

OVERVIEW

The findings in this summary are based on the Iowa Barriers to Prenatal Care project. The purpose of this ongoing project is to obtain brief, accurate information about women delivering babies in Iowa hospitals. Specifically, the project seeks to learn about women's experiences getting prenatal or delivery care during their current pregnancy. Other information is included that may be pertinent to health planners or those concerned with the systematic development of health care services.

This project is a cooperative venture among all of Iowa's maternity hospitals, the Statewide Perinatal Program, the University of Northern Iowa Center for Social and Behavioral Research, and the Iowa Department of Public Health. The Robert Wood Johnson Foundation funded the first three years of this project. The current funding is provided by the Iowa Department of Public Health. The co-directors are Dr. Mary Losch, University of Northern Iowa Center for Social and Behavioral Research, and Dr. Herman Hein of the Statewide Perinatal Care Program. The 2002-2003 coordinator for the project was Angela Sikkema.

The questionnaire is distributed to all maternity hospitals in the state of Iowa. Nursing staff, or those responsible for obtaining birth certificate information in the obstetrics unit are responsible for approaching all birth mothers prior to dismissal and requesting their participation in the study. The questionnaire takes approximately 10 minutes to complete. Completed questionnaires are returned to the University of Northern Iowa Center for Social and Behavioral Research for data entry and analysis. Returns are made weekly, biweekly, or monthly depending on the number of births per week in a given hospital. All mothers are recruited for participation, except mothers who are too ill to complete the questionnaire..

This yearly report includes an analysis of large Iowa cities; a mother's age analysis; a multivariate analysis addressing race and ethnicity; and an analysis of a new variable, a mother's feelings of sadness or depression. Unless otherwise noted, all entries reflect percentages. Please note that since percentages were rounded, total values may not equal 100 percent. Data presented are based upon 2002 questionnaires received to date (n=15,781).

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A. Analysis of Selected Variables by City

The following section compares the findings across the following cities for all 2002 data received (n=15,781).

DM = Des Moines (n=2,801)

DV = Davenport (n=733)

SC = Sioux City (n=1,315)

WL = Waterloo (n=800)

CR = Cedar Rapids (n=642)

Mother/Family Characteristics

Overall, the age of the mothers in the cities closely tracked the state data. Sioux City had a higher percentage of young mothers than the other cities. Des Moines had the highest percentage of older mothers (see Table A1).

Table A1. Mother=s Age (%)						
	STATE	DM	DV	SC	WL	CR
< 20 years	09	07	09	12	10	06
20 - 25 years	33	27	32	36	33	30
26 - 30 years	31	32	32	28	33	34
31 - 35 years	19	24	18	17	17	23
> 35 years	08	10	09	07	07	07

The largest percentages of non-white mothers were located in Sioux City (26 percent) and Davenport (16 percent). The Native American/Alaskan (9 percent) and Hispanic (12 percent) populations in Sioux City and the black (8 percent) and Hispanic (5 percent) populations in Davenport accounted for these findings. Data for fathers followed this general geographic pattern, but fathers were more likely than mothers to fall within racial/ethnic categories other than white (see Table A2).

Table A2. Race/Ethnicity (%)						
	STATE	DM	DV	SC	WL	CR
Mother						
White	90	90	84	74	90	94
Black	02	04	08	02	07	02
Asian/Pacific Islander	02	03	02	03	01	02
Am Indian/Alaskan	01	<1	01	09	<1	<1
Hispanic	05	03	05	12	02	02
Father						
White	86	86	81	70	85	89
Black	04	06	12	05	10	07
Asian/Pacific Islander	02	03	02	03	01	02
Am Indian/Alaskan	01	<1	01	07	<1	01
Hispanic	07	04	05	16	04	02

In terms of education, Des Moines and Cedar Rapids had somewhat lower educational attainment than other cities, with 8 percent and 9 percent (respectively) of mothers having less than a high school education (see Table A3).

