testified that she did not believe the minutes of the August 10 meeting were accurate in their statement that all the committee members had accepted the report. She said that at the August 10 meeting, she indicated her concern that the report “did not address the fundamental question of whether the mortality was acceptable.” (Evidence, page 31,395) She was told that the other members of the committee were comfortable with going ahead and that the mortality and morbidity rates were acceptable, based on the reviews of the individual cases.

Odim testified that the committee discussion did not always appear to be as full and frank as the interim report suggested. While he said that the summer results had been encouraging, he testified that:

There was still certain combinations of players created the wrong chemistry and there was still some attitudinal things that still existed, but I don't think they really had any bearing on, you know, what we had to do as professionals, but my personal sense was that there was still some issues that really weren't quite resolved and I don't know whether everything was frank and open. (Evidence, page 25,325)

The people he was referring to were Youngson, Hinam, Swartz and McNeill. In short, while Odium wished to see the program return to full strength, he was developing reservations about the team's capabilities. This was reflected in his ambivalent testimony on the report's conclusion that the team had taken on cases that exceeded its maturity. At one point he rejected the conclusion, while at another point he accepted it, stating that the team was capable of performing the cases that it undertook upon startup; however, he also felt that there were problems with the team's maturity.

While Odium had a number of concerns about the chemistry of the operating-room team members and about post-operative care, he did not believe that these problems needed to be fully addressed before moving back to full service. He believed that, at that point, the program could provide acceptable care, as opposed to what he called optimal care.

In many ways, it appears that point number 9 (the statement that the team had taken on cases that exceeded its maturity) was, in large measure, offered as an appeasement to the program's critics. Odium and Giddins accepted that they had to agree with the point, if they wished to see the program return to full service. This point was made apparent when Wiseman was asked who, during the committee's work, had identified cases that were of an order of complexity greater than the team's maturity. In response, he testified:

Well, the committee, I think it's alluded to or suggested, even the terms of reference of the committee is to kind of this gradation phenomenon, the need to sort of step back and have a look. It was very clearly meant to make recognition of this fact, that's this lucidity phenomenon. That's why this—

Question: Did Dr. Odium agree that the cases at the beginning of the program had been too complex, by the time you wrote this?

Wiseman: I think insofar as the proceedings of the committee led to this conclusion, yes.

Question: Did Dr. Giddins agree that the cases selected at the beginning of the program were too complex?

Wiseman: Again, in sort of, from a retrospective perspective, I would say yes. (Evidence, page 40,626)

It was recommended that the interim report be forwarded to the three department heads.

THE INTERIM REPORT IS DISTRIBUTED

On August 22, 1994, Wiseman sent copies of the report to Blanchard, Craig and Dr. John Bowman, the acting head of pediatrics. On August 23, Blanchard responded in a note to Wiseman:

I have some difficulty with statements in the latter part of the report. The assignment of arbitrary risk levels as a basis for the decision regarding whether the patient should have an operation in Winnipeg makes no sense in and of itself. The mere existence of increased risk for certain categories of congenital cardiac defects should not be a criterion for acceptance or rejection of the patient for treatment in Winnipeg or elsewhere. After all of the meetings and the improved communication why is there need for a further moratorium of three to six weeks during which so-called low and medium risk patients will be acceptable for surgery in Winnipeg and higher risk patients deferred? (Exhibit 19, Document 249)

There is some merit to Blanchard's question. Why were people still reluctant to take the program to full service after a summer of team building? The fact that there was such reluctance should have caused Blanchard to question whether the program should undertake such a step without full support and confidence. However, instead of raising that concern, Blanchard went on to question why the program could not have moved to full service sooner.

Blanchard saw the use of risk categories as being artificial. He said his concerns about the levels of risk reflected a worry that the program might be attempting to improve its surgical outcome by avoiding cases it was capable of doing but that carried a higher risk. He testified:

It wasn't clear to me, in reading the report, you know, what were the decisions they had to make now, what were the obstacles? Were we missing some equipment? Were there some problems with deciding on cases? It wasn't sort of totally clear to me just how they were going to make this decision, and what would another few weeks difference make? (Evidence, pages 36,537-36,538)

Wiseman responded to Blanchard's memorandum on September 6, with the following comments:

With respect to the "arbitrary risk levels" and decisions regarding surgery we discussed this at length and it seems that this is the only way that the program could continue with the participation with the Department of Anesthesia. In truth, the risk levels are not quite so arbitrary. They do represent patients with low, medium and high mortality rates and it was initially stated that the program should recommence with a graduated case load, specifically with respect to case complexity. I would only add that it seems in retrospect that this was perhaps not a bad decision in view of the fact that there have been an additional 16 cases carried out since our deliberations commenced and all [underlining in original] of these patients have had a successful outcome.

