SASKATCHEWAN POPULATION HEALTH AND EVALUATION RESEARCH UNIT

Saskatchewan *KidsFirst* Program Evaluation:
Summary of Findings and Recommendations



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[1] See Acknowledgements for list of team members

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The following reports were produced as part of this evaluation:

- Evaluation Framework
- Community Profiles
- Focused Literature Review
- Using Theory to Plan and Evaluate *KidsFirst* (full and summary versions)
- Report of the Qualitative Study
- Report of the Quantitative Study
- Summary of Findings and Recommendations

All of these reports can be downloaded from www.kidskan.ca, the Saskatchewan Knowledge to Action Network for Early Childhood Development. To access information and reports, click on "KidsFirst" on the Projects tab on the front page.

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Background

Launched in 2002, *KidsFirst* is an intervention program that provides services and support to vulnerable families with young children in Saskatchewan. *KidsFirst* is offered in nine targeted high-needs communities in Saskatchewan.[2] These communities are: Meadow Lake, Moose Jaw, Nipawin, Northern Saskatchewan, North Battleford, Prince Albert (select neighbourhoods), Regina (select neighbourhoods), Saskatoon (select neighbourhoods), and Yorkton.

The overall purpose of the *KidsFirst* program evaluation is to assess the program's effectiveness in helping participating families and communities make positive changes. This document provides an integrated summary of two reports: a quantitative evaluation and a qualitative evaluation of *KidsFirst*. These reports study the short-term impact of the *KidsFirst* program on children, parents and families as well as on the wider community.

Various other documents have been published as part of the evaluation and provide complementary information. For example, we also examined changes experienced by families within sites, along with perceptions of how changes may have (or why changes may not have) come about. The site-specific summary, developed as a companion document to quantitative and qualitative evaluations of the Saskatchewan *KidsFirst* program, presents a summary of the key findings in each community.

In this report we present the integrated findings from the quantitative and qualitative *KidsFirst* evaluations and map them onto the goals and objectives of the Saskatchewan *KidsFirst* program.

The vision of *KidsFirst* is that:

> *Children living in very vulnerable circumstances enjoy a good start in life and are nurtured and supported by caring families and communities. In targeted high-needs communities, supports and services are provided through partnerships between families, communities, service organizations and governments.*[3]

Progress towards achievement of the following goals is the means to realizing this vision:[4]

Goal #1: Children in very vulnerable situations are born and remain healthy.

Goal #2: Children living in very vulnerable circumstances are supported and nurtured by healthy, well-functioning families.

Goal #3: Children living in very vulnerable situations are supported to maximize their ability to learn, thrive and problem-solve within their inherent capacity.

Goal #4: Children living in very vulnerable situations are appropriately served by the *KidsFirst* program and support.

[2] *KidsFirst* sites were initially chosen based on rates of poverty, lone-parent families, low birth weight, infant hospitalizations, and, in order to ensure that the site was of sufficient size, hospital births.
[3] *2007-2008 Performance Plan: KidsFirst Strategy*. Regina: Saskatchewan Learning, Early Learning and Child Care Branch and Early Childhood Development Unit, 2007.
[4] Ibid.

Goal #1: Children in very vulnerable situations are born and remain healthy

The objectives under this goal are:

- Pregnant women in the program access adequate prenatal care;
- Primary caregivers address their mental health and addictions issues;
- Children maintain good physical health status or improved health status over time.

Objective 1: Access to prenatal care
Results from the qualitative study suggest that across sites, *KidsFirst* has tried to assist women to access prenatal care. Program staff expressed a strong belief in the importance of early intervention. For instance, a program manager said:

> *It's well documented in the literature that if you're going to intervene with a family, your greatest opportunity is during the pregnancy or following the birth of the first child.*

Program management data from the *KidsFirst* Information Management System (KIMS) indicate that the percentage of women who enrolled during the prenatal period grew from around 15% of the total enrolment in the first years of the program (2002, 2003) to around 35% to 40% in the most recent few years (2007, 2008, 2009) (see Appendix A). For the most recent year we have data (to October 2009), the proportion of women enrolled in the program prenatally more than doubled compared to the enrolment in the first year of the program (40.6% versus 15.9%).

All *KidsFirst* sites have tried to engage pregnant women, but with varying degrees of success. As a result, not all program sites currently have prenatal enrolments around the 40% mark. In sites where prenatal recruitment is high, the *KidsFirst* staff members have conducted specific outreach work within their community.

> *...We hosted a luncheon for anyone who might be working with prenatal – school counsellors, medical clinic staff, population health staff, etc., etc. and told them about the various early childhood programs and interventions that are available in and around [our city]. The result: numerous prenatal referrals (highest in the province), which results in earlier intervention than we might have hoped for through the Birth Questionnaires.*

In some other sites, *KidsFirst* staff reported difficulty in recruiting women prenatally. To increase the number of pregnant women in the program, one site has moved beyond the targeted area and worked actively with community partners serving pregnant women. At the time of the study, the program staff at this site were strategizing how to assist pregnant women in obtaining regular prenatal care.

> *We're getting a lot of these young women prenatally, and postnatally as well. We're really looking at a collaborative response as a community in terms of how … we support these moms to get regular prenatal care, get the drugs that they need prenatally [and] how … we support them to administer medication to their babies in that immediate postpartum period … so they can keep them as healthy as possible.*

KidsFirst staff from various sites reported that it is common practice to offer a range of services to *KidsFirst* clients who enrol prenatally. These include offering prenatal classes to families,

connecting families to collective kitchens, and distributing prenatal vitamins and vouchers. For example, in one particular site, the program has offered prenatal vitamins to all pregnant women enrolled in the program, as reported by a staff member:

> *All of the KidsFirst moms … get prenatal vitamins. … We were putting that as part of our strategy … that all the moms were going to get prenatal vitamins, because they're expensive [but] they're needed. … Lots of times, high-risk families don't get that kind of thing because they don't make that their priority. But if it is a no-cost item [to the family], then of course they'll take them. So we were going to make sure that they got the vitamins and [a local business] stepped up and said "… We'll make sure they get their vitamins."*

Home visitors have helped families learn about prenatal care and explained to families the negative effects of drinking and smoking during pregnancy. As a result, some women have reportedly cut back on smoking and stopped drinking. In some sites, addiction workers also joined with home visitors to promote prenatal health. One program manager stated:

> *Home visit[or]s and our addiction worker work specifically with our prenatal moms and deliver… a prenatal curriculum around the [danger of] us[ing]… alcohol and drugs during pregnancy. …. Typically addiction services don't do that right now. They don't work with prenatals … specifically.*

In addition, some program staff have also tried to make prenatal knowledge culturally accessible and relevant to families. For instance, a home visitor said:

> *I have an Aboriginal prenatal calendar that I use with certain families, and then I have the KidsFirst prenatal calendar that I use with others. The Aboriginal calendar has Kukam sayings like "Kukam says you're pregnant, not sick." So … it's okay to feel a little bit down with your morning sickness, but you are not sick. You are actually building a baby so you need to take care of yourself to make sure that that baby comes out right. I just adjust my wording to suit the family.*

Objective 2: Mental health and addiction

Access to mental health and addiction services is a mandated component of the *KidsFirst* program in all sites. We did not have quantitative data to examine the extent to which parents have accessed these programs or successfully addressed their mental health and addiction challenges. However, participants in the qualitative study provided information on primary caregivers addressing their mental health and addictions issues. A home visitor, for example, related that watching for postpartum depression and supporting primary caregivers who have mental health issues is a critical part of her job when working with new parents:

> *If I have a new mom, in the back of my head I'm going to say to myself, even if I don't meet with her, I'm going to phone her and just say "how is the breastfeeding going? … and maybe this new mom has mental health issues [so] that she… gets depressed easily. Any depression – post-partum depression is so huge, and especially if there's already a diagnosis in the past that you're aware of, thanks to [another worker in the program] because she's discovered it during her first interview with this person, … you have a little bit of background. If that depression becomes full-blown, you know that there's already bit of a history. … And you know you're going to have to watch that person with depression.*

Parents have also shared experiences where home visitors have provided emotional support and linked them with mental health counsellors to deal with postpartum depression:

> *At first, I think it was just about my mom leaving. … As soon as I talked to [my home visitor], she … brought me to a counsellor… I felt better after I talked to her. So it was like, OK, now I'm good, but if I feel depressed, I'll phone her.*

Parents related that they started addressing mental health and addiction issues because of their involvement with *KidsFirst*. For instance, a parent said:

> *They provided me [with] an addiction counsellor and they helped me talk to a lot of people where I became more open myself and I wasn't like scared to tell anybody who I was and where I came from and just that it helped me out with like my own development, just as my children's development.*

In another case, a parent was able to attend to her addiction issue by changing her social circle through *KidsFirst.*

> *They've done a few things,…[such as] group activities where they've had the chance to meet somebody I can relate to. [It] really helps … when you have kids. … Lots of my old friends were drug related friends and I don't want to drink so I plan to completely cut them off and [KidsFirst] has helped me stay sober for a year… just having somebody else to meet and meet other friends.*

It is important to note that mental health and addiction services to *KidsFirst* parents have often been delivered in a non-traditional manner. Instead of parents traveling to an office, mental health and addiction counsellors have met families in places where the families feel comfortable, such as their homes. In some sites, mental health services have been particularly successful in reaching parents, as *KidsFirst* participants have been observed as being receptive as well as responsive:

> *One of the valuable program[s] we have is run by … our mental health and addictions worker. [The worker] runs a healthy relationships group, and it started out as ... [an] anger management group ... but ... the participants wanted to continue. … so it evolved into an ongoing healthy relationships group, which is very well attended now. There's childcare for it, so parents can come together. There's food, ... If it's over supper, we provide a full supper for them.*

KidsFirst has made mental health services accessible to parents who might not have accessed them by supplying them with transportation, food, childcare, and personal support and advocacy:

> *With Addiction Services and the partnerships we have with KidsFirst, there are women accessing the women's programs as their main source of addictions counselling. [Some women] aren't able to access daycare to come to the regular programs in our office. With KidsFirst-funded programs, they have daycare and transportation [and therefore are able to use our services].*

Objective 3: Child health

We evaluated achievement of this objective in the quantitative study by examining differences between the *KidsFirst* group and a comparison group (non-*KidsFirst*) for the following outcomes:

- Rates of at-risk birth weights;
- Rates of at-risk gestational ages at birth;
- Rates of well-child physician visits in the first 13 months of life;
- Rates of physician visits for infectious diseases, perinatal conditions, respiratory diseases, and injury/poisoning; and
- Rates of hospital visits for respiratory diseases and injury/poisoning.

These outcomes were chosen as they represented a mix of negative health outcomes (e.g., at-risk birth weights, physician visits for injury/poisoning) and positive health behaviours (i.e. routine well-child physician visits), which could reasonably be expected to be influenced by enrolment in *KidsFirst* and which corresponded to this goal and objective. The data came from Saskatchewan Health.

Quantitative results suggested no significant differences between *KidsFirst* children and comparison children in rates of at-risk birth weights (defined as low birth weight, high birth weight) and at-risk gestational ages (i.e. preterm births). However, given that we do not know what proportion of *KidsFirst* families in these analyses was enrolled prenatally, we do not know the extent to which we could have expected differences between the *KidsFirst* and comparison groups in these birth outcomes. *KidsFirst* children had fewer routine well-child physician visits (i.e. healthy baby check-ups) in the first 13 months of life and fewer physician visits for perinatal conditions (e.g., respiratory conditions originating in the perinatal period; jaundice). Also, *KidsFirst* children had more hospital visits for respiratory-related conditions. Together, these results may suggest that *KidsFirst* families lagged behind comparison families in finding a "medical home"—a clinic and/or physician to see regularly for health concerns and routine check-ups. In any case, *KidsFirst* children fared worse in some, but not all, health outcomes we examined.

We controlled for selected demographic differences between the *KidsFirst* and comparison group families (such as mother's age, receipt of Social Assistance, and indicator for location of residence); however, we could not control for other variables that would have been different between the two groups (e.g., history of substance abuse, mother's nutrition intake). As such, we believe that the *KidsFirst* group may have remained at significantly higher risk of negative health outcomes even after statistically controlling for the available data and known differences. That the *KidsFirst* group did not fare worse in all health outcomes that we examined, in relation to the comparison group, does offer the possibility that *KidsFirst* may prove effective in helping some children to maintain their health status.

The results available from the *KidsFirst* qualitative study suggest more strongly that the *KidsFirst* program has benefits for children's health. According to participants in the qualitative study, *KidsFirst* has directly and indirectly contributed to maintaining and improving the health status of children. In all sites, the program has shared knowledge and information about health—in particular early childhood development and children's health—with families through group activities, workshops and home visitations. Below is an excerpt from one particular site concerning an event they held to promote children's health.

> *We did a Parent Day … it was kind of a parents' educational day where we presented information on nutrition and infant care. We kind of kept it [for parents*

with a child] under a year and just talked about weaning from breast to bottle and dental care of infants and sleeping patterns and how to know if [babies] are sick or what's going on with them.

In this site, the program has also hired a speech and language pathologist to reach and work directly with *KidsFirst* children. The program manager illustrated this point by telling how the speech and language pathologist had identified a child's hearing problem and provided timely intervention so that he, like other children without hearing problems, could proceed along a normal, healthy course of development:

We…have…a [speech language pathologist] with the program. It's hard to coordinate so that she comes to the house and the people are actually home and she gets to do the hearing test on the children … At the Parent Day, one of the children that she'd been kind of chasing to do a hearing test was there, and she ran up and got her test kit. … On the break, she did a hearing test on the little guy and found out he need[ed] ear tubes so [she] referred him on to [the relevant services].

Home visitors have also shared health care information with parents. Some of them have helped families identify children's health problems and referred families to services. They have also accompanied families for health-related services such as immunization appointments.

In some sites, the program has stepped up and served children who had been rejected by other services. *KidsFirst* has also facilitated families' access to medical specialists, advocating on their behalf and directing them to appropriate and timely care. In addition, by helping families meet their basic needs such as food, housing, transportation, and jobs, *KidsFirst* has also worked to create a healthy living environment for children.

Goal #2: Children living in very vulnerable circumstances are supported and nurtured by healthy, well-functioning families

The objectives under this goal are:

- Social support networks, housing, food security, education, employment, and income for families will improve over time;
- Family interactions will improve over time;
- Families develop and maintain a safe and secure home environment.

Families in *KidsFirst* are assessed with a family assessment tool adapted from one used in a similar program in Ontario (*Healthy Babies, Healthy Children*), both at enrolment (the In-Depth Assessment or IDA) and, since 2007, at regular intervals while in the program (the On-Going Assessments or OGA). The tool is used to collect data on a number of variables related to family circumstances and family functioning. For each variable, assessors rate the degree to which the family's circumstances or level of functioning pose a risk for negative outcomes. For example, on the variable that indicates "availability of social supports," a family assessed as having "multiple sources of reliable and useful support" would be considered to have low risk concerning social supports. A family assessed as being "effectively isolated" would be considered to have high risk concerning social supports.

