Monitoring of Reducing Restraints Initiatives in Intensive Services: Final Report

The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO
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Regional (Jones, Stevens, Rodrigues, & Carter, April 2005) and international (Jones, Carter, & Stevens, June 2005) conferences have recognized Vanier’s work in reducing incidents of physical restraints. In keeping with recommendations from the literature, this initiative has involved the entire agency. In practice, the programs most involved in these efforts have been the residential (“TLC” and “Hand-in-Hand”) and day treatment (“Early Intervention Program” and “On-Campus Day Treatment”). The residential and on-campus day treatment programs each serve boys and girls age 7-14 who have been identified by either the Community Services Coordination Network or a local Children’s Aid Society as needing intensive services. The Early Intervention Program is a day treatment program serving preschool children who have been identified at Vanier as requiring an intensive service. At this point, numbers and durations of restraints are tallied by hand for each program and for each child. This data is presented to a “Reduce Restraints Working Group” and the agency-wide committee responsible for quality assurance (“Value Team”). Results regarding the first year of our efforts to reduce restraints were shared at the previously mentioned conferences. The grant enabled us to improve our ongoing, quarterly reporting regarding restraint incidents, and to provide more information as needed to front-line staff and to the Reduce Restraints Working Group.

Program Evaluation Activities

One of the crucial elements in an effective plan to reduce the number and duration of restraint incidents is effective monitoring. The primary goal of the current project was to strengthen our infrastructure for reporting on restraints. To this end, an external Information Systems consultant (Phil Kirchgessner of Syntag) was hired to help us develop a report summarizing restraint incidents during a given date range.

A second goal was to improve our ability to identify the children who are most likely to engage in dangerous behaviour. To this end, Mr. Kirchgessner was hired to develop a report that would pull from existing information records as much relevant information as possible. The resulting data file contained records for 1 054 children who had been active Vanier clients between April 1, 2004, and March 31, 2006. Each record included the client’s unique casebook number, age, gender, presenting concerns, most intensive program involvement, Brief Child and Family Phone Interview (BCFPI) scores, and Child and Adolescent Functional Assessment Scale (CAFAS) scores. Of these children, 96 had at least one restraint incident. For those children, the number of restraint incidents and their total duration was provided. From these data, the algorithm described in Appendix A was developed to predict the number and duration of restraints.

A third goal was to evaluate staff perceptions and attitudes regarding restraints. Three projects addressed this issue. First, Appendix B summarizes the results of in-depth
interviews were conducted to explore staff experiences, attitudes, and ideas about restraints. Second, Vanier had previously conducted a staff survey on similar themes. This survey was repeated and the results can be found in Appendix C. Third, Vanier had previously created a video depicting various scenarios of staff transporting a “client” from one location to another. This video was intended to develop a better understanding of the concept of gentle guidance. Appendix D provides details on this project.

**Deliverables**

Deliverables from the current project included:

1. A computer report that summarizes all restraint incidents within a given date range. This report is now available on the Vanier computer system.

2. A prediction algorithm and accompanying computer reports to categorize clients at intake according to their risk for dangerous behaviour and to allow for continuous development of this algorithm. A report summarizing all available data for a given date range and a report predicting risk for an individual client are now available on the Vanier computer system.

3. A report on the development of the concept of gentle guidance is appended.

4. Reports on staff interviews and a staff survey are appended.

5. Website design has been facilitated by Syntag, with implementation in progress.

**Knowledge Exchange Activities**

Within the agency, the results of this project will be shared at team meetings, and this report will be available to staff through the Vanier website. The main findings have already been shared at Vanier’s Reduce Restraints Working Group on April 27, 2006. They will also be shared at the regional, inter-agency meeting scheduled for May 26, 2006. This full report will be available to members of that group through the Vanier website. The general public will be able to access portions of this report through a different section of the Vanier Website.
APPENDIX A:
Prediction Algorithm for Number and Duration of Restraints

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The results of the current project indicate the validity of an actuarial approach to predicting dangerous behaviour among children with mental health problems. In keeping with the actuarial approach, the primary consideration in the current study was the accurate prediction of behaviour, and no underlying theory is assumed. Further, interpreting the meaning of the inclusion of different variables and their associated weights would be risky at best, given the high correlations and complex relationships among the variables. The reliability and validity of the formulae developed in this study vary greatly. One of the major considerations in a statistical approach is the size of the sample. Although the overall sample size is more than adequate, much data is missing. As a result, many of the resulting models need to be considered preliminary. Where sufficient data was available, however, cross-validation indicated correct classifications in up to 90 per cent of cases. Good predictive ability and stable weights were obtained for whether children over age 6 years would have any restraints, and for the total duration of restraints for these children. These results suggest that a concerted effort to collect data on an ongoing manner would reap benefits in terms of the success of an actuarial approach.