I believe we are on the verge of allowing this program to go forward at full capacity and at the present time the team members do appear to be gaining confidence with each other. (Exhibit 19, Document 250)

It should be again noted that this overstated, by a considerable degree, the degree of team cohesiveness that had been developed by this point. There is an even more disturbing overstatement. Wiseman stated that all the patients who had undergone surgery since the shutdown had experienced successful outcomes. By the time he wrote his response, two children who had undergone surgery in Winnipeg, Aric Baumann and Shalynn Piller, had died. Furthermore, Wiseman had been informed about these deaths by August 24. When questioned about this omission, Wiseman was not able to offer any explanation, other than to suggest that he had forgotten.

THE WISEMAN COMMITTEE PLANS TO RETURN TO FULL SERVICE

The committee met on August 24. The case of Daniel Terziski was discussed at this meeting. According to the minutes, the discussion led to revisiting the question of the post-operative care of neonates. The committee concluded that it should recommend that all open-heart cases be sent to the PICU, as opposed to the NICU. According to the minutes, the discussion of the Terziski case ended with the following conclusions:

The child went on to have ventilator dysfunction and proceeded relatively soon after return to the Nursery to have a cardiac arrest resulting in the need to open the chest and determine the patency of the shunt. The child expired and it was felt that there was no specific single component in the management of the patient which contributed greatest to the demise. Factors such as the prolonged arrest time were discussed, as well as the need to revise the shunt size. (Exhibit 20, Document 278 H)

Without belabouring the point, it is worth noting that the consulting witnesses to this Inquest identified a number of other serious problems with this operation. Duncan and Cornel questioned the wisdom of the team undertaking a Norwood procedure. This was also one of the cases about which Soder concluded that the

skill and dexterity of the surgeon performing these operations were insufficient for the challenge of successfully repairing infant hearts with complex malformations. (Bold in original)
(Exhibit 345, page 8)

The inadequacy of the committee's approach is revealed by the extreme difference between the committee minutes and the reports prepared for this Inquest by consulting witnesses.

According to the minutes, after the discussion of a second case that was largely uneventful, the meeting turned to the cases that had taken place after the establishment of the committee.

The overall sense was that the results of the more recent experience have been satisfactory. Small problems have been encountered however the team communication and overall conduct of procedures appears to have improved.

It was further mentioned that there have been 4 cases carried out which are considered to be of an intermediate level of complexity and the results of these are also satisfactory.

Two deaths were mentioned including the death of a child in the Intensive Care Unit with previous repair of an ASD and the death of a child in the Intensive Care Nursery who underwent repair of a hypoplastic aortic arch.

The Team members recognize that there is significant pressure to increase the level of activity of the Cardiac Program and this of necessity will require the need to recommend in two weeks that the Program be allowed to continue at its full operating level. (Exhibit 20, Document 278 H)

It is useful to note the way that the return to full service was accelerated in the month of August. On July 27, it appears that a move to do medium-risk cases was turned down. By August 10, a report that recommends moving to full service in four to six months is accepted. According to some of the participants at the meeting, they expected the time line to be shortened in the final report. However, they did not expect it to be reduced to four to six weeks. Two weeks later, at the same meeting where the committee was informed of two deaths and reviewed the Terziski case, Wiseman informed the committee that he was recommending a return to full service in two weeks time.

The program had clearly been rushed back to full service.

Wiseman testified that when using the word ‘pressure’, he was referring to patient backlogs. When asked why the backlog required that the program return to full operating level, he testified:

This was, I think, this is awkward phrasing and, again, I am guilty of it here. I think that we had sort of agreed that in two weeks we would make a decision, or at least have a plan, so he could take away something in terms of when the program would be reactivated.

So that we were sort of trying to, I think, my sense was that the team was trying to posture itself to make a decision. And this was, two weeks was selected as a time to decide, to make a recommendation in two weeks whether the program was going to commence in another six months or three months or two months, so that Dr. Giddins would have some directive. (Evidence, page 40,650)

Wiseman testified that the statement in the minutes should be read as saying that in two weeks time a decision would be made about whether or not to return to full service.

THE ANAESTHETISTS AGREE TO RETURN TO FULL SERVICE

Before the September 7 meeting, at which the recommendation to return to full service was to be discussed, Ulliyot met with the four pediatric cardiac anaesthetists individually and discussed their positions on returning the program to full service. They each told her that, despite their ongoing concerns about the program, and in particular the skills of the surgeon, they were prepared to return to doing high-risk cases.