Findings from the Quantitative Study

We evaluated achievement of the three objectives in *KidsFirst* Goal 2 in the quantitative study. We calculated differences in risk scores on items included in the family assessment tool used to collect data at different times, for example at enrolment (IDA) and again at six months, 12 months, and 24 months (OGAs). In addition, we calculated differences in risk scores from OGA at six months to OGAs at 12 and 24 months. Although we were unable to assess all family circumstances and conditions mentioned in the objectives (for example, we could not assess education, employment, and income), we believe that the eight variables that we did include in our analysis (availability of social supports, food security, expectations of child[ren], parent motivation, family identity and interactions, living conditions, housing suitability, and housing stability) correspond very well to the objectives stated above.

We found significant improvements in risk scores from IDA to OGA at six months in all of the eight variables considered (see *Appendix B*). We also found significant improvements in scores from IDA to OGA at 12 months for two variables (expectations of child[ren] and housing suitability) and from IDA to OGA at both 12 and 24 months for four variables (social supports, food security, family identity and interactions, and housing stability). However, we found no significant improvements after six months post-enrolment in any of the variables and, in fact, found significant declines from OGA at six months to OGA at 12 months in three cases (food security, family identity and interactions, and living conditions). Results suggest that while some families may have experienced improvements later on, the bulk of improvements in family circumstances and family functioning occurred within six months of enrolment in *KidsFirst*.

Some families in the *KidsFirst* program are identified as having complex needs. These families tend to be at higher risk for child maltreatment, in part due to the presence of risk factors such as domestic violence, maternal depression/mental illness, substance abuse, and extreme parenting stress. We examined whether families with complex needs have benefited to the same degree as non-complex-needs families. The sample sizes in the complex-needs group were often small, potentially limiting statistical power to detect changes, yet the results were interesting. While both groups (complex-needs and non-complex-needs families) appeared to benefit similarly within six months of enrolment on both availability of social supports and food security, improvements were not statistically significant for the complex-needs group on any of the six other variables (expectations of child[ren], motivation, interactions, living conditions, housing suitability, and housing stability), although results were suggestive of significantly decreased risk scores on housing stability (see *Appendix B*). Improvements were statistically significant for five of the variables and suggestive of significant improvement for the sixth for the non-complex-needs group. With these six variables, although the proportions of families with decreased risk scores were comparable between complex- and non-complex-needs groups, the complex-needs group had higher proportions of families with increased risk scores.

There are a number of possible explanations for these differences in results between the complex-needs and non-complex-needs groups. Two are mentioned here. First, it is possible that initial assessments of risk for many complex-needs families underestimated the actual conditions. In these cases, to the extent that OGAs were more accurate than IDAs, we would expect scores for these families to show increased risk. Secondly, it is possible that while many families benefited early on, families with more complex needs may have taken more time to show benefits.

Findings from the Qualitative Study

Findings from the qualitative study provide additional information related to these objectives, including activities believed to bring about positive changes as well as experiences of positive outcomes amongst some families. Relevant findings are discussed under each of the objectives for Goal #2 below.

Objective 1: Improved social supports, housing, food security, education, employment, and income

The program has reportedly helped families break away from social isolation by encouraging them to participate in program activities and social events, where parents are exposed to new knowledge and different ways of parenting and interacting, and given the opportunity to meet with other families and people from the larger community. Through enrolling in these activities, some parents started forming their own personal and support networks. In some cases, they started providing transportation, childcare, and other support for one another. A program staff member related:

> *Some KidsFirst families that … have participated in different programs that I am involved in … have developed such good skills that they are networking away from here with each other. They provide transportation for each other; they help with childcare for each other; they invite other families to their [kids'] birthday parties ...*

As well, participants believed that the program has helped some families with their food needs. A parent shared the following with the interviewer:

> *[Our food situation is] better than before. We have our dairy vouchers now [from KidsFirst], which allow us to have milk. … [The child] drinks a lot of milk.*

While not a long-term solution to food security, the program in all sites has helped alleviate the stress of extreme food insecurity over the short term by offering parents milk vouchers, providing them with food boxes, and referring them to food banks. Looking to longer-term solutions, home visitors have helped families plan for better use of their limited resources.

> *I really like them because … I can spend my money more, more wisely. … when you make a weekly plan you know what you need to buy but I also wanted to do that [based on my needs], what I have in my pantry already …so that I'm not buying a whole bunch of things I don't [need]*

KidsFirst has also held cooking activities and nutrition programs, and connected parents to other food and nutrition-related programs where they could learn about healthy food and nutrition. At some sites, *KidsFirst* has also delivered nutrition services to the homes of the families, which some have found extremely helpful. For example, a parent said:

> *They helped me with nutrition, because … my kids always eat … junk food, and I don't cook that well, so it's like "ugh" … They got in … one of those dietician people. Plus my son can't eat high carbohydrates, and my daughter has allergies, so I had to get somebody to come in here and tell me which foods I can [eat], and what I shouldn't let them take.*

Affordable housing is a common issue of concern. Home visitors in all sites were reported to have helped parents apply for houses through municipal housing authorities. A staff member said:

> *KidsFirst really advocates for their families that are in need of housing. They've been encouraging too… giving them the courage to find accommodation.*

To help parents with housing, *KidsFirst* staff have provided application forms, helped parents fill them out, and driven them to look for houses. Some sites have also held workshops to teach parents about their rights and about ways to advocate for themselves. Despite these efforts, affordable housing was reported to be a persistent issue, preventing some families from focusing more on being nurturing parents.

In the qualitative study, many success stories were shared of parents who went back to school or gained employment. Some participants reported that by offering childcare support, *KidsFirst* has made it possible for women to go back to school and to work. They also reported that the most important contributing factor is that home visitors work with parents on their confidence and self-esteem. A home visitor shared the following story:

> *I have another family I work with … she's a single parent and has one child, and when I first met her she [had] low self esteem, very low self esteem, didn't even go out of the house ... I knew that was a big part of what I had to deal with. So I worked on that … I would really praise mom for whatever she's doing … and make her feel good about herself and that was like a year and half ago … She invited me to her grad, and now she is in school … so big, big impact that KidsFirst has on a lot of these parents.*

Objective 2: Improved family interactions

KidsFirst parents have reportedly improved their ways of interacting with their children. Many parents recognized that attachment, bonding and interactions are important for their child's mental development:

> *Now I realize how important it is to interact with your child [when they are] as small as an infant and even in the womb.*

> *[KidsFirst taught] me little things that I can teach my kids. Like I never learned before KidsFirst that peek-a-boo was a very important game for them to learn because it teaches the importance … that people can go away and come back.*

In addition to raising parents' awareness of the importance of interacting with their children, home visitors also work with them on their practical interactive skills, including emotional control and communication, so that a better relationship can be created between parents and children:

> *They taught me how to stay calm when the kids get frustrating. And they taught me how to tone my temper down and taught me better ways to communicate. Now I can communicate with my son a lot more.*

Many home visitors shared stories of parents who became better at understanding and communicating with their children, which helped improve their interactions with the children:

Bonding and attachment has improved significantly. Parents are going,"I didn't realize that's what my baby was saying. I didn't realize how much I love my children."

Objective 3: Safe and secure home environment

Some sites have placed particular emphasis on home visitors working with parents to identify safety hazards in the house. In one community where there has been a high incidence of fire fatalities among *KidsFirst* families, the program has worked with the local fire department to raise families' awareness about fire safety and has held a fire safety carnival for children within the community. At one site, *KidsFirst* brought housing concerns to the municipality's attention by using the example of two children who were killed when their house caught fire due to poor housing conditions. At another site, involvement from *KidsFirst* and other local agencies led to the development of a bylaw to regulate property standards within the municipality:

Going back a number of years … we looked at a housing study in [our community] … The outcome of that was not only to identify poor housing conditions, but it impacted the community so much that they brought in the municipal housing standards. … We now have municipal bylaws. I think those are things that have been successful.

