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# ‘Grow Along With Me’ Project

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## Q1 & Q2 Report, Part 1

October, 2008



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# Executive Summary

The Grow Along with Me (GAWM) project is a collaborative, intersectoral, community- based initiative designed to enhance existing developmental screening services for preschool children (18-36 months of age). The purpose of this project is to create an integrated continuum of regional services, bringing together project partner knowledge and expertise to build an evidence-based model that will better serve children and their families in the communities where they live.

The goals of the 'Grow Along with Me' project are to:

1. Identify children with a developmental delay as early as possible, and
2. Develop a comprehensive continuum of services that provides the right level of service, at the right time, by the right person as near to the child's residence as possible.

In the first quarter of 2008-09 progress toward achieving these goals are reflected in:

- A 64.3% increase in the number of Ages and Stages Questionnaires submitted to Children's C.A.R.E. services,
- Enhanced public awareness of early childhood development and developmental screening through:
  - Brochures, posters, growth charts, website and newspaper announcements,
  - A Community Development Checkup Blitz (Spring 2008) , was a community-based developmental check-up and dental health screening focusing on children 18-36 months of age. Parents completed the Ages and Stages questionnaire with the assistance of a multidisciplinary team of health professionals. Information on normal growth and development, activities to promote optimal child development, and support were available. Referrals for further evaluation were initiated as appropriate.
- Significant changes in staff/partner attitudes and perceptions regarding developmental screening associated with Ages and Stages educational training sessions,
- Enhanced access to comprehensive and consistent first level developmental evaluation through innovative, collaborative community partnerships
- Ages and Stages Questionnaires (ASQ) allowed for the identification of children in need of further evaluation. In the first quarter of 2008-09, baseline rates of developmental disorder detection<sup>1</sup> for returned 18-36 month ASQs were: communication 14.3%, gross motor 5.8%, problem-solving 4.5%, fine motor skills 4.3% and personal social 4.0%.
- Factors contributing to project success and sustainability were identified by the 'Grow Along With Me' Steering committee through the G.A.W.M. Partnership Self-assessment Inventory. Positives included: a clear vision, mission and goals, regular meetings, facilitative and supportive leadership, grassroots involvement, strong collective skill sets, and mutual respect and problem solving. Opportunities for improvement identified by the team will provide a stepping stone for quality improvement initiatives.

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<sup>1</sup> scores below Ages and Stages cut-off rates by age group



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# I. Introduction

The Grow Along with Me (GAWM) project is a collaborative, intersectoral, community-based initiative designed to enhance existing developmental screening services for preschool children (18-36 months of age). The purpose of this project is to create an integrated continuum of regional services, bringing together project partner knowledge and expertise to build an evidence-based model that will better serve children and their families in the communities where they live.

The goals of the 'Grow Along with Me' project are to:

1. Identify children with a developmental delay as early as possible, and
2. Develop a comprehensive continuum of services that provides the right level of service, at the right time, by the right person as near to the child's residence as possible.

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# II. Evaluation purpose and objectives

This G.A.W.M. evaluation report outlines processes and outcomes associated with the Grow Along with Me project implementation during **Quarter 1 (Q1)**, April 1 – June 30, 2008. Specifically, the purposes of the G.A.W.M. project evaluation are to:

- 1) Assess the extent to which the G.A.W.M. project is demonstrating successes;
- 2) Determine whether access to integrated services is improving;
- 3) Examine the impact of increased education opportunities; awareness, and promotion of 'best'/'better' practices in developmental screening; and
- 4) Explore the project's sustainability beyond the funding period.

'Grow Along with Me' project indicators are presented under their corresponding goal and objectives (see Appendix A, the G.A.W.M. Evaluation Framework). Critical pathway and workload indicators (Objectives 2.2 – 2.5) will be presented in the 2008-09 Quarter 2 report.

# III. Evaluation Results

## Goal 1 To identify children with a developmental delay as early as possible

### Objective 1.1

#### To increase a child and their family's access to evidence-based developmental screening

Target: December 31, 2009<sup>2</sup>

Table 1 Grow Along with Me Ages and Stages Training

GAWM Training and Development	07-08	08-09			
	Q4	Q1	Q2	Q3	Q4
<b>Ages and Stages Questionnaire (ASQ)</b>					
Children/parents who completed the ASQ (C.A.R.E., All ages)	367	603			
ASQs received with consent for evaluation (GAWM project)	-	446			
<b>ASQ training</b>					
ASQ trainers (e..g Train the Trainer)	1	0			
Regional & partner agency staff trained to administer the ASQ**	65	0			

Source:

\* Meditech \* All ages

\*\* G.A.W.M. Attendance sheets \*\*

Note: More than ASQ can be completed per child

#### Developmental Check-ups

Ages and Stages Questionnaires (ASQ) are available for developmental assessment of infants at 18, 20, 22, 24, 27, 30, 33, or 36 months of age. The number of ASQs submitted to Children's C.A.R.E. services in Q1 increased 64.3% from the previous quarter (2007-08 Q4 n=367, 2008-09 Q1, n=603) stimulated, in part, by the spring Community Developmental Checkup Blitz (March 31 – May 2, 2008) and launch of brochures, posters, growth charts, webpage, and newspaper announcements. The Community Developmental Blitz targeted children 18-36 months of age. Parents were invited to participate in a community-based developmental check-up and dental health screening. With the assistance of a multidisciplinary health professional team, parents completed the Ages and Stages questionnaire. Information on normal growth and development, activities to promote optimal child development, and support were available for parents. Referrals for further evaluation of delays were initiated as appropriate.

It must be noted that multiple ASQs may be submitted for the same child during a quarter. In Q1, 2008-09, two parents submitted two ASQs and one parent submitted three ASQs for a single child (for differing developmental stages).

<sup>2</sup> Included are data where parental consent for research project participation was obtained (see Appendix A, G.A.W.M. project consent form).

## Early Childhood Development Training

Sixty-five trainees attended ASQ training events in February – March 2008. The first session was presented to Public Health Nurse trainees (n = 40) with a second session offered to a multidisciplinary group (n = 25). Details of staff training (e.g. breakdown by partner and geographical location) can be found in Appendixes B & C. Staff attitudes and perceptions were measured prior to and following the sessions. A summary of the Staff Survey can be found in Objective 1.2, p. 9.

### **Objective 1.2**

#### **To increase parent knowledge of...**

##### **a) early childhood development**

##### **b) the importance of periodic developmental screening**

*Target: December 31, 2009*

#### Project Communications

The G.A.W.M. project was publicly launched January 10, 2008 at a special event featuring Drs. Fraser Mustard and Brian Kolb, prominent early childhood development practitioners/researchers/advocates. Health care administrators, health care providers, community representatives, members of the University and College communities, and the general public deemed the launch a great success. A CD recording of the event is available on request.