McNeill testified that she had reluctantly come to the conclusion that continued resistance to allowing the program to return to full service was approaching futility, since she felt that the anaesthetists had had an opportunity to have the question of the viability of the program addressed and had not been able to get others to see the legitimacy of their concerns.

THE RETURN TO FULL SERVICE

When the committee met on September 7, it first dealt with Blanchard’s comments on the interim report. The minutes concluded that the “risk level, although awkward to deal with, had assisted in resolving differences between members of the Cardiac Team.” (Exhibit 20, Document 278 I) The minutes further stated that in the previous two weeks, two infants had undergone successful operations. Giddins noted that since the program had been partially suspended, three of the eleven patients who had been sent out of province had died. A survey of VCHC records indicates that, in fact, fourteen patients had been referred out of province during this period. One died within twenty-four hours of surgery, one died thirty-two days after surgery (twelve days after being initially discharged from hospital), and one died forty-one days after surgery (twenty-one days after being discharged).

Discussion occurred concerning the impact of sending patients away from the program in Winnipeg. It was felt that these patients constitute a significant part of the overall patient population and as such the local program is considerably weakened by their transfer. (Exhibit 20, Document 278 I)

Wiseman believed that the program was weakened because a reduction in the number of complex cases affected the development of the team's skills. McNeill did not believe the program had been weakened, if by that term one meant a decline in team members' skills by sending some patients out of the province. However, she did agree that the program was not providing the services originally intended. To that extent, she agreed, the program was weakened.

The meeting then went on to discuss the program's future.

Following discussion of this issue it was the consensus of the members of the committee that the program now continue at full capacity. Specifically, it is intended that patient selection for surgery will be the responsibility of the Cardiac Surgery and Cardiology Departments. ***It was recommended that discussion re: patients and review of patient management occur appropriately at the Friday end of month session which is intended to allow all members of the Team to participate fully.*** (Bold and italicized in original) (Exhibit 20, Document 278 I)

Wiseman testified that while the surgeon and the cardiologist would be selecting patients, other team members would have input into the selection process, when the recommendations were presented at the pre-operative conference.

Finally, it was recommended that Seshia be invited to attend the committee's next meeting to discuss post-operative care issues.

McNeill testified that, in agreeing to the return to full service, she was not simply responding to pressure. She said she felt that the surgical results over the summer had been positive, as were the few moderate-risk cases that had been undertaken. She said that, while relations with Giddins and Odum were not friendly, they were civil. However, she felt that the review had not accomplished all that had been hoped for.

I know, when we went into the process we had concerns about surgical technique, or the surgical side of the patient management that I didn't feel was addressed completely through the process. Whether it could have been or not, because by the nature of what we were doing and the way we were doing it, I am not sure that we really stood much chance of necessarily answering all the questions that we had at the beginning.

So, from my point of view, and also the other anaesthetists, because I spoke with them, we felt that was still a partially unresolved issue at the end of this.

Question: I know we have been over this before, but can you clarify as to why you couldn't get at that?

McNeill: In many ways because it came down often to non-surgeons commenting on surgical care. So, there is always, no matter, you know, how you approach it, you get to that bottom line. And there perhaps would have been a more likelihood of resolving issues if there had been a mechanism for other surgeons to examine the issue or comment. (Evidence, pages 13,371–13,372)

Wong testified that he thought it was a mistake to return to full service.

I didn't think that we had had enough time on the lower risk cases to really develop confidence for the team in each other again, and work together. And an example like what we just talked about [Wong was referring to the suturing of the eustachian valve in the KZ case] was one of the reasons that I had concerns. (Evidence, pages 19,914–19,915)

Wong was asked why he agreed to a return to the full program when he had these reservations.

Basically, the evidence had been presented to the administration aka the Wiseman committee and, you know, it was their judgment that it was safe to return. And it was out of our area of expertise to decide what was safe and what was unsafe, so we agreed, even though our reservations were not satisfied.

As well, we had agreed to abide with the findings of the committee, so we were, I guess you would say we were being team players, even though we weren't happy, everybody else said it was okay, so we reluctantly agreed. (Evidence, pages 19,915–19,916)

Throughout the period when the team was doing only low-risk cases, Youngson said that while the surgical outcomes had improved, there were still ongoing problems with cannulation. When testifying about the September 7 decision, she stated:

Well, I think we were all happy with the results over the summer for the most part. Things had gone fairly well. There had been a couple of things that had happened in the operating room, but for the most part, the outcomes had been what we had hoped for.