KidsFirst has also helped improve safety and security in the home environment for families by working with women subjected to domestic violence. In some cases, the program has helped women flee domestic violence. In other cases, home visitors supported the women by enhancing their self respect and helping them to see that they should not tolerate domestic abuse. Some *KidsFirst* staff noted that only when a safe environment is created can parents work on establishing a supportive relationship with their child:

We have two moms who recently left very violently abusive relationships. That has improved their parent-child interactions because they're not living in a house filled with fear. They really credit the KidsFirst program for the support that was provided in leaving those relationships.

Goal #3: Children living in very vulnerable situations are supported to maximize their ability to learn, thrive and problem-solve within their inherent capacity

Ages and Stages Questionnaires (ASQ) are a set of age-specific developmental screens used to quickly determine the appropriateness of additional assessment and possible intervention for children from shortly after birth to school age. Each age-specific form assesses development in five domains: communication, gross motor, fine motor, problem-solving, and personal-social. Although the ASQs have been found to have high levels of false positives (49%) (i.e. passing the screening test despite the existence of true deficits) and false negatives (19%) (i.e. failing the screening test when there are no true deficits) at some ages, they are nevertheless, widely used and recommended as first level developmental screens (Boyce, 2005; Poteat, 2005).

Quantitative Study

The objective under this goal is to "support and nurture children's ability to learn." In the quantitative study, we looked at developmental screening rates. Eighty-four percent (84%) of children whose families were in *KidsFirst* in their first year of life had at least one developmental screen (ASQ) in that year. Screening rates with the ASQ for the sites ranged from 78% to 90%.

We also looked at the outcomes of the 6-month, 12-month, 18-month, 24-month, 36-month, 48-month, and 60-month ASQs. Results for the samples suggested that most children were developing normally (see *Appendix C*). Proportions of children who had age-appropriate scores in all ASQ domains (i.e. "normal" or no failed domains) were around 90% in the first year of life. This figure dropped to 62% on the 18-month ASQ and then increased to around 74% for all other ASQs.

It is not known why the proportion of normal scores was so low for the 18-month ASQ relative to the others. It is possible that ASQs were completed for a higher proportion of children with developmental concerns at 18 months *because* of known, specific concerns. The generally high ASQ scores in our sample were somewhat of a surprise, particularly since the ASQ results for *KidsFirst* children (which we expected to include more "at-risk" scores) were quite comparable to the American normative sample scores. However, we also found marked similarity between *KidsFirst* scores in the ASQs and those of children in a similar program in Manitoba (*Families First*) (see *Appendix D*).

Although the screening rates and outcomes of ASQs seem to provide some evidence supporting *KidsFirst*'s achievement of this goal and objective, a further, more rigorous test might include evaluating what happened with children whose scores indicated that they needed further assessment. If it could be shown that a high proportion of children who needed additional assessment actually received it, and furthermore that a high proportion of these in turn received the necessary intervention, then we could comfortably conclude that *KidsFirst* has done what it can to support and nurture children's ability to learn.

Qualitative Study

Participants in the qualitative study shared stories of staff members helping parents identify health and development issues facing their children and referring families to relevant services. In one site, the program made it possible for a child with speech issues to attend an early learning centre, which reportedly facilitated his speech development. These stories again underscore the importance of recording and tracking what happened to those children identified as needing additional assessment.

Results from the qualitative study suggest that *KidsFirst* has also supported children's ability to learn. The program, at all the sites, has offered children and families social learning opportunities by organizing family- and community-centred activities where *KidsFirst* children and families can interact with others. The program has also helped parents acquire parenting knowledge and skills so that they can better support their children's learning and development. For instance, home visitors have shared parenting knowledge through delivering the *Growing Great Kids* curriculum and modelling caring and interested interactions with children. In particular, they have tried to enhance parents' confidence through constant affirmation and positive reinforcement.

Through their involvement in *KidsFirst*, some parents have started working on their parenting practices. For example, some parents have reportedly shown more compassion in their

interactions with their children. Some parents have also become better at controlling their anger when interacting with their children. Some have demonstrated more realistic expectations of their children. They have also started to better understand children's behavioural cues and become more responsive to their children's needs. A number of parents also reported reading to and playing with their children more. All these, to the extent that they have been influenced by *KidsFirst*, may be evidence of *KidsFirst*'s support of children's ability to learn.

Goal #4: Children living in very vulnerable situations are appropriately served by the *KidsFirst* program and support

The objectives here are:

- Establish and maintain shared accountability mechanisms for processes and outcomes;
- Create and maintain a service system for early childhood development that uses a community development approach, is built on existing services, and is integrated, comprehensive, innovative, flexible and inclusive;
- Identify appropriate families in a timely manner and retain them in the program; and
- Families are satisfied with *KidsFirst* services.

Objective 1: Shared accountability mechanisms

KidsFirst is an intervention built on intersectoral and inter-agency partnership and collaboration. Structurally, it involves multiple stakeholders, and operationally, it necessitates contracts with agencies. At each site, there is a local accountable partner and a local management committee directing the implementation of the program. The local accountable partner is either a regional health authority or a school board. The local *KidsFirst* management committee is a group of people brought together to provide intersectoral leadership. They share responsibilities such as ensuring an inclusive community planning process, identifying service needs and gaps, developing a 5-year *KidsFirst* plan, hiring program managers, and so on. Such a structure enables collaborative learning and collaborative strategizing among different organizations in order to build community capacity.

Participants in the qualitative study reported different working relationships among the managerial staff. In many sites, the relationship was believed to be positive. In other sites, research participants noted some negative effects of having many layers of accountability built into the *KidsFirst* program. Specifically, the fact that *KidsFirst* staff has to report to and get approval from various authorities may have delayed the implementation of certain program decisions in some sites.

Similarly, the contract-out structure is applauded in many sites as it brings together the strengths of different community services providers, facilitates the flow of information, and provides the potential to streamline services. The contract-out structure has also created issues around accountability and management. Contracted home visitors who work for *KidsFirst* are usually physically situated away from the *KidsFirst* management office and report to the managerial staff of their affiliated organizations. Home visitors are accountable to the supervisors at the agency for which they work, rather than being directly accountable to *KidsFirst*.

In those sites where the home visitors are contracted out through different agencies, regulation of home visitation has been particularly difficult because there are often variations in authorization

procedures, hiring practices, and salary and benefits packages between the different agencies. There are also variations in regulation and supervision standards. In some site, the program managers reported a complicated supervisory control over home visitors who are contracted out through particular agencies, despite being ultimately responsible for the work that they carry out. Not only has this structure created a disconnection between home visitors and program managers at some sites, but it has also created tension between agencies rather than facilitating collaboration.

Objective 2: Community development

Across sites, *KidsFirst* has tried to involve the broader community in program development. To a great extent, the mandate of the program (to build on existing services and form partnerships in the community in the delivery of services) has given the program the space to engage in community development. A program staff member commented that the biggest success of the program in her site is that it has managed to build itself into the fabric of the community.

> *One of the biggest successes of KidsFirst in [this site] that I see is exactly that, the relationship with other agencies and organizations. [We] have come together and … work[ed] together. With all these partnerships, we've just ballooned, [with] different supports and programming for families. And nobody remembers how it start[ed]. [The program] has become so integral with the community. But I'm telling you, it came originally from the way … KidsFirst was set up to work with different agencies and organizations as opposed to being set up as a stand-alone program where we could have our own little island and do what we wanted.*

The success of community development, according to the research participants, is to a great extent contingent on the relationship the program has with other community agencies and organizations, as well as with the community at large. In sites where the program has established good relationships with peer organizations and has managed to mobilize the larger community, it tends to be better supported by the community.