Table A3. Education (%)						
	STATE	DM	DV	SC	WL	CR
Mother						
< High School	12	08	12	18	11	09
High School	25	22	22	28	31	18
Some College	35	31	35	33	33	42
College	22	30	23	18	18	25
Graduate School	06	08	07	04	07	07
Father						
< High School	12	08	12	20	11	07
High School	33	27	30	31	31	26
Some College	30	27	29	27	33	39
College	18	29	22	17	18	20
Graduate School	07	09	08	04	07	07

Sioux City (38 percent), Davenport (35 percent), and Waterloo (34 percent) had the highest percentage of unmarried mothers. In Des Moines and Cedar Rapids, 75 percent and 77 percent of the mothers, respectively, were married (see Table A4).

Table A4. Marital Status (%)						
	STATE	DM	DV	SC	WL	CR
Single, Never Married	12	11	18	17	17	08
Single, Lives W/ Partner	14	11	13	17	14	11
Married	71	75	65	62	67	77
Divorced	02	01	02	02	02	02
Separated	01	01	02	02	01	02

As shown in Table A5, Waterloo had the highest percentage of mothers who expected the fathers to have less involvement or no involvement in the baby’s life (18 percent).

Table A5. Expected Involvement of Father in Baby’s Life in the Next Year (%)						
	STATE	DM	DV	SC	WL	CR
More involvement Than I will	01	01	01	03	01	01
About the same	84	83	84	82	81	83
Less involvement	12	11	12	10	14	12
No involvement in baby’s life	04	03	04	05	04	03

The majority of mothers reported that they worked full-time at least three months during their pregnancy. There was slight variation across locations with 62 percent of mothers working full-time in Des Moines and 59 percent of mothers working full-time in Cedar Rapids. Fifty-one percent of mothers were working full-time in Davenport. Fathers’ employment mirrored this pattern (see Table A6).

Table A6. Employment Status During Pregnancy (%)						
	STATE	DM	DV	SC	WL	CR
Mother						
Full-Time	55	62	51	54	55	59
Part-Time	19	15	22	15	19	16
Not Employed	26	23	27	31	26	25
Father						
Full-Time	85	89	81	81	82	88
Part-Time	05	04	07	04	04	03
Not Employed	10	08	13	15	15	08

Des Moines respondents reported the highest family income and Sioux City respondents reported the lowest (see Table A7).

Table A7. Family Income (%)						
	STATE	DM	DV	SC	WL	CR
Under \$10,000	14	09	17	19	17	10
\$10,000 - \$19,999	12	09	11	14	12	09
\$20,000 - \$29,999	12	08	11	13	11	08
\$30,000 - \$39,999	13	10	08	11	13	12
\$40,000 - \$49,999	13	10	09	10	14	10
> \$50,000	37	54	43	33	34	52

Current infant feeding practices varied across cities. Sioux City reported only 36 percent of mothers breastfed exclusively compared to Des Moines at 53 percent (see Table A8).

Table A8. Current Feeding Practices (%)						
	STATE	DM	DV	SC	WL	CR
Breast Milk Only	47	53	47	36	46	49
Mostly Breast Milk	10	09	09	13	07	12
Breast Milk Formula	05	05	04	09	04	03
Mostly Formula	03	04	04	03	01	03
Formula Only	35	29	36	39	42	33

Waterloo and Sioux City reported the highest rate of cigarette use during pregnancy (21 percent and 19 percent respectively).

Table A9. Cigarettes Smoked Per Day During Pregnancy (%)						
	STATE	DM	DV	SC	WL	CR
Never Smoked	69	75	72	65	65	73
Quit	12	11	12	17	15	12
1 - 10 Per Day	13	10	09	13	14	11
11 - 20 Per Day	05	04	07	06	06	04
> 20 Per Day	01	<1	<1	<1	01	<1

Mothers in Des Moines and Davenport reported feeling sad or miserable most of the last two weeks at a slightly lower rate (both at 13 percent) than the rest of the state (15 percent).