Program and media materials for the project launch were developed by the G.A.W.M. Steering Committee and Communication Sub-committee. These teams continue to promote community awareness of normal growth and development and the importance of developmental checkups, and highlight project activities.

#### Parent knowledge of early childhood development

Strategies to enhance parent awareness and knowledge of the importance of developmental screening included the development of a "Grow Along With Me" website, print publications, TV and radio segments, and advertising materials (such as poster, displays, and growth charts). Resource utilization serves as an indication of the impact of communication and knowledge translation strategies.

## Communication and Knowledge Translation

Table 2 Communication and Knowledge Translation Indicators

<b>Communication and Knowledge Translation Indicators</b>	<b>2008-09</b>			
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Website</b>				
G.A.W.M. website visits	310	468		
Unique visitors	203	333		
New visits	65.5%	66.0%		
Hits on the G.A.W.M. home page	268	395		
Page views	1,703	2,601		
Average minutes on G.A.W.M. website	2.50	3.58		
Average # pages/visit	5.5	5.6		
<b>Print Material</b>				
# printed publications (e.g. newsletters; magazine, etc) (TOTAL)	12	NA		
Free news releases	6	NA		
Printed Advertisements	6	NA		
<b>TV and Radio</b>				
TV segments (Health Matters – 14 second segments)	2	NA		
Public service announcements	-	-		
TV campaign(s)	2	NA		
Radio campaign(s)	1	NA		
Public Service Announcement Template	1	NA		
<b>Other</b>				
Project displays, posters, brochures, growth charts, magnets ordered	15,501	NA		
Project displays	1	NA		
Posters	500	NA		
Brochures	7500	NA		
Growth charts	5000	NA		
Magnets	2500	NA		

Source: T. Grindle, Communications, personal communication (n.d.)

The website, "Welcome to Grow Along With Me - Supporting Child Development in Southern Alberta" ([www.growalongwithme.ca](http://www.growalongwithme.ca)) went live in March 2008. While website visits were initially infrequent (April, 2008, n=2), utilization increased substantially in subsequent months (n=146 May 2008, n=162 June 2008). Quarter 2 (Q2) data reflects continued demand for web site information. In comparison to Q1, in Q2, web site visits have increased by 50.9%, page views have increased by 52.7% and average time on the web site have increased by 40.1%. Return visits account for 34% of total visits, the remaining 2/3 were new site visits. The most commonly viewed web pages (Q2, 2008) were:

- Home Page 15.19%,
- Information for parents/upcoming parent programs (9.8%),
- Information for parents (9.2%)
- Information for professionals (6.04%)

A detailed description of web site access can be found in Appendix D.

## Parent Education Groups

In addition to media and web-based knowledge transfer, evidence-based education sessions were offered to Grow Along with Me staff and partners, who, in turn facilitated parent education sessions. Core sessions include:

Table 3 Grow Along with Me Core Education Sessions

<i><b>Focus</b></i>	<i><b>Session</b></i>
Prevention	<ul style="list-style-type: none"><li>• Coping with Toddler Behavior</li><li>• Parenting the Strong-willed Child</li></ul>
Intervention	<ul style="list-style-type: none"><li>• You Make the Difference</li><li>• Learning Language and Loving It</li><li>• Responsive Teaching</li></ul>

### **Attitudes and perceptions. Periodic developmental screening**

*Source: Grow Along with Me Annual Report, 2008, 'Grow Along with Me' Project Q1 Q2 Report, 2008 Sept 17).*

Staff and parent knowledge, attitudes and perceptions regarding development checkups are being assessed using surveys and parent focus group interviews.

#### Staff and Partners

Health care provider and multidisciplinary partner attitudes and perspectives regarding developmental checkups and follow-up services were assessed using a self-administered survey tool<sup>3</sup>, the Service Provider Survey<sup>4</sup>. Public Health Nurses (cohort 1) and multidisciplinary partners (cohort 2) were invited to complete surveys at three time points (prior to, following, and six months post Ages and Stages Questionnaire (ASQ) training [Time 1, 2 & 3 respectively]). Pre and post surveys were completed in conjunction with the February and March 2008 ASQ training sessions.

Significant differences between pre and post education session responses were noted for both cohorts (95% Confidence,  $p \leq 0.05$ ).

<sup>3</sup> designed by the G.A.W.M. Evaluation Team and Evaluation Subcommittee

<sup>4</sup> Peer reviewed literature supported the inclusion of 23 items developed on a five-point Likert scale.

Table 4 Significant differences: Pre and Post Ages and Stages educational session Staff Surveys

Public Health Nurses (Cohort 1)	Multidisciplinary Staff (Cohort 2)
<ul style="list-style-type: none"> <li>The ASQ can effectively detect a developmental delay in 18-36 month old children (Q3),</li> </ul>	<ul style="list-style-type: none"> <li>Parental concerns about their child's development are valid indicators of a developmental delay(s) (Q10),</li> </ul>
<ul style="list-style-type: none"> <li>I have time in my work day to screen 18-36 month old children for a developmental delay (Q7),</li> </ul>	<ul style="list-style-type: none"> <li>A developmental checkup is effective in determining developmental delays in children (Q16), and</li> </ul>
<ul style="list-style-type: none"> <li>Once I identify a developmental delay in a child, I feel confident in managing referrals (Q8), and</li> </ul>	<ul style="list-style-type: none"> <li>The developmental check-up offers immediate benefits to a child and their family (Q17)</li> </ul>
<ul style="list-style-type: none"> <li>Once I identify a potential developmental delay, I am confident that follow-up services are available (Q15).</li> </ul>	

Both cohorts expressed a desire for additional topic-specific training (see Appendix E for the survey and a detailed description of the pre and post survey findings). Six-month surveys will be conducted September - October 2008.

### Parents

In summer 2008, telephone surveys were conducted with a random sample of parents of 18 to 36 month old infants who participated in the Ages and Stages developmental check-up with no concerns identified. Parents of infants with concerns identified through the Ages and Stages Questionnaire and who received further evaluation and follow-up through Chinook Children's C.A.R.E. will also be contacted regarding their perception of the developmental screening and follow-up process. Data collection and analysis are currently underway.

### Objective 1.3

#### **To adopt a consistent regional referral pathway across partnering service providers in relation to a positive screen for a developmental delay**

Target: December 31, 2009

Indicators selected to reflect a regional referral pathway include:

- a) Referrals initiated as a result of completion of the Ages and Stages Questionnaire, and
- b) Parent's perceived acceptance of services received through the G.A.W.M. project (see Objective 2.1).