Community development: collaborating with other organizations at the managerial level

A core component of community development is for *KidsFirst* to work collaboratively or in partnership with other agencies. The program at all sites has endeavoured to build relationships and partnerships with other organizations and agencies. One major issue when working with other services providers, which has been reported across sites, is territorialism. A program staff member mentioned:

> *Folks have a notion that, "Well, this is my client. This is our agency's client. We can't share this information," … Actually they're a program client. Supporting people to understand a conceptualized circle of care and what that means in a program like KidsFirst that's multi-faceted, interdisciplinary and has several agencies involved has been a real struggle.*

To combat territorialism, program staff noted that a number of strategies are crucial. Some related that the program needs to make the message clear that *KidsFirst* does not duplicate existing services; instead it bridges gaps in services and is designed to deliver services in partnership with other agencies and organizations. Through bridging gaps in services, the program has contributed to creating a collaborative working environment. Below is an example.

[Sometimes] the pre-K programs … didn't have the supplies they needed because maybe the books in the library were geared to children that were … [So] we started collaborating with the pre-K teachers saying "Okay. What would you need in your classroom that would support children?" and so we started our Early Learning Backpack with them with the ideas the teachers gave us saying "This is what we find some of the children are missing, that they don't have at home that we could link here" so then we started to supply all the pre-K programs with Early Learning Backpacks so that everybody might have access to say a camera, a disposable camera at the beginning of the year so all children could take pictures of their families and bring them to school …

Through *KidsFirsts*' initiative, the preschool teachers from two different school systems were brought together for joint program planning. This initiative started to bloom and blossom as other people and organizations came on board to work as a community to identify areas of work and joint actions for children.

Participants also emphasized the importance of open communication and clearly-defined program roles and boundaries amongst *KidsFirst* and other services providers. In many sites, *KidsFirst* staff members have realized the importance of streamlined services. Some of them have started working on integrating services. For instance, the program in one site has taken the initiative to set up monthly meetings with Social Services to review common families and define which will be the primary agency involved in a case so that services do not overlap.

KidsFirst's collaborative work is not only with other services providers. It is also with other organizations and institutions such as the medical community, the fire department, and business owners. Here are some examples:

[The program staff] often … do work on community development, and they also have worked with the business community to work on different things … One year, they put little cards in the bar to say if you're pregnant, don't drink, and that kind of thing. [KidsFirst] also worked with the thrift store, and [an organization] has supported them with some kind of a fundraising effort. So they've got a lot of businesses providing support to KidsFirst. I think that fosters a sense of cohesion. Also the RCMP ball was held here a year or so ago, and the funds raised from the ball were directed to KidsFirst. So, you know, I think there's quite a lot of community awareness about KidsFirst ... There seems to be a sense of pride in the community related to that and a lot of support from the community.

In some sites, the program has made deliberate efforts to involve people and organizations well respected within the community. Such moves have often made it easier for the program to establish its name in the community. As well, while it is difficult to involve certain key organizations in the program planning process, given the workload of these organizations for instance, *KidsFirst* staff stressed that their invitation has remained open. As a result of the careful and persistent outreach of the program, all *KidsFirst* sites have reportedly received increasing community support.

Community development: through home visitors

Relationship-building is not solely the responsibility of management. According to the participants in some sites, home visitors have also played a crucial role in facilitating understanding and building rapport with other organizations. One staff member related:

> *[Home visitors] do very informal types of community development every time they're out there in the community, meeting our different partnering agencies that we [have] service … coordination agreements with. They're really the ones that interact with them every day, so they do a lot of that community capacity building between our program and other programs … Many times they [may not] recognize how much of a role they play in that partnership by being those informal contacts with those agencies all the time.*

Home visitors are considered the primary link between families and the services. In some sites, they are encouraged to develop their knowledge of the community so that they can better connect the families with the community. A program manager said:

> *[Home visitors] do some community development work … On their work plan, they identify two or three community resources that they need to learn about. And so one way you might learn about it is … to volunteer there ... So they might volunteer there, take a family there and volunteer there and learn about it. And we have some home visitors that have participated with me in terms of community development initiatives, or just because they had the knowledge or expertise, or they have the family that's really struggling with [a particular] kind of need …*

Home visitors have reportedly served as advocates for families. In particular, they have informed other service providers of the barriers facing *KidsFirst* families and encouraged other organizations to make their services more accessible. As a result of their advocacy, in one site, a community agency other than *KidsFirst* has begun to transport families to and from their appointments. In some other sites, community agencies have started to provide childcare, food and transportation during their evening events and have since noted an increase in family attendance. Members of the general public are invited to attend *KidsFirst* programming at other sites as well as volunteers or participants so that their awareness of the program grows.

The impact of the *KidsFirst* program has not only been on the parents in the program but also on the *KidsFirst* staff. Some research participants noted that home visitors have also grown through the program.

> *Well … one of the things that we didn't expect to happen – and it's not a bad thing, it was just unexpected – was [that] we've had a huge impact on our home visitors and their families … As they're being trained, they're learning all kinds of new information. So I think we're seeing a ripple [effect], which is very good … Many of the home visitors come from the neighbourhoods that we're [serving], so I think from a community development perspective, that's been a really unanticipated goody. Many of our home visitors who leave the program are leaving to go back to school. We've got several in faculty of education, in faculty of social work, those kinds of things.*

Community development: engaging and integrating families into the community

Many research participants noted that, through the program, families have started to have a voice, extend their social networks, and integrate more into the community. In some sites, program staff believed that community development is in part about listening to and amplifying voices in the community, including the voices of *KidsFirst* families. Indeed, some families have started to have a stronger voice in some sites due to the program staff's efforts to actively involve families in the program development process. A program staff member mentioned:

With the community development work … there's [a] focus not only on bringing together organizations that serve families but also strategizing and thinking about tapping into the voice of actual community members; of families who've been influenced with their children, to be that voice … [We use] focus groups, and we use a model called Developmental Assets, which is a positive framework for families in communities to look at how children are thriving in your community. So there [are] tools like a workshop that we do with communities. And it's strength-based. And [there are] community meetings that are open to whoever wants to come.

In one site, families are actively involved in streamlining services. For example, a staff member mentioned the following:

One of the most powerful things that KidsFirst does is … community development … It has been very positive to the point now where I can actually see families who say "Well, can I also invite my … worker [from a particular organization] to come in on our meetings?" and so families are actually taking that now and saying, "I would like the two of you to meet with me so we're all doing this the same." So the great turnaround for us is that we're starting to see that the community, the families, are taking this on themselves … pulling agencies together as well. So that's been something that I think has led to the positive agency, inter-agency work that we do.

KidsFirst has held many program activities that are family-centred and community-based and has encouraged families to attend activities in the community. One other commonly-reportedly program outcome is that some families have been able to develop their own social networks and support through attending these activities. In some sites, families have formed their own support groups. Some families have also given back to the community by volunteering in different programs, and a few also took on leadership roles. Some families have started to develop a sense of belonging, and their communities have also become more receptive to them.

In [this particular community], KidsFirst partnered with the town in [a particular program]. And their intent was to get families to take better care of their homes … We had some parents win awards because their yard was improved, and … these are people who would [not] have been connected with this type of thing at all in the past. They … had a clean-up day; there was a huge number of people there … There's a pride in the community from that, and that was a good example of one that I think we've seen an outcome. And they seem to be willing to participate, and the communities seem to be more willing to have them involved.

Objective 3: Identification and retention of families

KidsFirst involves a classification of different participation levels by parents who will then receive a different frequency of home visits. For example, Level-1 generally involves weekly home visits, while Level-2 generally involves visits every second week. Visits decrease to monthly and less frequently at levels 3 and 4. While the expectation is that families enter *KidsFirst* at Level-1 or Level-1P (prenatal) and then progress to levels 2, 3 and 4 as they become more self-sufficient and in less need of *KidsFirst* visits, data suggested that progress in the program is not always straightforward. Rather, many families did not progress beyond level 1.