Table A10. Mother Felt Sad or Miserable (%)						
	STATE	DM	DV	SC	WL	CR
Felt Sad/Miserable	15	13	13	15	15	15

Prenatal Care

Although the first month when care was received varied slightly across cities, over 90 percent of mothers in all cities received prenatal care during the first trimester (see Table A11).

Table A11. Month Pregnant at First Prenatal Care Visit (%)						
	STATE	DM	DV	SC	WL	CR
1	27	25	38	35	20	26
2	45	47	46	42	43	38
3	21	22	11	15	30	30
4	04	03	03	04	04	04
5	02	02	02	02	02	01
6	01	01	01	01	01	<1
7	<1	01	<1	<1	<1	<1
8	<1	<1	<1	<1	<1	<1
9	<1	<1	<1	<1	<1	00

Approximately 95 percent of mothers paid for prenatal care with insurance or Medicaid assistance. The majority of mothers paid for prenatal care visits with insurance (see Table A12).

Table A12. Payment of Prenatal Care (%)						
	STATE	DM	DV	SC	WL	CR
Own or Parents Income	04	03	03	03	04	03
Insurance	66	76	64	58	64	74
Medicaid	29	20	31	35	32	22
Govt. Assistance	01	<1	02	01	<1	01

As shown in Table A13, with the exception of Davenport, all cities showed that 1 percent of mothers reported some difficulty receiving prenatal care. The values in the table are based on a five-point scale of ability to get prenatal care, where “1” represents “very Easy” and “5” represents “very difficult.” More than 90 percent of the mothers reported it “-easy” or “very easy” to receive prenatal care.

Table A13. Ability to Receive Prenatal Care (%)						
	STATE	DM	DV	SC	WL	CR
1	90	90	91	86	89	91
2	07	07	06	08	08	06
3	03	03	03	05	02	02
4	01	01	<1	01	01	01
5	<1	<1	<1	<1	<1	01

B. Analysis of Selected Variables by Age of Mothers

This section outlines crosstabular analyses of selected variables by the age of the mother (n=15,781).

Data in Table B1 reveals, consistent with demographic trends, that younger mothers are more likely than older mothers to report race or ethnicity other than white. More than 90 percent of mothers over age 25 are white while less than 84 percent of those under age 20 are white.

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
White	78	82	89	92	93	91
Black	07	05	03	01	01	02
Asian/Pacific Islander	02	01	02	02	02	03
Amer. Indian/Native Alaskan	04	03	02	01	01	01
Hispanic	10	09	05	04	03	04

Younger mothers were more likely than older mothers to report participation in WIC (see Table B2).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
WIC	72	77	51	22	14	18

Fathers' and mothers' ages were positively related. Fifty-nine percent of mothers under age 18 reported that the fathers of their infants were age 19 or younger (see Table B3).

Table B3. Father's Age by Mother's Age (%)						
	Mothers < 18	Mothers 18 - 19	Mothers 20 - 25	Mothers 26 - 30	Mothers 31 - 35	Mothers > 35
Fathers < 18	23	04	<1	<1	<1	<1
Fathers 18 - 19	36	21	03	<1	<1	<1
Fathers 20 - 25	34	63	51	09	02	01
Fathers 26 - 30	03	09	33	50	14	05
Fathers 31 - 35	02	03	09	31	53	20
Fathers > 35	01	01	04	10	32	73

Younger mothers were more likely to report lower household incomes than were older mothers (see Table B4).

Table B4. Income by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
< \$10,000	50	50	20	05	03	04
\$10,000 - \$19,999	18	25	19	07	05	07
\$20,000 - \$29,999	11	12	18	11	07	08
\$30,000 - \$39,999	07	07	15	14	12	14
\$40,000 - \$49,999	07	02	11	16	14	12
> \$50,000	06	04	16	47	59	56

Although more than 88 percent of all mothers reported that they were very satisfied with their hospital care, satisfaction with hospital care was positively related to age (see Table B5).