A preliminary examination of the data indicated that we needed to differentiate between children under age 6 years and older children. Looking at the younger age group, it was apparent that only those children in the day treatment program experienced restraints. A logistic regression analysis (least squares criterion, stepwise backwards method with p < .1 to remove) provided the following formula:

$$
\text{Where Gender} = \begin{cases} 
1 \text{ if Male} \\
2 \text{ if Female}
\end{cases}
$$

$$
\text{Presenting Concerns} = \begin{cases} 
1 \text{ if Present} \\
0 \text{ if Absent}
\end{cases}
$$

$$
(\text{Presenting Concern of Family Issues} \times -19.401) + \\
(\text{Presenting Concern of Mood} \times 22.058) + \\
(\text{Gender} \times 0.437) + \\
(\text{Age in Years at Most Recent Agency Involvement} \times 1.720) - 10.452
$$

Values greater than 0.5 predicted that the child would be restrained. Although this formula yielded 72.7 per cent accuracy for the data on which the weights were calculated, the weights appear to be unstable. Cross-validation of these variables with weights calculated on half of the sample and tested against the other half (then repeated with fit and test roles reversed) yielded only 40.9 per cent accuracy. In terms of the specific prediction, the median number of restraints (1) and duration (5 minutes) were determined to be appropriate predicted values.

Turning to the children age six years and older, the first task was to identify those children who were most likely to be in restraints. A logistic regression analysis (least
squares criterion, stepwise backwards method with $p < .1$ to remove) provided the following formula:

Where $\text{Most}\_\text{Intensive}\_\text{Program} =
\begin{align*}
4 & \text{ if Supported Foster} \\
3 & \text{ if Residential Placement} \\
2 & \text{ if Day Treatment} \\
1 & \text{ if Intensive Family Services} \\
0 & \text{ for all other clients}
\end{align*}$

$\text{Presenting}\_\text{Concerns} =
\begin{align*}
1 & \text{ if Present} \\
0 & \text{ if Absent}
\end{align*}$

$\text{Values greater than 0.5 predicted that the child would be restrained. This formula yielded 92.6 per cent accuracy for the data on which these weights were calculated, and the weights appear to be stable. Cross-validation yielded 89.7 per cent accuracy.}$

The next step was to identify those children who were at risk for a particularly high number of restraints. $\text{High Risk}$ was defined as those who had more than the median number of restraints, which was three. A logistic regression analysis (least squares criterion, stepwise backwards method with $p < .1$ to remove) provided the following formula:

$\text{Scores greater than 0.5 predicted that the child would be High Risk. This formula yielded 100 per cent accuracy for the data on which the weights were calculated. Cross-validation indicated that these weights are not stable, and only 54.5 per cent accuracy was achieved.}$
Children who had restraints but were not predicted to be High Risk were predicted to have the median number and duration of restraints for their group. These predicted values represented one restraint incident that lasted five minutes.

As in previous research (Carter, 2002), the shape of the distribution of the number of restraints was exponential. That is, many clients had a few restraints, and a few had many restraints. To facilitate the analysis, potential variables were screened through linear regression (stepwise backwards method with $p < .1$ to remove). This short list of variables was included in a constrained nonlinear regression model. The basic formula was:

$$ \text{Predicted Number of Restraints} = v \times \exp \left( - v \times \left( \text{sum (weight} \times \text{variable}) \right) + c \right) $$

where $v$ is a positive constant and $c$ is a constant, and where each variable had a unique weight that was constrained to values between -1 and +1.

Where Presenting Concerns = 1 if Present
0 if Absent

the parameter values of the best-fitting model were:

\[
\begin{align*}
+ 3.071 & \quad v \\
- 0.007 & \quad \text{weight for BCFPI Managing Anxiety population norms} \\
+ 0.042 & \quad \text{weight for CAFAS Thinking} \\
- 0.017 & \quad \text{weight for CAFAS Self Harmful Behaviour} \\
+ 0.384 & \quad \text{weight for Presenting Concern of Victim of Bullying} \\
- 0.569 & \quad \text{weight for Presenting Concern of Reality Testing Problems} \\
+ 0.643 & \quad \text{weight for Presenting Concern of Substance Abuse} \\
- 0.181 & \quad \text{weight for Presenting Concern of Witness to Substance Abuse} \\
+ 0.010 & \quad c
\end{align*}
\]

The correlation between the predicted and actual number of restraints was 0.948 ($p < 0.001$). Cross-validation indicated that the resulting weights are not stable. The correlation dropped to 0.279 (ns).