Figure 1 displays our understanding of *key paths* of progress that families may take in *KidsFirst*. Note that many paths are bidirectional, denoting movement forward and backward. *KidsFirst* is

indeed flexible and accommodating in its service delivery to families, and it appears to retain many families in the program. It is also the case, however, that many families have left the program without necessarily progressing through the levels, suggesting that the program is not retaining families as well as it could. There are of course many reasons for families to leave the program prematurely (some of these mentioned below), but the fact remains that retaining families in the program to the point where they no longer need the services of *KidsFirst* is an important challenge to address.

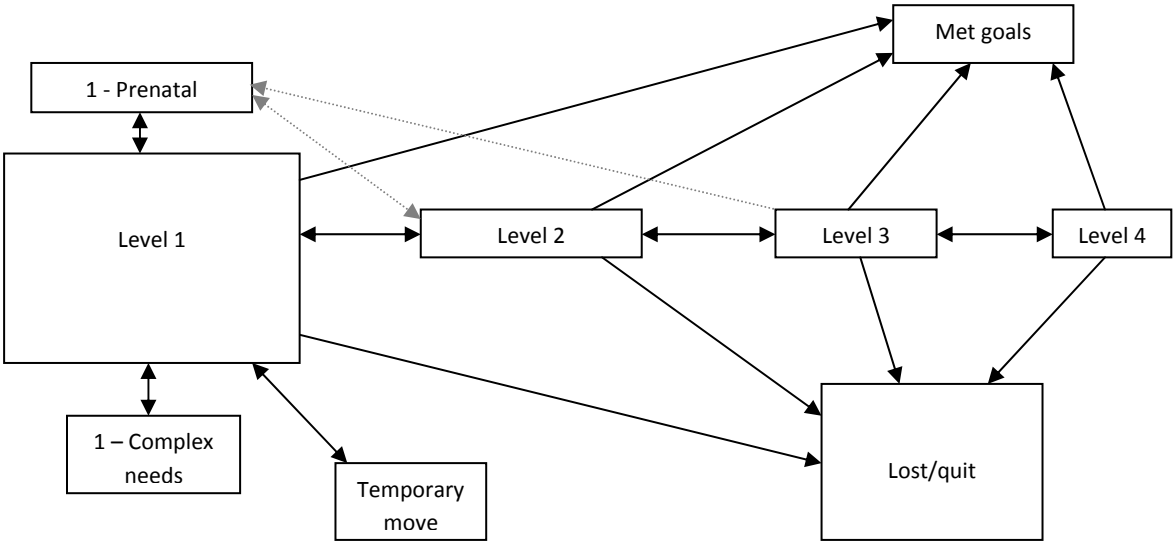

Figure 1: Key paths taken by families in *KidsFirst*

In the qualitative study, many *KidsFirst* staff reported that the program is unable to reach all families that meet the recruitment criteria. Of families that do enter the program, not all stay for as long as they are eligible. According to the participants, three major factors have hindered the program from engaging and retaining families: lack of in-hospital birth screening; suspicion of the program; and transiency. While it is intended to be universal, in-hospital birth screening is not administered universally in practice. Some families are suspicious of *KidsFirst;* they do not understand how it works, and view it as a program provided by one of the traditional ministries of the government with which they have not always had the best experiences. Other families are afraid that *KidsFirst*, like Child Protection, will take away their children. Transiency presents another barrier. Some families often move from house to house in search of stability and security. Other families move back and forth between reserves and municipalities several times in a given year. *KidsFirst* workers and external agencies have a difficult time tracking and providing services to these families.

To help engage and keep families in the program, home visitors have employed various practices. These include creative outreach, program promotion, and building trust and relationships with families. *KidsFirst* staff emphasized the importance of creative outreach in recruiting families. In some sites, home visitors call potential and newly-recruited families after working hours when they know the timing works better for them. At other sites, home visitors attempt to reach families in places they frequently visit. Programs are also organized for fathers in some sites and used as an opportunity for the fathers to learn what *KidsFirst* is and the services it provides. Despite such gender-conscious outreach efforts, however, mostly women are involved in *KidsFirst*.

Different sites permit varying levels of flexibility for home visitors to be creative and persistent in an attempt to recruit new parents. One site has formulated a policy to do whatever it takes for the first three months to engage a family into the program. At another site, community outreach has proven to be very successful. At some sites, home visitors are required to document their time closely, which restricts their ability to reach families using non-traditional methods. *KidsFirst* workers reported a long waiting list for families to enter into the program. Methods used to recruit families include raising awareness about the program through the Aboriginal radio station, print materials, and using the "moccasin telegraph" (informal word of mouth). Home visitors also invite families into the program by offering extra benefits such as pampering on Mother's Day and back-to-school haircuts for parents and children.

Another important *KidsFirst* practice that helps with recruitment is program promotion. In many sites, *KidsFirst* tries to promote itself in the community by organizing and becoming involved in various community events and activities. For instance, some sites have organized theme events, such as African cooking workshops, to connect with families of different cultural backgrounds. Other sites have added multicultural components to their annual Christmas parties, integrated *KidsFirst* programming with Elders' activities, set up booths at community powwows, and placed the *KidsFirst* logo on school kits they helped create.

In some sites, participants identified ideological resistance among selected elderly and rural populations who do not support publicly-funded poverty reduction initiatives and believe that *KidsFirst* is such an initiative. Racism towards Aboriginal individuals has also been identified as a barrier to support, as *KidsFirst* is at times misunderstood as an initiative only for aboriginal people. To tackle these issues, *KidsFirst* has formed strategic partnerships to either enhance their acceptability or to access special populations within the community. For example, in one site the program has partnered with immigrant service agencies and is therefore able to connect with newly-arrived immigrants. Study participants also maintained that, if someone well respected at the community level is involved with *KidsFirst*, the community becomes more receptive to the program.

Objective 4: *Families are satisfied with KidsFirst services*

The families interviewed were generally happy with the services provided by *KidsFirst*. Among other things, they appreciated the program's efforts to address their basic needs, such as food, housing, childcare, and transportation; although some parents from one site suggested that the program staff should communicate explicitly how the program benefits the parents. Many of them thought highly of their home visitors. They considered what they learned from the home visitors useful, and were grateful that home visitors provided emotional support to their families and were loving and caring in their interactions with their children. Some stated that they had gained confidence through their involvement in *KidsFirst*. Others liked the fact that they met new people and made friends through the program. In the interviews with program staff, there were also many stories shared about how some parents started to give back to the community because of their involvement in the program.

Conclusion

The goals of this evaluation were to determine what short-term effects *KidsFirst* has had on participating children, parents, and communities, and, with a close examination of the understandings of participants in the qualitative study, offer possible explanations for positive outcomes.

Generally speaking, *KidsFirst* has been making progress towards achieving its goal of ensuring that children in very vulnerable situations are born and remain healthy. Prenatal enrolment has increased to around 35% of the total enrolment in the past few years. While some might suggest that more progress could be made, this constitutes an improvement from the early years of the program. Suggested activities that may have helped here include creative outreach and program promotion.

While we did not have quantitative data to examine the extent to which parents in the program have addressed their mental health and addictions issues, participants in the qualitative study provided stories and statements suggesting that many parents have received these services because of *KidsFirst*.

Although results from the quantitative study suggest that *KidsFirst* children fared no better than comparison children in birth outcomes and a number of health utilization outcomes, it is likely that the *KidsFirst* group had related risks for which we could not statistically control. As a result, we believe that the fact that the *KidsFirst* group did not fare worse than the comparison group on some of the outcomes may be evidence of *KidsFirst* helping children to maintain, or in some cases improve, their health status.