Table 5 Ages and Stages Developmental Checkups by administering agency

<b>Indicators</b>	<b>Q1</b>	<b>Q2</b>
# of children screened (GAWM project)*	N=446	-
<b>ASQ Administering Agency</b>	<b>n=446</b>	
Chinook Health Wellness Services	53.1%	-
Community Developmental Check-up	28.5%	-
Children's C.A.R.E. Services	9.2%	-
Parents as Teachers (P.A.T.)	5.4%	-
Parent Link Centres	2.5%	-
Alberta Health Services, Chinook Home Visitation Program	1.3%	-

Source: Ages and Stages Questionnaire Demographics

Table 6 C.A.R.E. Referrals initiated as a result of the Ages and Stages Questionnaire developmental checkups

<b>ASQ Developmental Screening. Infants requiring further evaluation</b>	<b>Q1</b>	<b>Q2</b>
<b>ASQ: Referrals to C.A.R.E.</b>	<b>n=439</b>	
# of referrals	17.6% (77/438)	-
Existing C.A.R.E. children referred	6.6% (29/438)	
Not referred	75.8% (332/438)	-
<b>Multidisciplinary referrals</b>	<b>n=77</b>	
One discipline	74.0% (57/77)	-
Two or more disciplines	18.2% (14/77)	-
Undecided	7.8% (6/77)	-
<b>ASQ discipline-specific referrals</b>	<b>n=98</b>	
Speech Language Pathology	62.2% (n=61)	-
Infant Preschool Development	10.2% (n=10)	-
Physiotherapy	8.1% (n=8)	-
Audiology	9.2% (n=9)	-
Occupational Therapy	3.1% (n=3)	-
Behavior Management Services	1.0% (n=1)	-
To be determined	6.1% (n=6)	-

Source: Ages and Stages Questionnaire Scoring Sheet

**Goal 2 To develop a comprehensive continuum of services that provides the right level of service, at the right time, by the right person as near to the child's residence as possible.**

**Objective 2.1**

**To provide a child and their family timely screening and assessment services**

*Target: October 2007*

A major obstacle to the timely delivery of early interventions services is the early and accurate identification of infants and young children who have developmental delays or disorders. The first step in obtaining needed services for infants and young children and their families is the establishment of comprehensive, first-level screening programs. The goal... is to separate accurately the few infants and young children who require more extensive evaluation from the children who do not." (Bricker & Squires, n.d.)

Ages and Stages Questionnaires (ASQ) allow for the identification of children who are in need of further evaluation of communication, gross motor, fine motor, problem solving,<sup>5</sup> personal-social skills and overall concerns. While nineteen ASQs are currently available,<sup>5</sup> the focus of this project is the eight questionnaires available for children 18 to 36 month of age. "Each questionnaire contains 30 developmental items that are written in simple, straightforward language.... Parents check *yes* to indicate that their child performs the behaviour specified in the item, *sometimes* to indicate an occasional or emerging response for their child, or *not yet* to indicate that their child does not yet perform the behaviour" (Bricker & Squires, n.d., p. 3). Responses are converted to a point value; values are totalled and compared to screening cut-off points. The table below reflects the total scores for each domain (communication, gross motor, fine motor, problem-solving and personal-social) as well as severity based on comparison to standardized norms.

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<sup>5</sup> Ages and Stages Questionnaires are available for children 3, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 27, 30, 33, 36, 42, 48, 54, and 60 months of age.

Table 7 Developmental domains requiring further evaluation (based on Ages and Stages [A &S]) cutoff scores

Developmental Domain % Delay (Below ASQ Cutoff)	2008-09	
	Q1	
	N=446	
	#	%
<b>Communication</b>	63/444	<b>14.2</b>
Mild-moderate	36/444	8.1
Severe	27/444	6.1
<b>Gross Motor</b>	26/446	<b>5.8</b>
Mild-moderate	15/446	3.4
Severe	11/446	2.5
<b>Problem-solving</b>	20/442	<b>4.5</b>
Mild-moderate	12/442	2.7
Severe	8/442	1.8
<b>Fine Motor</b>	19/445	<b>4.3</b>
Mild-moderate	12/445	2.7
Severe	7/445	1.6
<b>Personal social</b>	18/445	<b>4.0</b>
Mild-moderate	12/445	2.7
Severe	6/445	1.3

Source: A&S Information Summary

Note: Cutoffs change with ASQ age group

Table seven reflects the number of delays identified as a proportion of total referrals received (n=446). Rates may overestimate population detection rates as a child could have more than one questionnaire submitted during the timeframe of interest. In quarter 1 of 2008-09, three children had more than one questionnaire submitted. The table below reflects parent's "overall concerns"<sup>6</sup>:

<sup>6</sup> \*\*Other concerns identified by parents included: speech/communication concerns (n=21), behavioral concerns (including biting, shyness) (n=7), toileting/bowel concerns (n=4), health concerns, other family members/siblings (n=4), nutrition/ low birth weight, small for gestational age (n=4), allergies/asthma (n=3), overall delayed development (n=3), and other (n=13) e.g. cyanosis, hernia, hearing, ear tubes, birthmarks, attention, bumping into things, noise sensitivity, sleeping temper, unknown or under investigation (unspecified).

Table 8 Ages and Stages “Overall Concerns” identified by parents of screened infants

Ages and Stages: Identified Concerns (18 mos. - 36 years), Grow Along with Me Project	2008-09							
	Q 1*		Q 2		Q 3		Q 4	
	n=446*		#	%	#	%	#	%
Do you think your child hears well?	425/431	98.6	-	-	-	-	-	-
Do you think your child walks, runs, and climbs like (others his/her age)?	420/434	96.8	-	-	-	-	-	-
Can you understand most of what your child says?	378/431	87.7	-	-	-	-	-	-
Do you think your child talks like (others his/her age)?	329/438	79.2	-	-	-	-	-	-
Has your child had any medical problems in the last several months?	75/434	17.3	-	-	-	-	-	-
Other concerns**	74/425	17.4	-	-	-	-	-	-
Does either parent have a family hx of childhood deafness or hearing impairment?	29/432	6.7	-	-	-	-	-	-
Do you have any concerns about your child's vision?	19/433	4.4						

Source: *Ages and Stages Questionnaire*

17.2% of parents identified that they had “other” concerns (n=73/424) (see appendix F for parent-identified concerns, identified through open-ended questions).