A similar process was completed to predict the duration of restraints. A preliminary analysis indicated that, like the number of restraints, the total duration of restraint incidents was also distributed exponentially. That is, many restraint incidents were very short, but a few were very long. To facilitate the analysis, potential variables were screened through linear regression (stepwise backwards method with $p < .1$ to remove). This short list of variables was included in a constrained nonlinear regression model. The basic formula was:

$$ \text{Predicted Total Duration} = v \times \exp \left( - v \times \left( \text{sum (weight} \times \text{variable}) \right) + c \right) $$

where $v$ is a positive constant and $c$ is a constant, and where each variable had a unique weight that was constrained to values between -1 and +1.
Where Presenting Concerns = 1 if Present
0 if Absent

the parameter values of the best-fitting model were:

\[ +14.374 \] v
-0.004 weight for CAFAS Self Harmful Behaviour
-0.005 weight for CAFAS Community Behaviour
+0.016 weight for Presenting Concern of Anger
-0.120 weight for Presenting Concern of Anxiety or Depression
+0.070 weight for Presenting Concern of Relationship Problems
+0.106 weight for Presenting Concern of Mood Problems
+0.106 c

The correlation between the predicted and actual number of restraints was 0.868 (\( p < 0.001 \)). Cross-validation indicated that the resulting weights are quite stable. The correlation did not change (\( r = 0.868, p < 0.001 \)).
APPENDIX B:
Interviews with Key Stakeholders

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Qualitative Interviews
A master’s student from the University of Western Ontario conducted qualitative, semi-structured interviews with 11 staff members at Madame Vanier Children’s Services about their experiences with physical restraints, their opinions about physical restraints, and ideas about how to reduce incidents of physical restraint. The staff members consented to the interview and agreed to be audiotaped. The tapes were destroyed after they were used in developing this report. Among those interviewed were two directors, two supervisors, a team leader, a psychologist, and five child and youth counselors (CYCs). These staff had worked at Vanier an average of 12 years, ranging from three months to 25 years.

Experiences with physical restraints
Overall, the interviewees reported that a very small percentage of their job involves physical restraints. Among those in management roles, only one reported current direct involvement in physical restraints. Generally, those in management roles are involved in training and supervising staff in physical restraint-related activities as well as in developing support programs and working groups. CYCs reported varying rates of direct involvement in physical restraints. One CYC said she could go a year without doing a restraint and then she might have three to four in a discrete period. Another CYC also reported that it varied, but said, “Restraints are certainly a daily experience.”

Staff Injuries
When asked if they were ever injured in a physical restraint, two supervisors and one CYC reported thumb injuries in the past. Only one of these was serious, requiring physiotherapy for two months, but no time off of work. This supervisor also reported chronic arthritis in her knees, which she thought was related to the impact of performing restraints on the floor over time. One CYC reported being punched in the eye and kicked while in the Prevention and Management of Aggressive Behaviour (PMAB) Escort position. Another reported being kicked in the head and on her shins. Still another CYC had five restraint-related injuries requiring visits to the ER. Three of the visits were for bites that broke her skin, and the other two were for head butts to her teeth and jaw. The latter injury required her to take time off for a couple of days. “Coming back was okay,” she said, unaffectedly. Certainly, most interviewees were nonchalant in reporting these injuries, especially because most had “nothing major” to report. As one CYC said, “I’m very cautious to make sure that I do things correctly.”

Various factors emerged when interviewees were asked about what contributes to staff injuries during physical restraints, including staff training and fitness, the interaction among staff members, child characteristics, and the confrontation of staff and children. Lack of physical fitness was listed as a factor that can be especially problematic among the population of aging staff. As one director said, “Back injuries are a big problem.” Others listed improper implementation of restraint techniques as a potential reason why staff sustain injuries, especially because restraints can be quite sophisticated. One trainer said that despite training, some staff still might lack coordination. According to two CYCs and a supervisor, lack of time to warm-up before doing a restraint, as they learn to do in their training, is another contributing factor. Many also listed inexperience of staff members as a concern, not only in doing restraints, but also in using de-escalation and
counseling techniques. One CYC reported that she does not get as injured now that she has more experience as when she first started. The interaction among staff members emerged as a factor that indirectly contributes to staff injuries. As one director asserted, “When you have teams with new members and really high-risk clientele, changeover in the management of those teams will lead to a more reactive than proactive environment, which is reflected in more restraints, and the more restraints, the higher the risk for injuries.” Related to this idea, poor communication between staff was reported as an indirect factor increasing the risk for injury. As one CYC asked, “How do I communicate, if I’m the one in charge, that I don’t want to go hands-on?” Conversely, another CYC suggested that injuries might be caused by not using a restraint, “When you should.” How, then, might these CYCs communicate to one another if they have different intentions in the same situation?