However, the results suggest that many *KidsFirst* families do not have a family physician or clinic that they go to for concerns and preventive check-ups (i.e. a “medical home”). In the face of this, *KidsFirst* may want to examine the possibility of increasing efforts in this area. Results of the qualitative study suggest that *KidsFirst* has facilitated some children receiving specialized medical attention, which is particularly important given that many *KidsFirst* families would likely not access these services through regular physician referral channels.

Results of both the quantitative and qualitative studies suggest that, while there is more to be done, *KidsFirst* has been working towards ensuring that children in very vulnerable circumstances are supported and nurtured by healthy, well-functioning families. Many families have improved in terms of social supports, food security, expectations of children, parent motivation, interactions, living conditions, housing suitability, and housing stability relatively soon after enrolling in the program. In addition, participants in the qualitative study noted that parents have returned to school and work with the support and assistance of *KidsFirst*. The program has contributed to these positive outcomes by helping parents address their basic needs, delivering the *Growing Great Kids* curriculum and other relevant information to the homes of families, linking families with needed services and connecting families with the communities and exposing them to alternative ways of socialization and interactions.

The results also suggest that some families, particularly those with complex needs, have not benefitted as quickly or to the same extent as families with less complex needs. Participants in the qualitative study noted that the lack of change in families with complex needs may be due to cyclical crises. As well, *KidsFirst*, with its lay home visiting model, may not have the capacity needed to provide specific and sustained professional services that are required for complex-

needs families. It is suggested, therefore, that *KidsFirst* consider having home visitors with specialized training work with families with complex needs.

By regularly screening to ensure that children are achieving developmental milestones, *KidsFirst* has been doing something very important to support and nurture children's ability to learn. Most of those screened were achieving milestones at appropriate ages. However, we are left wondering what happened to those who were not developing normally. While participants in the qualitative study noted that some children are referred for further assessment and possible intervention, we recommend that *KidsFirst* institute mandatory tracking and recording (in KIMS) of children whose ASQ scores suggest possible developmental problems. Regular developmental screening alone is not sufficient to nurture and promote healthy children; mechanisms for intervention and understanding whether these interventions are effective in bringing about positive change are essential parts of any screening activity.

Results of the qualitative study provide some evidence for the achievement of *KidsFirst*'s fourth goal: "Children living in very vulnerable situations are appropriately served by the *KidsFirst* program and support." The program has contributed to changes at the community level. Among others, it has identified and filled in some gaps in services. It has also expanded the capacity of community agencies by collaborating and forging partnership with them. It has helped the community understand the needs of the families and helped change the way services are delivered to the families. Most importantly, the program has fostered a sense of community and integrated families more within the community at large.

Many features and practices of the program have contributed to improvement for families. The resourcefulness of the program turns out to be a blessing in many sites. Although some of the gaps in services, such as affordable housing and accessible transportation, are too large for the program to fully address, *KidsFirst* has been able to assist individual families with their immediate needs. The flexibility of the program has also benefitted the families. Although a major mission of home visiting is to deliver the *Growing Great Kids* curriculum, home visitors have taken a flexible approach during home visits and let family needs take precedence and respond to these needs in a timely manner. Community development turns out to be a crucial principle that the program has tried to implement across sites. Through involving different organizations and the community at large, the program in many sites has helped to integrate services and managed to create more synergy in the community.

In addition to the structural features, based on this evaluation, we believe the success of the program is founded on the work of program staff in building relationships with multiple stakeholders. It is through developing understanding and rapport with other community groups and organizations that the program gained its operational foundations. As well, without home visitors building trust and relationships with families at the individual level, the program would not have worked for the families at all. It is important, according to participants, that the program match home visitors to families so that families feel a connection as soon as possible after enrolling in the program. A program staff member said:

> *Once you have that relationship then trust builds and then [parents] get more confident, more empowered and then they start branching out and doing what they need to, and that all starts with the home visitor.*

Recommendations

The following recommendations follow from our interpretation of the results of our evaluation of *KidsFirst*. While they appear in appropriate places in the quantitative and qualitative reports, all recommendations are listed here along with a reference to *KidsFirst* goals and objectives, allowing readers to refer to some of the relevant results and interpretation found in this summary report.

1. Intake should continue to focus on increasing prenatal recruitment (Goal 1 – Objective 1).

2. Parents should be encouraged to take their children for well-child visits within the first year (Goal 1 – Objective 3).
    - Rates of well-child visits were below those of the comparison group for all benchmarks. *KidsFirst* might consider further partnering with Public Health and/or individual medical clinics in order to improve preventive health practices of *KidsFirst* families.

3. Families with complex needs should be offered a modified (specialized) program involving specialized home visitors (Goal 2).

4. Working with appropriate agencies, increased effort should be made to help families find suitable, affordable and safe housing (Goal 2).

5. A thorough review of all existing data and collection procedures should be undertaken in order to enhance data quality, reliability, completeness, and relevance (Goals 2 & 3).
    - Data on highly relevant measures should be routinely collected using standard and valid measures, e.g., parenting style/knowledge, self-efficacy, home environment, mental health, addictions, and community connectedness.
    - Effort should be made to develop and maintain a longitudinal sample of *KidsFirst* children with complete data from prenatal to age 5.

6. Review KIMS in consultation with KIMS users and adjust it to reflect the needs of all user groups (Goals 2 & 3).
    - Assess and increase the effectiveness of KIMS training.

7. Conduct research that evaluates whether the curriculum (GGK) was presented, received, learned, and implemented (Goal 3).

8. Children screened and referred for additional psycho-educational assessment and/or interventions should be followed and their outcomes recorded (Goal 3).

9. Increase the intensity of services provided for up to one year (Goal 4).

10. Targeted area restrictions should be reviewed and updated or, if deemed appropriate, eliminated (Goal 4).

11. Guidelines on the roles of various agencies and staff members who are involved in *KidsFirst* programming should be better defined (Goal 4 – Objective 2).

12. Community agencies should be encouraged to share information in an effort to streamline case management (Goal 4 – Objective 2).

13. Families should be encouraged to progress through the participation levels within the program, taking into consideration their particular situation (Goal 4 – Objective 3).
    - The meaning of participation levels and their connection to family needs should be clarified.

14. Efforts to retain home visitors should be increased (Goal 4 – Objective 3).
    - Retention of home visitors may be related to retention of families in the program. *KidsFirst* might review the compensation packages to ensure that these reflect the qualifications, and experiences of home visitors as well as the complexity of their work.

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Appendix A: Prenatal enrolment in *KidsFirst* by year

Prenatal enrolment in *KidsFirst* by year								
	Enrolment Year							
	2002	2003	2004	2005	2006	2007	2008	2009 (to Oct.)
First participation record is Level 1-P (%)	11 (15.9%)	19 (13.9%)	72 (17.1%)	221 (28.1%)	212 (36.0%)	184 (34.1%)	184 (34.0%)	186 (40.6%)
Total	69	137	421	786	589	539	541	458