#### Oral health

Sixty-five children received oral health checkups<sup>7</sup> at the Spring 2008 Developmental Checkup Blitz. Of the children screened, 65 % were less than 4 years old (n=42). 23% of children screened had decay experience (n=15/65). Prevention information and recommendations for dental follow-up were provided to parents as appropriate.

### Project Sustainability. The ‘Grow Along With Me’ Partnership Self-Assessment Inventory

Source: Gregory, D. & Burks-Charles, M. (2008, Sept. 16). *G.A.W.M. Partnership Self-assessment Inventory*. Unpublished manuscript (see Appendix G.).

Developed by the Grow Along with Me Evaluation Team, the ‘G.A.W.M. Partnership Self-assessment Inventory’ examines factors associated with the success of an inter-organizational partnership or network. In June 2008, 14 Steering Committee members completed an email survey and responded to qualitative questions in a focus-group forum (G.A.W.M. Stakeholder Committee Meeting).

#### Results

Two key domains were identified in the literature as being important for network success: (1) foundational factors and (2) sustaining factors. Key **foundational factors** identified by survey and focus group respondents included:

<sup>7</sup> by the Oral Health Promotion specialist (Chinook Population Health)

- a clear vision, mission, and goals statement;
- regular meetings;
- facilitative and supportive leadership;
- grassroots involvement; and
- strong skill set of its members.

Key **sustainability factors** identified by respondents as being present within the G.A.W.M. stakeholder group included:

- mutual respect;
- collective problem solving;
- transparency of project information; and
- collective adherence to established project processes.

In addition, focus group respondents suggested that **architectural factors** (i.e., the creation of three sub-committees; establishment of terms of reference; and the use of information technology – e.g., videoconferencing) were critical success factors supporting Steering Committee activities to date.

**Benefits of participating** in the G.A.W.M. partnership included: the strength of an inter-agency collaborative; shared goals and concerns; resource allocation; and the gathering of experts to benefit the G.A.W.M. project.

Survey respondents expressed **satisfaction** with the committee and sub-committee functioning; the level of attention paid to early childhood development (ECD); synergistic connections among committee members; positive reinforcement from external sources (e.g., public and internally); and the committee’s ability to break down barriers among ECD service providers.

**Opportunities for improvement**

The following were identified as opportunities for improvement:

Table 9 Opportunities for improvement (G.A.W.M. Partnership Inventory)

<b>Domain</b>	<b>Opportunities for improvement</b>
<b>Foundational factors</b>	<ul style="list-style-type: none"> <li>• collective understanding of project goals and objectives;</li> <li>• shared leadership;</li> <li>• establishment of a problem-solving process; and</li> <li>• timely and specific feedback and information sharing to committees and staff.</li> </ul>
<b>Architectural factors</b>	<ul style="list-style-type: none"> <li>• the establishment of a sustainability sub-committee and</li> </ul>

	<ul style="list-style-type: none"> <li>• hiring qualified staff.</li> </ul>
<b>Sustainability factors</b>	<ul style="list-style-type: none"> <li>• constructive approaches to feedback and consistent use of affiliation agreements;</li> <li>• develop process whereby parent organizations are regularly informed of project activities, challenges, and processes;</li> <li>• transparent decision-making processes and resource allocation</li> <li>• establishment of working agreements</li> </ul>

**Key benefits** of participation in the G.A.W.M. project included:

- the development of collaborative working relationships, and
- sharing of common goals and concerns.

**Potential benefits** of participation included: attainment of organizational goals, improved access to the target population, increased awareness and knowledge of early childhood development, perceived unity, and increased awareness and public profile of parent organizations.

Overall, G.A.W.M. Steering Committee members appeared to be **satisfied** with the progress of the project to date. They suggested that improving the committee's training initiatives required more attention. Evaluation findings create a benchmark of successes and outline opportunities for future improvements. A detailed description of this partnership evaluation can be found in Appendix G. The G.A.W.M. Partnership Self-assessment Inventory and interview will be repeated in one year (June 2009).

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## V Limitations

The following limitations must be considered when reviewing the findings:

- Official launch of the G.A.W.M. project consent form (April 1, 2008) excludes data received prior to this date as per the University of Lethbridge ethics proposal provisions (See Appendix H, Sept 2008 Consent revisions).
- Developmental assessments (ASQ) recorded by parents at their “well child” visit are completed based on parent recall (versus objective) observation of the child’s developmental status. Responses may be affected by historical or response set bias.
- Measurement tools, e.g. G.A.W.M. Partnership Self-assessment Inventory, Staff Survey not been tested for validity and reliability.
- Age adjusted Ages and Stages (for premature infants) and the duration of use of age-adjusted scoring is not consistent between care providers. The use of age-adjusted questionnaire data in the research sample is under review.
- English language proficiency may have influenced parental understanding of Ages and Stages developmental tasks.

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## VI. References

- 1) *'Grow Along with Me' Annual Report. Innovative approaches to preschool developmental screening and follow-up services initiative.* (2008, May 30), pp 1-44. (Available from the Chinook Grow Along with Me Project Team, Children's C.A.R.E., 906 – 19<sup>th</sup> St. S, Lethbridge, Alberta, Canada T1J 1W5).
- 2) *Welcome to Grow Along With Me - Supporting Child Development in Southern Alberta.* Retrieved Oct 13, 2008 from the Grow Along with Me Website: [www.growalongwithme.ca](http://www.growalongwithme.ca)
- 3) *Burka-Charles, M. (2008, Sept 10). Grow Along with Me Evaluation Survey.* Unpublished manuscript.
- 4) Gregory, D. & Burks-Charles, M. (2008, Sept. 16). *G.A.W.M. Partnership Self-assessment Inventory.* Unpublished manuscript.
- 5) *Grow Along with Me Q1 & Q2 report (2008, Sept. 17 draft).*pp 1-27. Unpublished manuscript.
- 6) Brickker, D. & Squires. (n.d.). *Ages & Stages Questionnaires. A parent completed child monitoring system (2<sup>nd</sup> edition).* Paul H. Brookes Publishing: Toronto, Ontario. Phone: 1-800-638-3775, [www.brookespublishing.com](http://www.brookespublishing.com).