In terms of child characteristics, as one supervisor said, “Some of our neediest kids are often young and are fairly flexible and can do things most adolescents wouldn’t be able to do, and most of the training is geared towards the adolescent population.” Thus, the flexibility of the young children, combined with a lack of physical fitness in staff, could increase staff injuries. Another CYC claimed that children are stronger when they are worked up. One director listed, “Unpredictable behaviours on the part of the children,” as a factor that contributes to staff injuries. In addition, a situation where the child is much bigger than the staff can contribute to staff injuries during a restraint. A team leader suggested that staff who do not recognize their physical limitations in this respect are more likely to get injured. Thus, physical fitness of staff members, improper implementation of techniques, lack of communication between staff, individual child factors, and the confrontation of smaller staff with larger children were all listed as potential factors that might increase the risk of staff injury during physical restraints.

Opinions about physical restraints
After sharing their experiences with respect to physical restraints, interviewees were asked about their opinions about physical restraints. Almost invariably, the first thing that a staff member said is, “I don’t like them,” or “I don’t like doing them.” Nine out of the 11 interviewees gave this exact response, or some variant thereof. As the psychologist said, “I don’t think there’s anybody that enjoys restraints.” A common reason for dislike of restraints is that restraint situations cause distress. “I think we forget how traumatizing it can be for the kids,” said one CYC. The psychologist and a team leader concurred, saying that it is especially hard for children with abuse or trauma histories. The psychologist also claimed that a physical restraint creates distress for other children and staff. Indeed, staff reported how distressing a restraint situation can feel. As one CYC said, “While you’re in it, it doesn’t feel good.” Another said that it bothers him when he sees the child and hears the child screaming, “I don’t like hearing the kids scream.” Similarly, a supervisor said that she does not like the look of restraints and would like to see them stopped. A team leader claimed that she does not like restraints because of the lack of research on how restraints impact a child physically and psychologically. A physical restraint does not help a child to solve problems, according to one CYC. “It sort of stops the aggression for that moment, [but] it doesn’t teach them anything except that I’m bigger than they are.”

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After this initial common expression of dislike of physical restraints, interviewees did admit that they might be necessary for safety. One director stated, for example, “I don’t like physical interventions with children, but believe that in some situations, we must physically intervene to keep that child or other children safe.” Most CYCs appealed to the concern for the safety of other children in the residence to justify restraints. A supervisor and a director also acknowledged that there are some children who are always a risk. For example, younger children, or children who are more vulnerable may need more physical redirection. This supervisor also cited situations in which the child is either going to put him or herself in harm’s way, or attack another child as instances when physical restraint may be necessary. As one CYC said, however, “I think that if you have a reason to restrain sometimes doesn’t mean you have to restrain.” Yet, another CYC claimed that a physical restraint could create a bond with a child afterwards. She also said, “I think that over the years, there was a period of time when we didn’t restrain and should have,” and claimed that she would rather restrain for safety. Nevertheless, most supervisors and CYCs stated that physical restraints are always a last resort. A team leader claimed that it is part of a worker’s responsibility to keep that in mind. According to one supervisor, “The important piece to remember is it’s a last resort after everything has been tried.” She said that it is a judgment call, but her position is not to go hands-on.

Another theme that emerged was the need for training in prevention. As one director said, “I believe that staff need good training to prevent the need for physical restraint, and if a physical restraint does occur, that they get good training on how to do it appropriately.” A CYC agrees, “Training is very important. I respect that about Vanier; not just the physical part, but all of the intervention including the de-escalation techniques beforehand.” Another CYC concurs, “I like to use more verbal de-escalation.” He also mentioned how one child might be an “active contagion” for other children, and a proactive removal of this child may help to de-escalate the situation. Indeed, what happens before a physical restraint is used is a constructive aspect of prevention. When asked how she feels when she hears about a physical restraint, a supervisor responded that she wants to know what techniques were used prior and the reasons why the person went hands-on.