I think anaesthesia still had some reservations about going to a full program, and so did nursing. But at this point in time, I was not prepared to voice my opinion any more at these meetings. I just was there more or less as an observer later on in the year.

I really didn't feel that nursing concerns were considered important to—certainly to Dr. Odim and to Dr. Giddins. (Evidence, pages 8,572–8,573)

In this general state of dissatisfaction over the review process, the Pediatric Cardiac Surgery Program prepared to return to doing all cases.

CONCLUSION

The period from May 17 to September 7 constitutes a period during which the hospital undertook an internal review of the Pediatric Cardiac Surgery Program. That review was undertaken by a committee chaired by the director of pediatric surgery for Children's Hospital, Dr. Nathan Wiseman.

That committee suffered from a number of deficiencies from the outset. It lacked a mandate broad enough to address the issues that were being raised privately by anaesthetic and nursing staff. The committee lacked the personnel to conduct an expert assessment of the issues that were being raised. Finally, it does not appear to have developed a systematic approach to reviewing cases.

At the outset of this Inquest, the court was informed that there were no minutes for the committee. Yet, as the Inquest proceeded, minutes were in fact produced, in a piecemeal fashion. It appears, however, that there were some meetings for which there are no minutes.

Furthermore, the committee's interim report contains no assessment of the care that was given to children in the program, particularly to those children who died. The focus of the report is almost entirely on issues relating to communication and team building.

The committee did not develop any plan of action that would address the issues that had been identified. For example, there were no recommendations dealing with case selection, communication or monitoring.

At the same time, a number of cases took place during this period, VM and KZ in particular, that indicated that the issues the nurses and anaesthetists had been speaking of to their supervisors were still of considerable concern to members of the surgical team.

While McNeill and Youngson testified that they concurred with the decision to go back to full service, it is apparent from the evidence presented to this Inquest that they had very serious reservations and would have preferred not to return to full service at that time. However, the built-in failings of the committee struc-

ture left them with little option. The cases had been reviewed, and while it was stated that a consensus had been arrived at, it would be more accurate to say that a dominant view had been imposed.

COMMUNICATION

Following the February restart of the program, there had been a major breakdown in communication. Nurses had spoken to their supervisors and anaesthetists, and to their division and department heads about the concerns they held with morbidity and mortality. The nurses and anaesthetists had also taken their concerns to Wiseman, who they believed was in charge of the Pediatric Cardiac Surgery Program. Wiseman chose not to observe Odum in operation. Instead, he appears to have discounted the opinions of the nurses and anaesthetists, and adopted the view that there were no surgical issues. From the way Wiseman structured the committee review, it appears that he interpreted the nurses' and anaesthetists' views as merely reflective of poor teamwork and their inability to deal with the deaths of patients.

The structure established for the committee may have been intended to build the team, but in reality it made team building impossible because the ground rules prevented the nurses and anaesthetists from raising issues that were most important to them. They could not effectively raise the issue of surgical competence because it was outside their area of expertise and because such a line of discussion went against the committee's goal of fostering camaraderie. In addition, the assistance that the committee needed to determine if the concerns of the nurses and anaesthetists over surgical ability had any validity was lacking.

DECISION-MAKING

Decision-making by consensus can be a powerful team-building tool. However, it requires that all members of a group agree to the decisions that the group is making. This means, however, that one member of the group can effectively block a decision. Decision making by consensus, therefore, can work only if the group is truly committed to developing real consensus, each member has a full opportunity to express his or her view (and is heard) and each member agrees not to act unreasonably in blocking a decision. Additionally the members must have an opportunity to feel that something has been agreed to.

This was not the case with the Wiseman Committee. The treatment given to Youngson and McGilton made it clear that nurses' views about medical issues would not be accorded much weight. Additionally, they would clearly have gained the impression that they would not be allowed to block decisions agreed upon by doctors. Furthermore the manner in which minutes were kept and circulated—and apparently never discussed, let alone agreed to—indicates that there was no proper decision-making process.

As a result of these shortcomings, communications at the committee were not forthright; nor were decisions (as reflected by the chairperson) reflective of the true feelings of some of the committee members.

As the program returned to full service, the conflicts and concerns of the spring re-emerged. Tragically, the program continued to be plagued with serious morbidity and mortality. These conflicts and problems eventually led to the full suspension of the program and the appointment of an external review, a decision that should have been made in May 1994, rather than in December of that year.