## **Appendix A**

### **G.A.W.M. Evaluation Framework**

Placeholder Page

## Appendix B

### Regional and staff partners trained to administer the ASQ (details by partner)

Staff trained to administer the Ages & Stages (A&S) Questionnaire												
Partner	2007-08				2007-08		2008-2009				2008-09	
	Q1	Q2	Q3	Q4	#	%	Q1	Q2	Q3	Q4	#	%
<b>Chinook Health</b>	-	-	-	-	-	-	-	-	-	-	-	-
Children's C.A.R.E. staff	-	-	-	4	4	6.2%	-	-	-	-	-	-
Public Health nurses	-	-	-	39	39	60.0%	-	-	-	-	-	-
Oral health specialist	-	-	-	1	1	1.5%	-	-	-	-	-	-
<b>Parent Links</b>	-	-	-	3	3	4.6%	-	-	-	-	-	-
<b>Parents as Teachers</b>	-	-	-	1	1	1.5%	-	-	-	-	-	-
<b>Day care/Day home</b>	-	-	-	-	0	0.0%	-	-	-	-	-	-
<b>Other</b>	-	-	-	-	0	0.0%	-	-	-	-	-	-
Family Centre	-	-	-	6	6	9.2%	-	-	-	-	-	-
School staff/support staff	-	-	-	3	3	4.6%	-	-	-	-	-	-
Brighter Futures CNP	-	-	-	1	1	1.5%	-	-	-	-	-	-
ARCQE	-	-	-	-	0	0.0%	-	-	-	-	-	-
Piikiani Early Childhood Dev't	-	-	-	2	2	3.1%	-	-	-	-	-	-
Unidentified	-	-	-	5	5	7.7%	-	-	-	-	-	-
<b>Total</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>65</b>	<b>65</b>	<b>100%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

\* Persons trained to offer "Train the Trainer" sessions

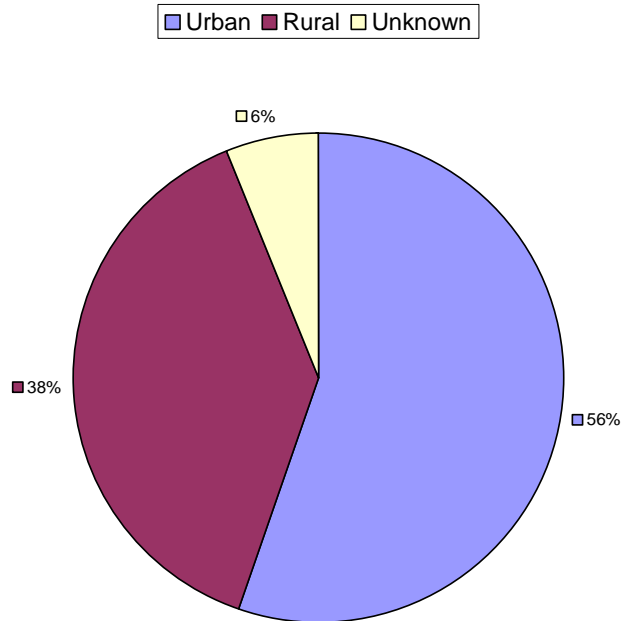
Source: M. Moland, Grow Along With Me Partner Report

## Appendix C

### Regional and staff partners trained to administer the ASQ (by location)

(n=65)