Given that almost every person interviewed expressed a dislike of restraints, but recognized the need for them in some cases, what did they think of the number of physical restraints at Vanier? One director answered jokingly, “As of today? There aren’t any today. It’s a good day.” In seriousness, however, this person said, “Any restraint is too many.” “I believe that there are too many currently. And until we get it down to a negligible number, there will always be too many.” A team leader also thought that the number is, “Too high,” because, “We move in too quickly.” She argued for a more preventative approach, with a need for staff to be more, “proactive.” Still, the other director argued, “It’s not excessive,” but, “any efforts to reduce it are welcomed.” Indeed, the psychologist and two supervisors spoke to the current efforts at Vanier in reducing the number of physical restraints. The psychologist said that they have a good intent in keeping the numbers down, but it is difficult with so much staff turnover. One supervisor said that there seems to be an increase in them and there are a lot of reasons for that, but
that it is much better compared to years ago. They are more regulated, shorter, and not as frequent, she says, but there are still too many. Another supervisor thought that the numbers have definitely decreased over the years, and that this is related to trying to teach staff to look at other alternatives. “It’s an overall goal to continue to decrease the number,” she said, arguing, “There can never be too few [physical restraints].” On the other hand, three of the five CYCs thought that Vanier does not have too many restraints. As one said, “I think that the restraints we do are necessary. Sometimes we don’t do one when we should, but that’s an experience thing for staff.” Some of these staff reported that the current numbers at Vanier are low compared to their previous experience. As on CYC said, “I’ve worked at a lot of other places and Vanier is low.” He continued, however, saying, “You still see the odd restraint that doesn’t need to happen.” The two other CYCs thought that the numbers were, “startling,” and, “scary.” A female CYC who has been working at Vanier for 3 years reported that it is certainly more than other agencies she had worked for because Vanier takes high-risk kids who, “Nobody else will take.” Another person, who has worked at Vanier for 14 years, said that the number of restraints used is, “Scary.” This person said, “I guess when you work frontline, you don’t realize the amount […] But [in] this job I do now, I know how many there are…. When you see the numbers, it’s scary.”

So did these staff members think that it is possible for an agency like Vanier to have no physical restraints? Interestingly, those in supervisory or directorial roles reported that yes, it is possible, but most qualified this assertion with a statement such as, “In an ideal world.” One supervisor thought, “It’s highly unlikely that we can ever get to zero, but we can get to a point where they are minimal or rare and probably related to specific children.” Another said that Vanier can come pretty close to zero, but she, “Would be surprised if we would ever not have physical restraints.” The CYCs, on the other hand, were more reluctant on the whole to agree that it is possible to have no physical restraints at Vanier. The three that disagreed explained that it was not possible because of the clientele. A relief CYC said that she did not think it was possible because of the type of children they see and the severity the children’s problems once they are seen at Vanier. She also thought that children are more violent today and do not respect adults or their parents as children used to do. Another CYC in the classroom thought it was not possible because of the types of children that they see. He said that sometimes the children become violent so quickly that staff have to prevent injury to others. One CYC that did think it was possible said, for example, “There’s always a possibility. We’re hoping.” Another said, “It is possible, but not the way things are now.”

**Future Training Directions**

When asked what they thought would decrease staff injuries from physical restraints, aside from better implementation of the learned techniques, almost all respondents said that eliminating, or at least decreasing, the number of physical restraints would be the best solution. The following are some suggestions that staff made on how this number might be reduced at Vanier. First, a major issue raised by some of the staff was the high turnover in staff teams. As one director explained, CYCs with experience tend to move out of residence and into other kinds of jobs. Therefore, there is always high turnover in residence and that is a challenge. Thus, increasing stability on staff teams is one of the
first challenges that this director mentioned. The psychologist also said that Vanier needs
team building because of staff turnover. One CYC also suggested that having more
consistency on the staff team would increase rapport building between the staff and
children, which would in turn decrease the use of restraints.

Second, a couple of staff suggested that changing the culture and some of the attitudes in
residential care would help. One director, for example, said, “I think that sometimes the
language we use, the idioms we use, can make a difference.” This director suggested that
the expectation of compliance is a part of this culture, and that changing the culture to
one of healing children rather than just taking care of them would make a difference. The
psychologist likewise suggested that using words such as power and control creates
problems. One solution to this is training that includes all aspects of prevention, “Even
down to the language used.” Along the lines of changing the culture, one team leader
suggested that the management could work on creating an environment for CYCs where
they can talk freely about their fears around physical restraints. She thought that having a
consistent time and place for CYCs to talk about ideas for decreasing physical restraints
will help to decrease stigma around restraints and will give CYCs a voice that can be
heard. She suggested changing the shift schedule to allow more time for debriefing as
well as changing the debriefing policy so that children and staff who witness a restraint
are also debriefed. One director mentioned the development of a mentoring and coaching
system for newer CYCs. She argued that although their training is really good, she thinks
that they require ongoing mentoring, coaching, clinical supervision and support, but a
lack of resources limit provision of this ongoing supervision. Nevertheless, she said that
Vanier is currently developing a system to provide more support for newer CYCs.

Third, many staff talked about the need for staff training in prevention. As one director
said, more preventative training and positive programming would decrease the number of
physical restraints. Preventative training can help preempt physical confrontations by
addressing problems at the emotional level. One supervisor said that staff intervene
physically with children too early, and there is a need to intervene therapeutically before
the crisis begins to build. She said, “We think that these children can regulate their
emotions better than they can, but they need our help in doing so in a non-physical way.”
Along these lines, a few staff mentioned the need for training around triggers. As the
psychologist suggested, staff need to be able to identify triggers in children when they
become frustrated before a problem escalates. A supervisor also suggested more
education for the staff around triggers, in order to enhance their ability to understand
“what makes [these children] tick.” A CYC also offered that he had, “Learned about
other ways from research. The stuff before the incident is important to understand. It’s
important to understand the reasons behind the behaviour.”