Appendix B: Results for Family Assessment Analyses

Change in risk scores between In-Depth Assessment and On-Going Assessment at 6 months Excluded: those with 'insufficient info' at either measurement			
	Decreased risk score	No change	Increased risk score
Availability of social supports			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-7.0 (p<.001)	224 (41.5)	204 (37.8)	112 (20.7)
Complex Needs sample: count (%) Wilcoxon Z=-2.5 (p=.014)	25 (45.5)	17 (30.9)	13 (23.6)
Non-Complex Needs sample: count (%) Wicoxon Z=-6.5 (p<.001)	198 (40.9)	187 (38.6)	99 (20.5)
Food security			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-7.9 (p<.001)	192 (36.5)	274 (52.1)	60 (11.4)
Complex Needs sample: count (%) Wilcoxon Z=-2.2 (p=.031)	24 (44.4)	19 (35.2)	11 (20.4)
Non-Complex Needs sample: count (%) Wicoxon Z=-7.6 (p<.001)	167 (35.5)	255 (54.1)	49 (10.4)
Expectations of child			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-3.9 (p<.001)	150 (34.1)	198 (45.0)	92 (20.9)
Complex Needs sample: count (%) Wilcoxon Z=-0.3 (p=.781)	16 (37.2)	13 (30.2)	14 (32.6)
Non-Complex Needs sample: count (%) Wicoxon Z=-4.2 (p<.001)	134 (33.8)	185 (46.7)	77 (19.4)
Parent motivation			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-2.2 (p<.027)	135 (28.1)	246 (51.1)	100 (20.8)
Complex Needs sample: count (%) Wilcoxon Z=-1.1 (p=.271)	16 (34.0)	17 (36.2)	14 (29.8)
Non-Complex Needs sample: count (%) Wicoxon Z=-1.9 (p<.057)	118 (27.3)	229 (52.9)	86 (19.9)
Family identity and interactions			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-5.7 (p<.001)	195 (38.8)	215 (42.7)	93 (18.5)
Complex Needs sample: count (%) Wilcoxon Z=-1.2 (p=.247)	23 (47.9)	12 (25.0)	13 (27.1)
Non-Complex Needs sample: count (%) Wicoxon Z=-5.6 (p<.001)	171 (37.7)	203 (44.7)	80 (17.6)
Living conditions			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-3.2 (p<.001)	136 (27.7)	279 (56.8)	76 (15.4)
Complex Needs sample: count (%) Wilcoxon Z=-0.3 (p=.777)	17 (34.7)	20 (40.8)	12 (24.5)
Non-Complex Needs sample: count (%) Wicoxon Z=-3.3 (p<.001)	118 (26.8)	259 (58.7)	64 (14.5)
Housing suitability			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-4.3 (p<.001)	99 (24.1)	268 (65.2)	44 (10.7)
Complex Needs sample: count (%) Wilcoxon Z=-1.1 (p=.251)	11 (34.4)	17 (53.1)	4 (12.5)
Non-Complex Needs sample: count (%) Wicoxon Z=-4.2 (p<.001)	88 (23.3)	250 (66.1)	40 (10.6)
Housing stability			
Total *KidsFirst* sample: count (%) Wilcoxon Z=-7.7 (p<.001)	212 (40.5)	242 (46.2)	70 (13.4)
Complex Needs sample: count (%) Wilcoxon Z=-1.9 (p=.063)	26 (49.1)	15 (28.3)	12 (22.6)
Non-Complex Needs sample: count (%) Wicoxon Z=-7.7 (p<.001)	186 (39.6)	227 (48.3)	57 (12.1)

Appendix C: Ages and Stages Questionnaire (ASQ) results

Sample sizes and % with no failed domains on ASQs: Total *KidsFirst* Saskatchewan data							
	ASQ 6mos	ASQ 12mos	ASQ 18mos	ASQ 24mos	ASQ 36mos	ASQ 48mos	ASQ 60mos
Total							
- sample size	820	842	337	669	487	341	205
- % no fails	91%	89%	62%	74%	74%	74%	73%
Excluded: those with data concerns (n=11) Totals include those without site information							

Appendix D: Descriptives for Ages and Stages Questionnaire (ASQ) data

Means and standard deviations for ASQ data from *KidsFirst*; the US normative sample; Families First, Manitoba; the Manitoba control sample; and Quebec (Dionne et al., 2006)							
Age (months)	Sample*	N	Communication *M(SD)*	Gross Motor *M(SD)*	Fine Motor *M(SD)*	Problem Solving *M(SD)*	Personal-social *M(SD)*
4	KF	478	54.7 (6.8)	54.6 (8.4)	52.9 (9.9)	55.2 (7.8)	54.2 (8.0)
	USA	1380	50.7 (9.0)	55.3 (7.4)	49.2 (11.1)	53.3 (9.2)	51.2 (9.3)
	MB (FF)	1512	53.8 (7.2)	55.7 (7.0)	53.6 (9.4)	56.2 (7.3)	53.6 (7.8)
	MBcontrol	237	53.3 (8.7)	54.9 (7.6)	52.8 (10.1)	55.6 (8.3)	54.0 (8.1)
8	KF	194	53.6 (8.6)	52.8 (10.1)	55.8 (7.4)	55.2 (7.4)	53.3 (8.3)
	USA	1285	53.5 (8.6)	50.4 (13.3)	54.4 (9.0)	51.7 (10.0)	51.2 (10.7)
12	KF	842	47.7 (12.3)	51.4 (13.4)	52.6 (9.6)	50.1 (11.3)	48.2 (12.5)
	USA	1091	42.1 (13.3)	48.6 (15.3)	49.3 (10.3)	48.5 (11.7)	45.4 (12.9)
	MB (FF)	1101	48.6 (11.3)	52.3 (12.4)	53.9 (8.3)	50.6 (10.5)	49.2 (11.1)
	MBcontrol	172	46.3 (12.1)	51.7 (11.5)	53.0 (8.1)	49.3 (10.3)	48.9 (10.5)
24	KF	669	48.2 (14.5)	55.7 (8.3)	52.8 (8.3)	50.7 (9.8)	52.3 (8.8)
	USA	820	49.5 (11.4)	54.3 (9.4)	52.8 (8.3)	51.4 (9.5)	52.3 (8.4)
	MB (FF)	600	49.0 (13.9)	55.1 (8.7)	52.1 (8.3)	50.4 (9.9)	51.5 (9.3)
	MBcontrol	117	49.6 (15.0)	56.1 (6.7)	51.7 (6.2)	51.2 (9.5)	51.6 (9.2)
36	KF	487	48.7 (11.8)	56.0 (7.7)	50.5 (12.8)	50.8 (11.4)	52.9 (8.7)
	USA	512	54.3 (7.8)	54.7 (9.5)	52.1 (11.1)	54.9 (8.2)	53.4 (7.4)
	MB (FF)	344	50.6 (10.8)	55.6 (8.0)	51.1 (11.9)	50 8 (11.2)	52.4 (8.9)
	MBcontrol	75	53.9 (8.2)	56.9 (6.6)	49.7 (11.1)	53.0 (9.7)	55.9 (7.0)
48	KF	341	51.3 (12.5)	55.0 (8.7)	47.7 (13.3)	50.2 (12.5)	52.6 (9.6)
	USA	336	55.9 (8.5)	51.9 (9.6)	43.5 (14.3)	56.7 (8.1)	48.6 (12.6)
	MB (FF)	96	51.8 (11.7)	55.0 (7.5)	47.1 (12.9)	52.3 (10.5)	53.0 (8.2)
	Quebec	126	51.2 (13.1)	54.5 (9.4)	50.0 (11.8)	50.95 (11.6)	53.6 (6.5)
60	KF	205	51.6 (10.7)	55.2 (6.8)	49.1 (13.0)	46.4 (13.1)	54.7 (7.4)
	USA	125	49.9 (9.1)	52.2 (9.8)	51.1 (10.3)	51.4 (10.6)	54.0 (7.3)
	MB (FF)	33	50.8 (9.7)	52.1 (9.2)	50.5 (10.1)	48.3 (9.2)	55.0 (6.3)
	Quebec	82	49.6 (10.3)	51.4 (8.7)	47.2 (12.6)	47.6 (11.1)	55.2 (5.4)

NOTES:

- **KF=*KidsFirst* sample**
- **USA=American norming sample**
- **MB (FF)=Families First sample**
- **MBcontrol=Families First control sample**
- **Quebec=Quebec sample (Dionne et al., 2006)**

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