Persons trained to administer ASQ by geographical location

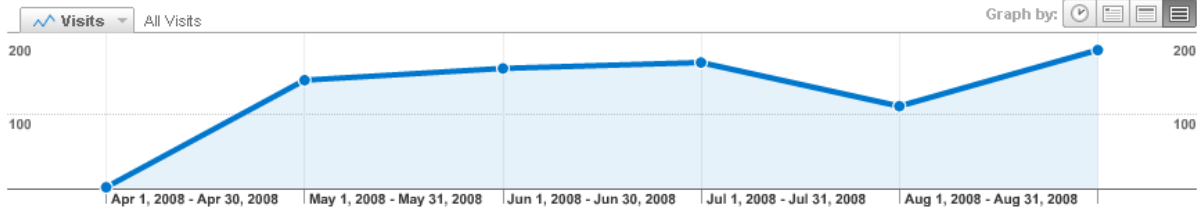


## Appendix D

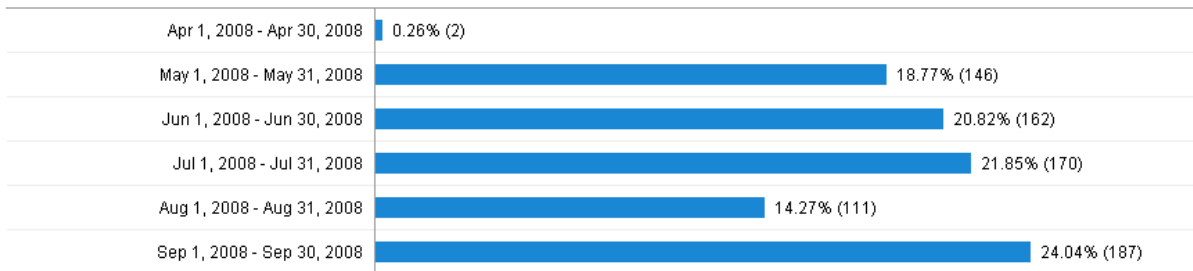
### Web Site Utilization

#### Visits for all visitors

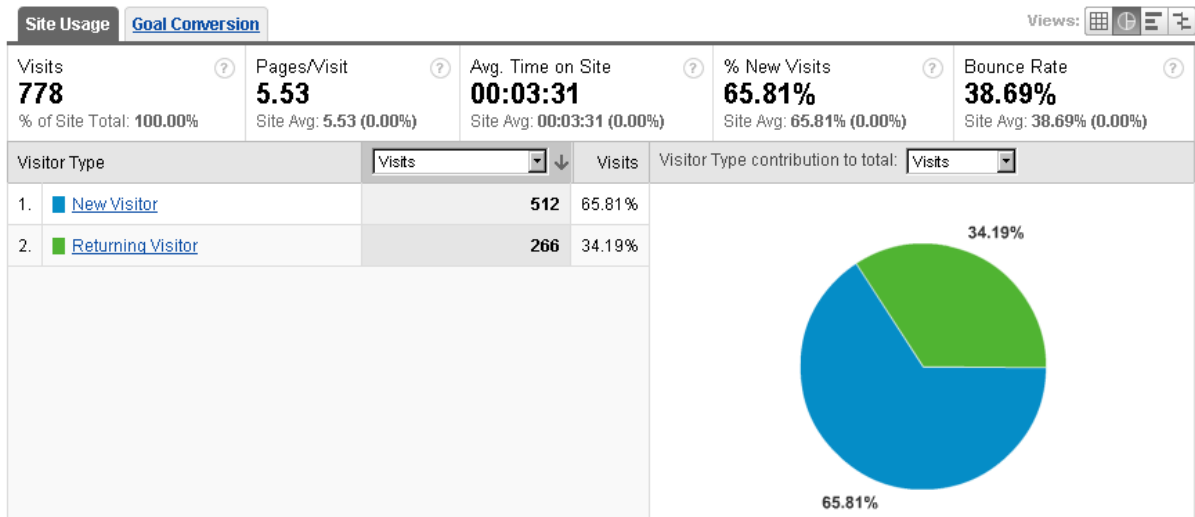
Apr 1, 2008 - Sep 30, 2008



778 Visits | 4.25 Visits / Day

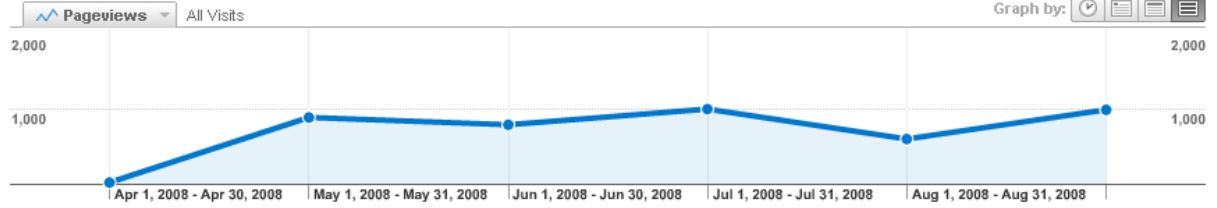


#### 778 visits from 2 visitor types

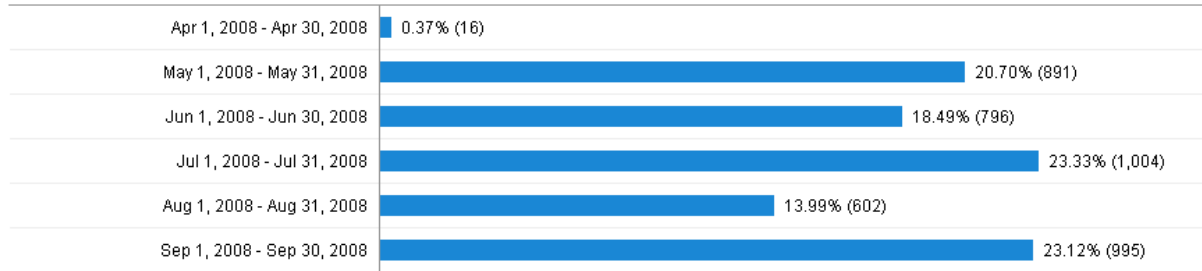


## Pageviews for all visit...

Apr 1, 2008 - Sep 30, 2008

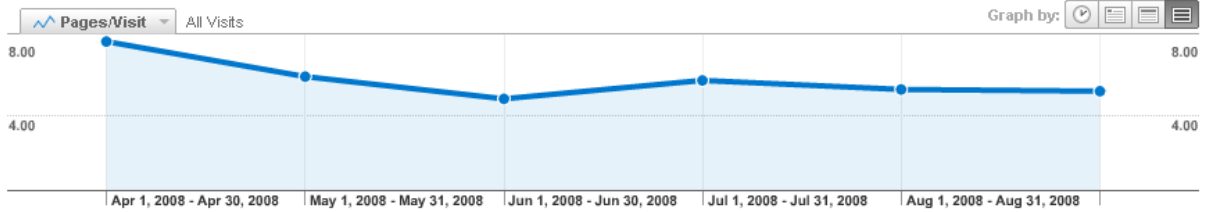


### 4,304 Pageviews



## Average Pageviews for all...

Apr 1, 2008 - Sep 30, 2008

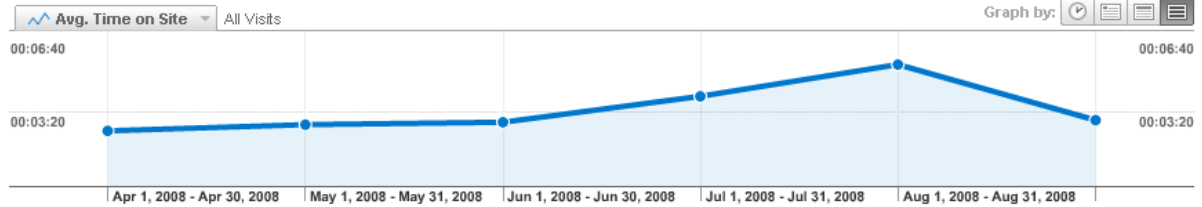


### 5.53 Pages/Visit

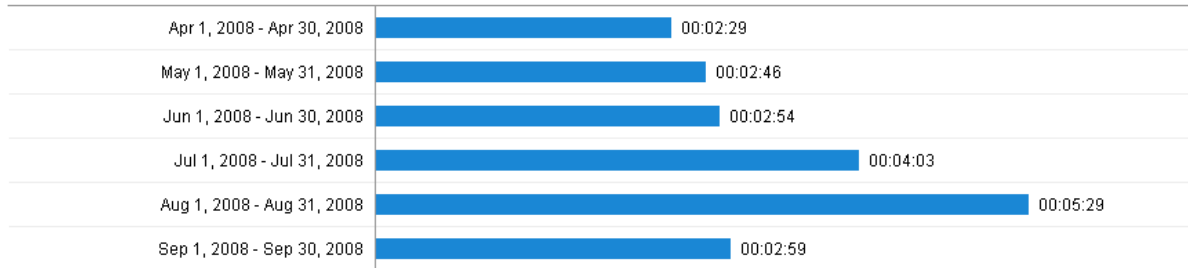


## Time on Site for all visi...

Apr 1, 2008 - Sep 30, 2008

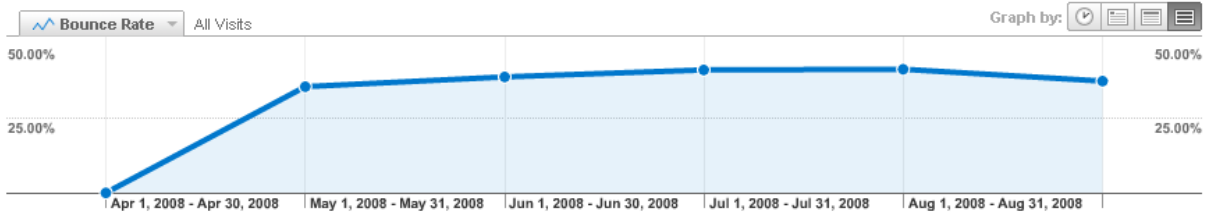


00:03:31 Avg. Time on Site

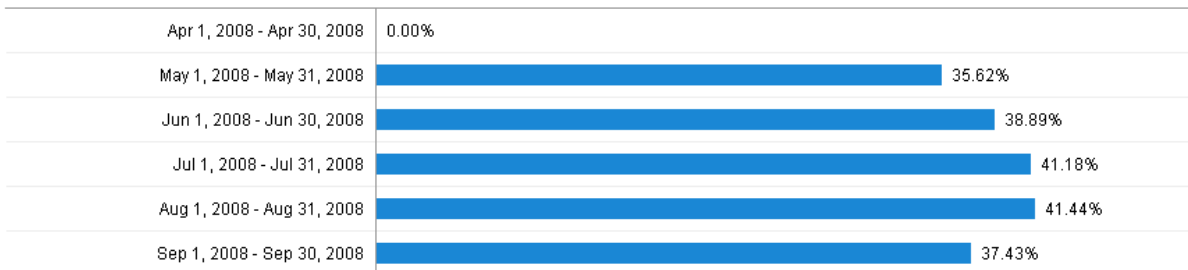


## Bounce Rate for all visi...

Apr 1, 2008 - Sep 30, 2008





38.69% Bounce Rate



## Web Site Visits by Country

778 visits came from 18 countries/territories

	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
	778	5.53	0:03:31	65.81%	38.69%
<b>Detail Level: Country</b>					
Country/Territory	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
 Continent					
1 Canada	701	5.91	0:03:48	62.20%	34.66%
2 United States	52	2.12	0:01:01	98.08%	71.15%
3 Germany	5	1	0:00:00	100.00%	100.00%
4 Australia	4	1	0:00:00	100.00%	100.00%
5 Netherlands	2	9	0:01:29	100.00%	50.00%
6 China	2	1	0:00:00	100.00%	100.00%
7 Bulgaria	1	5	0:06:21	100.00%	0.00%
8 Switzerland	1	1	0:00:00	100.00%	100.00%
9 Jamaica	1	5	0:01:46	100.00%	0.00%
10 United Kingdom	1	1	0:00:00	100.00%	100.00%
11 Turkey	1	1	0:00:00	100.00%	100.00%
12 Libya	1	4	0:02:14	100.00%	0.00%
13 South Africa	1	1	0:00:00	100.00%	100.00%
14 Ireland	1	1	0:00:00	100.00%	100.00%
15 Puerto Rico	1	1	0:00:00	100.00%	100.00%
16 Malaysia	1	1	0:00:00	100.00%	100.00%
17 Ghana	1	1	0:00:00	100.00%	100.00%
18 Italy	1	1	0:00:00	100.00%	100.00%

Source: Google Analytics, Apr 1, 2008 - Sept 30, 2008, run date Oct. 7, 2008

## **Appendix E**

### **Staff Survey Findings**

## Appendix F

### ASQ Summary Data

A summary of legal parent/guardian and/or ASQ implementer's open-ended responses to questions related to the overall development of their child at the time of screening are presented below.

Overall Development	Open-ended responses (Q1)