Fourth, many staff spoke about alternative interventions to reduce the number of physical
restraints. One CYC spoke about the need for more individual programming for children.
“If we increase individual programs for kids maybe that would reduce restraints. And
really do it, not just say you’re going to do it.” One of the directors also suggested a focus
on skill building and resiliency building for children. One CYC agreed that teaching
children skills, “Other than acting out,” was necessary. She thought that staff should be
able to use the skills that they are trying to teach the children such as how to de-escalate a situation. One CYC declared that after reading about alternatives in the literature, he is, “A big CBT lover.” A couple of CYCs brought up the idea of Time-Out rooms as an alternative to physical restraints. When asked about what they thought about Time-Out rooms, however, almost all staff members expressed a dislike for them. One CYC that brought it up said that these rooms could be abused as well. “I’ve had experience with them elsewhere. I don’t like the word ‘Time-Out room.’ I don’t like the word ‘Quiet Room.’” Alternatively, he suggested a safe room as a place for a child, “To vent with support. I don’t mean a quiet room, not to be locked up.” Another CYC said that she would have to know more about them. “I have had some negative experiences at other agencies. I would have to learn more.” A team leader also suggested considering whether or not the current training program for physical restraints is the best choice for the types of children that Vanier serves. She suggested that perhaps behavioural interventions that are less intrusive, such as handholds, are more appropriate for this younger population.

Finally, in relation to the younger population that Vanier serves, one director spoke to the need for focusing on age-appropriate interventions because the physical restraint guidelines do not apply. This director said that they would like to focus on three to six-year olds in the upcoming year, and to come up with some recommendations as part of the PMAB-approved interventions, especially for younger children. Since other agencies have the same struggle, Vanier is working on this with the Ministry. Nevertheless, this director reports that it is a struggle to work with the Ministry because, despite the large quantity of data about physical restraints from Vanier, there is no cross-agency data available. “In some sense we feel like we’re operating in isolation. That’s why we did a workshop at the provincial residential conference and from the feedback there it sounds like we’re not alone in our concerns.” Although much information is supplied to the Ministry about physical restraints, Vanier does not receive any comparison data. “There’s no feedback loop in terms of that information, so that’s not very helpful.” Thus, Vanier is dedicated to pulling together a provincial network. “There has to be a lot more done at the lobbying level. It’s not just a frontline issue.”

To conclude, future areas for consideration in the aim to reduce incidents of physical restraint at Madame Vanier Children’s Services include team building among staff members, with a view to increase consistency on staff teams; changing the culture of residential care (including the language used) through increased training and support of newer CYCs, increased training in preventative techniques such as de-escalation. Other areas include understanding the escalation process (including “triggers”), skill building for the children, and alternative interventions such as “safe” rooms, and focusing on increasing the age appropriateness of interventions. At the systems level, networking with other agencies to share information on common efforts to reduce incidents of physical restraints is a necessary component of this challenge.
APPENDIX C:
Staff Survey

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April 26, 2006

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A survey of staff attitudes toward physical restraints was conducted in April 2006. This same survey had previously been administered in May 2003 and May 2004. In absolute terms, the sample is small, and results regarding subgroups (e.g., managers compared to Child and Youth Counsellors, CYCs) should be interpreted with caution.

**Demographic Information**
A total of 33 staff members returned surveys (compared to 33 and 47 in previous years). They identified themselves as follows:

<table>
<thead>
<tr>
<th>Experience at Vanier</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 2 years</td>
</tr>
<tr>
<td>Child and Youth Counsellors (CYC)</td>
<td>1</td>
</tr>
<tr>
<td>Clinical Staff and Teachers</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6</td>
</tr>
</tbody>
</table>

More CYCs completed the survey in 2004 than in other years ($\chi^2 = 13.366, p < 0.05$). Five support staff completed the survey when they were added to the participants in 2004, but none completed the survey in 2006.