<p><b>Talks like other toddlers?</b> (n=65)</p>	<ol style="list-style-type: none"> <li>1. <b>Small Vocabulary (n = 12)</b> <ul style="list-style-type: none"> <li>■ Slow to speak, /not many words (n=9)</li> <li>■ Doesn't say words (n=4)</li> </ul> </li> <li>2. <b>Enunciation Issues (n = 11)</b> <ul style="list-style-type: none"> <li>■ Speech nasal/ unclear (n=2)</li> <li>■ Enunciation is a concern saying 't's' for 'c' &amp; 's' etc.</li> <li>■ Slight impediments</li> <li>■ Sometimes he repeats himself so I can understand him</li> <li>■ Enunciation (possibly related to ear infections) has taken target word (Fall 07')</li> <li>■ Hard to understand/mumbles (n=3)</li> <li>■ He has problems with (enunciation)</li> <li>■ Does not make all alphabet sounds</li> </ul> </li> <li>3. <b>Delayed Speech (n = 11)</b> <ul style="list-style-type: none"> <li>■ Doesn't talk as much/quiet (n=2)</li> <li>■ Understands well, just doesn't use many words</li> <li>■ Slower than others/ A little behind (n=3)</li> <li>■ (Behind but) getting better (n=2)</li> <li>■ Can be better (n=1)</li> <li>■ He is behind. He copies his sister and she has delayed speech</li> </ul> </li> <li>4. <b>Current/previous SLP Referral (n=10)</b></li> <li>5. <b>Speech improving/ no concerns (n=10)</b> <ul style="list-style-type: none"> <li>■ Better than average (n=5)</li> <li>■ Most of the time</li> <li>■ Not sure, but not concerned (n=3)</li> <li>■ I would say 'almost there'; just completed Hanen Program.</li> </ul> </li> <li>6. <b>Miscellaneous (n = 10)</b> <ul style="list-style-type: none"> <li>■ A little behind in English; child is bilingual</li> <li>■ Premature</li> <li>■ Father not concerned as yet - declined referral to care centre at present</li> <li>■ Mom concerned</li> <li>■ Unsure (n=6)</li> </ul> </li> </ol>
<p><b>Hears well?</b> (n=19)</p>	<ol style="list-style-type: none"> <li>5. <b>?Hearing –related attention Issues (n=6)</b> <ul style="list-style-type: none"> <li>■ Has selective memory.</li> <li>■ How much is selective?</li> <li>■ Not sure, will 'tune us out' but responds to even small noises.</li> <li>■ ...Gets focused &amp; doesn't listen</li> <li>■ Sometimes she says 'what?' a lot</li> <li>■ Not sure. I think she hears okay but she likes parents to repeat selves over &amp; over.</li> </ul> </li> <li>6. <b>Ear Tube insertion/chronic infection (n =5)</b> <ul style="list-style-type: none"> <li>■ Lots of ear infections; tubes in past; OK now.</li> <li>■ Don't know; has had 3 sets of tubes.</li> <li>■ Yes &amp; No has implants.</li> <li>■ Chronic ear infections</li> <li>■ Has fluid in his ears</li> </ul> </li> <li>7. <b>Audiology testing/Diagnostic testing (n = 3)</b> <ul style="list-style-type: none"> <li>■ Unsure especially of left ear; testing has been done inclusive. Will continue to test every couple of months at health unit.</li> <li>■ Tested by audiology, no fluid in ears.</li> <li>■ Waiting for hearing test.</li> </ul> </li> </ol>