**Survey Results**

Table C-1 shows a summary of the quantitative results of the staff survey. For the most part, participants indicated that restraints occur at appropriate times and at an appropriate frequency. The idea that too few restraints occurred peaked in 2004. The responses of managers were slightly different from others in that they were less likely to indicate that restraints occurred at appropriate times or that the number of staff on shift was a factor in the number of injuries. Managers and people with more than ten years of experience were less likely to attribute the number of restraints or of injuries to client characteristics. Clinicians were more likely than others to attribute injuries to staff training. People with more experience were more likely than others to indicate that restraints occur too often, and were less likely to attribute the number of restraints to staff training. The idea that staff experience is a factor in the number of restraints and staff injuries was endorsed more often than it had been in past surveys. People with more experience were less likely to indicate that policies are clear or consistent. Policies are more widely viewed as reasonable and less restrictive compared to previous years, but CYCs with more than 10 years of experience tended to be more likely to see them as unreasonable.
[Insert TABLE C-1 here]
APPENDIX D:
Development of the Escort versus Gentle Guiding Video

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The creation of the Escort versus Gently Guiding video has been influenced by a number of factors. The Ministry of Community and Social Services legislation that came into effect April 2003 related to the use, documentation and reporting requirements to the Ministry of Community and Social Services as it related to the use of physical interventions with children and youth being serviced in residential, hospital and custody facilities being the initial impetus. In this new legislation, the following guideline was outlined, “For greater certainty, ‘physical restraint,’ as defined in subsection (1), does not include, (a) restriction of movement, physical redirection or physical prompting, if the restriction of movement, physical redirection or physical prompting is brief, gentle and part of a behaviour teaching program.” The difficulty we experienced in training this legislation was providing staff with a working definition of, “Physical redirection or physical prompting that is brief, gentle and part of a behaviour teaching program,” (i.e., “gently guiding”) as this terminology was not more clearly defined.

In September 2003, Vanier created what was termed a “Child and Youth Counselor, Floater” position for the two residential units. Among other functions, it was our thinking at that time, that this position created an opportunity for someone consistently to review and oversee the appropriate completion of the increased legislated reporting requirements of the Ministry. Second, this position created a mechanism to review collectively our use of physical interventions on an almost daily basis for patterns, trends and issues. A factor that became evident to the person in this role was the inconsistent documentation and use of the term, “gentle guiding,” with what they were visually witnessing on campus.

In October 2003, Vanier’s created the Restraint Reduction working group and the Floater position then assumed active membership of this committee. The observation made earlier by the Floater position related to the inconsistent use of gentle guiding thus became incorporated into one of several goals of this committee, which was to refine the language and definition around restraint/escort/ gently guiding through the creation of a video.

We subsequently planned to then use the video for discussion and training purposes in developing and promoting a common understanding, consistent implementation and documentation practices related to the use of gentle guiding and escorts.

By April 8, 2005, we had identified three variables for the video and created the following twenty combinations in random order (except that the first and second blocks of 10 each contained a balance across the three variables):

A. Child Response
   1. Struggling
   2. Cooperating

B. Location
   1. From On Campus school to residence
   2. In residential unit, from hallway to cloak room

C. Level of Intervention
   1. One staff with arm around or behind
   2. Two staff with arms around or behind

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3. Two staff holding wrists
4. Two staff with arms linked
5. Two staff in a Prevention and Management of Aggressive Behaviour (PMAB) Escort position

1. A-1,B-1, C-5: Struggling, school to residence, two staff in escort position
2. A-2,B-1, C-3: Cooperating, hallway to cloakroom, two staff holding wrists
3. A-2,B-1, C-4: Cooperating, school to residence, two staff with arms linked
4. A-1,B-1, C-3: Struggling, school to residence, two staff holding wrists
5. A-2,B-2, C-1: Cooperating, hallway to cloak room, one staff with arm around or behind
6. A-2,B-1,C-2: Cooperating, school to residence, two staff with arms around or behind
7. A-1,B-2,C-4: Struggling, hallway to cloak room, two staff with arms linked
8. A-1,B-1,C-1: Struggling, school to residence, one staff with arm around or behind
9. A-1,B-2,C-2: Struggling, hallway to cloak room, two staff with arms around or behind
10. A-2,B-2,C-5: Cooperating, hallway to cloak room, two staff in escort position
11. A-2,B-1,C-3: Cooperating, school to residence, two staff holding wrists
12. A-2,B-2,C-4: Cooperating, hallway to cloak room , two staff with arms linked
13. A-1,B-1,C-2: Struggling, school to residence, two staff with arms around or behind
14. A-2,B-1,C-5: Cooperating, school to residence, two staff in escort position
15. A-2,B-2,C-2: Cooperating, hallway to cloak room, two staff with arms around or behind
16. A-1,B-2,C-5:Struggling, hallway to cloakroom, two staff in escort
17. A-1,B-2,C-1: Struggling, hallway to cloak room, one staff with arm around or behind
18. A-1,B-2,C-3: Struggling, hallway to cloak room, two staff holding wrists
19. A-1,B-1,C-4: Struggling, school to residence , two staff with arms linked
20. A-2,B-1,C-1: Cooperating, school to residence, one staff with arm around or behind

Four staff from the Restraint Reduction Working group volunteered their involvement in the video the two staff person roles, one as the child/youth and one videotaping, which we completed April 29, 2005. We used a simple video camera and recorded the 20 scenarios following the above listed variables. With the computer and technological expertise of the video recorder, the tape was then formatted to Compact Disc (CD) with accompanying sound and music. We then formatted the survey based on the CD scenarios and the predetermined order.

The video was shown initially to members of the Restraint Reduction working group and it became evident at that level the lack of consistent interpretation of gentle guiding versus escorts, when each appeared most appropriate, and under what circumstances a Serious Occurrence Report (SOR) was required. In early November 2005, various disciplines and teams were asked for 20 minutes so the video and survey could be completed.

The PMAB trainers then met February 24, 2006, for an in depth review of each scenario. Based on our expertise in managing crisis situations and our understanding of the legislative requirements and definitions we came to a consensus (see Table D-1). For each scenario we determined whether the staff intervention was appropriate (i.e., would they have concerns if they saw this situation at Vanier), whether it should be classified as gentle guiding or an escort, and whether a Serious Occurrence report was required. Later that same day the video was shown to the Interagency Regional Restraint Working group and where the determinations of the PMAB trainers were also shared. This group was very interested in further information following the detailed analyses of
[Insert Table D-1 here]
our survey results and depending on these results, the significant as a training tool the video would take in our future crisis management training sessions.

Table D-2 summarizes the statistical analysis of the questionnaire. Demographic results are roughly representative of the staff composition at Vanier. A total of 56 people across 6 teams or disciplines viewed the video and completed the survey. Of these, 4 were members of the working group, 36 identified themselves as Child and Youth Counselors (CYCs), 11 were clinical or teaching staff, and 5 were Intensive Family Services (IFS) workers. The survey asked how long the participants had worked at Vanier. Twelve people indicated less than one year, 2 indicated one to two years, 5 indicated three to five years, 28 indicated more than 5 years, and 9 people did not indicate their experience at Vanier.

The overall results tended to be consistent with expectations. Participants were more likely to rate an intervention as needing an SOR if they had rated it as an Escort ($r = -0.981, p < 0.001$), and they were more likely to rate an intervention as an Escort if it was more intrusive ($r = 0.847, p < 0.001$). If the child was struggling, participants were also more likely to rate an intervention as inappropriate ($r = -0.721, p < 0.001$) and as needing an SOR ($r = 0.556, p < 0.02$). There was a trend towards staff being less likely to rate an intervention as gently guiding if the child was struggling ($r = -0.427, p < 0.1$). In terms of whether an intervention was judged to be appropriate, a significant interaction existed between Child Response (struggling or not) and the Level of Intervention (from one staff with one hand touching the child to two staff in a proper escort position, $F(4, 10) = 17.204, p < 0.001$). The pattern of responses for individual combinations of variables (cell means) was consistent with expectations. For example, more intrusive interventions were more likely to be seen as appropriate for children who were struggling than for those who were not. Staff with more experience were more likely to rate an intervention as appropriate ($r = -0.451, p < 0.001$). Whether staff indicated an SOR was needed and whether the intervention was rated as Gently Guiding or an Escort was not related to experience. Position at Vanier did not seem to have an effect overall, but it was a significant factor in many of the individual scenarios. Table C-2 shows a summary of results.

We have recently completed our first PMAB refresher where the video was shown to the 13 participants. The two participants that provided feedback specifically on the video were as follows: “The video with results was helpful, it provided clarification what gentle guiding is,” and “What I liked best was the video demonstrating the differences between escort and gentle guide”

We see this video as a work in progress and continue to discuss future applications with the following directions having been identified:

1. To use the video in this year’s annually scheduled PMAB refreshers so that clarity is provided to all staff implementing physical interventions. To also include a review of the video as an expectation of our agency orientation for all new CYC student, relief and full time positions.
[Insert Table D-2 here]
[Insert Table D-2, page 2, here]
2. To develop a written definition for gentle guiding that could enhance consistency of application and documentation practices and well as further guide agency policies and training.

3. As a result of discussions by members of the Restraint Reduction Working group and our PMAB trainers, we are exploring how the use of hand-holds may be a less intrusive and threatening intervention for children. Exploration of how hand holding may impact the use of physical restraints is of great interest to many of us, not only those of us employed by Vanier. In situations where a child must be guided away from impeding danger or stimulus that is further escalating their behaviour, this less intrusive intervention may play an effective role that we would like to investigate. In many situations, especially with our primary aged clients and those clients that are functioning developmentally at a younger age, hand holding may create an effective and defusing first physical intervention, in the continuum of physical options.
REFERENCES