Overall Development	Open-ended responses (Q1)
	<p><b>8. Prematurity (n =1 )</b></p> <ul style="list-style-type: none"> <li>■ Appears to hear OK, but mom would like him tested as he was 3 months premature.</li> </ul> <p><b>9. General Concerns (n=4)</b></p> <ul style="list-style-type: none"> <li>■ Yes &amp; No; mom concerned.</li> <li>■ 'Love you daddy'; 'Come on buddy', 'I like it'</li> <li>■ Ear wax problems</li> <li>■ ?</li> </ul>
<p><b>Understand child?</b> (n=41)</p>	<p><b>1. Limited sound/words (n=21)</b></p> <ul style="list-style-type: none"> <li>■ Doesn't say anything/ points and makes sounds (n=4)</li> <li>■ Babbles/gibberish/words unclear(n=9)</li> <li>■ Missing sounds (n=2)</li> <li>■ Some words/ one word answers/ really have to listen (n=5)</li> <li>■ Harder to understand with long sentences</li> </ul> <p><b>2. Understand child most of the time (&gt;=50%) (n=10)</b></p> <p><b>3. Mother understands but others do not (n=8)</b></p> <p><b>4. Miscellaneous (n=2)</b></p> <ul style="list-style-type: none"> <li>■ Would be interested in individual speech program if available</li> <li>■ People with him all the time</li> </ul>
<p><b>Walks, runs, and climbs like others?</b> (n=9)</p>	<p><b>1. Mobility delay (n=4)</b></p> <ul style="list-style-type: none"> <li>■ Does not walk or run</li> <li>■ Crawling, not walking</li> <li>■ Not much jumping</li> <li>■ Late walker</li> </ul> <p><b>2. Delay but catching up (n=2)</b></p> <ul style="list-style-type: none"> <li>■ Maybe a bit behind, but catching up</li> <li>■ Child was premature but is now catching up physically</li> </ul> <p><b>3. Better than others (n=1)</b></p> <ul style="list-style-type: none"> <li>■ Better: especially climbing</li> </ul> <p><b>4. Miscellaneous (n=1)</b></p> <ul style="list-style-type: none"> <li>■ (Child) always very cautious</li> </ul>
<p><b>Family history of hearing impairment?</b> (n=25)</p>	<p><b>1. Extended family(n=11)</b></p> <ul style="list-style-type: none"> <li>■ Grandparents (n=8)</li> <li>■ Paternal half-brother/great aunt (n=3)</li> </ul> <p><b>2. Paternal (n=7)</b></p> <ul style="list-style-type: none"> <li>■ Father deaf in one ear (n=5)</li> <li>■ Tinnitus (grandfather also had tinnitus) (n=1)</li> <li>■ Husband, birth defect (n=1)</li> </ul> <p><b>3. Maternal (n = 4)</b></p> <p><b>4. Unknown/unspecified(n=3)</b></p> <ul style="list-style-type: none"> <li>■ Later in life, not in children (family member not specified)</li> <li>■ Lots of ear infections as a kid led to difficulty in one ear (family member not specified)</li> <li>■ Unknown (n=1)</li> <li>■</li> </ul>
<p><b>Vision concerns?</b> (n=19)</p>	<p><b>1. Vision concerns (n=6)</b></p> <ul style="list-style-type: none"> <li>■ One eye wanders/lazy eye (n=3)</li> <li>■ Nystagmus</li> <li>■ We are aware of eyelid problem</li> <li>■ Sometimes looks at books very closely</li> </ul> <p><b>2. Already-scheduled eye appointment(n=6)</b></p> <ul style="list-style-type: none"> <li>■ Eyes tested at 2</li> <li>■ Eyes turn inwards, seeing ophthalmologist in Medicine Hat</li> <li>■ Getting checked next week</li> </ul>

Overall Development	Open-ended responses (Q1)
	<ul style="list-style-type: none"> <li>■ Lazy eye being checked</li> <li>■ Mom told to have checked at 3 (years)</li> <li>■ Scheduled for eye appointment</li> </ul> <p><b>3. Family history of vision problems(n=4)</b></p> <ul style="list-style-type: none"> <li>■ Mom legally blind; bad poor eyesight too</li> <li>■ Mom glaucoma/cataracts</li> <li>■ Both siblings wear glasses so probably will need</li> <li>■ Poor eyesight runs in the family</li> </ul> <p><b>4. Corrected vision concerns(n=2)</b></p> <ul style="list-style-type: none"> <li>■ Corrected far-sightedness</li> <li>■ Has glasses</li> </ul> <p><b>5. Miscellaneous(n=1)</b></p> <ul style="list-style-type: none"> <li>■ Eye contact</li> </ul>
<p><b>Recent Medical Problems? (n=63)*</b></p> <p>*A child may have had more than one problem</p>	<ul style="list-style-type: none"> <li>■ Ear infections/ ear tubes (n=18)</li> <li>■ Asthma (n=11)</li> <li>■ Colds/cough/nasal infection (n=6)</li> <li>■ Eczema/allergies (n=4)</li> <li>■ Throat infection (n=3)</li> <li>■ Croup (n=3)</li> <li>■ Pneumonia (n=2)</li> <li>■ Tongue tie release (n=2)</li> <li>■ Bowels/constipation (n=2)</li> <li>■ Other (n=17) (acrocyanosis, athletes foot, bladder infection, broken collar bone, dilated kidney, odontodysplasia, flu/dehydration, heart and liver testing, lactose intolerance, seizure, ongoing care, RSV, hole in heart, spherocytosis, swollen lymph nodes, heart murmur, tonsillitis)</li> </ul>
<p><b>Does anything bout your child worry you? (n=65)</b></p>	<ol style="list-style-type: none"> <li><b>1. Speech development/communication (n=23)</b></li> <li><b>2. Physical concerns (e.g. birthmark, hernia, knee problem, pustule, acrocyanosis, breathing concerns, walks on tiptoe) (n=10)</b></li> <li><b>3. Behavioural concerns (e.g. aggression, sadness, biting, playing with others, strong-minded child, hits head once a day, shyness) (n=9)</b></li> <li><b>4. Gastro-intestinal concerns (e.g. nutrition, weight, bowel concerns, swallowing, growth, toilet training) (n=8)</b></li> <li><b>5. Hearing/communication skills (n=4)</b></li> <li><b>6. Slow Development/prematurity (n=3)</b></li> <li><b>7. Attention/focus (e.g. following directions, relative with autism) (n=3)</b></li> <li><b>8. Misc (scheduled CT scan, crosses fingers, English as a second language, use of sign language) n=5)</b></li> </ol>

## **Appendix G**

### **G.A.W.M. Partnership Self-assessment Inventory**

Placeholder Page

## **Appendix H**

### **G.A.W.M. Project Consent Form**

Placeholder Page