Table B5. Satisfaction with Hospital Care by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Very Satisfied	88	90	92	94	94	95
Somewhat Satisfied	11	09	07	06	05	05
Somewhat Dissatisfied	02	01	01	<1	<1	<1
Very Dissatisfied	<1	<1	<1	01	<1	01

Consistent with income patterns, younger mothers were more likely than older mothers to report paying their hospital fees with Medicaid assistance. Older mothers were more likely to report insurance coverage (see Table B6).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Your Own or Other Family Member's Income	06	01	02	02	03	04
Insurance	24	19	50	80	87	84
Medicaid or Title 19	69	77	46	17	10	11
Other Government Assistance	01	02	01	01	<1	01
Other (including Adoption, Housestaff Medical Benefits, Armed Forces, & Indian Health Service)	01	<1	01	<1	<1	01

Mothers in the youngest age group were least likely to report that their babies were expected to go home with them and along with the oldest mothers, more likely to report that their babies were in intensive care (see Table B7).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Yes	91	93	95	95	95	94
No, Intensive Care	05	04	04	04	04	05
No, Another Hospital	01	02	01	01	01	01
No, Adopted	02	01	<1	<1	<1	<1

Younger mothers were much more likely than older ones to choose formula feeding instead of breastfeeding. Twenty-seven percent of those under age 18 chose breastfeeding while the majority of those over age 25 chose exclusive breastfeeding (see Table B8).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Breast Milk Only	27	31	42	52	57	54
Mostly Breast Milk	07	12	10	10	11	13
Breast Milk = Formula	08	07	05	04	04	05
Mostly Formula	04	03	03	02	02	02
Formula Only	54	48	38	31	26	26

The majority of mothers at all ages reported that they planned to place their babies on their backs as the preferred sleeping position. However, younger mothers were somewhat less likely to choose this position and were more likely to indicate that they did not know what position they preferred (see Table B9).

Table B9. Baby's Sleep Position by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Baby Lying on Stomach	02	01	01	01	01	02
Baby Lying on Side	12	13	16	17	15	19
Baby Lying on Back	73	71	75	78	81	76
No Preference	03	04	04	02	02	01
Don't Know	11	10	04	03	02	02

Differences in intention of pregnancy varied based on the age of the mother. Fourteen percent of mothers in the less than 18 age group indicated that they intended to become pregnant. More than three-quarters of those over age 25 indicated that they intended to become pregnant (see Table B10).

Table B10. Pregnancy Intended by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Pregnancy Intended	14	26	52	76	79	73

Mothers in the younger age groups were more likely to discover their pregnancy in the second or third trimesters than those in the older age groups (see Table B11).

Table B11. Trimester Discovered Pregnancy by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
First Trimester	87	93	96	98	98	97
Second Trimester	12	06	04	02	01	02
Third Trimester	01	01	<1	<1	<1	01

Younger mothers (under age 25) were twice as likely to report smoking during pregnancy compared to older mothers (see Table B12).

Table B12. Cigarettes Smoked During Pregnancy by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Never Smoked	51	41	56	77	84	83
Quit Smoking	24	26	17	09	06	05
1 - 10 per Day	20	27	19	08	06	06
11 - 20 per Day	04	06	07	05	04	05
> 20 per Day	01	<1	01	01	<1	02

Consistent with their higher rates of smoking, higher percentages of younger mothers reported that they were warned by their health care provider about the dangers of smoking. Slightly higher percentages of younger mothers also reported that they were not warned by their providers about smoking during pregnancy (see Table B13).

Table B13. Mothers Warned by Provider of Cigarette Smoking by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Yes	25	35	29	15	11	14
No	04	04	03	02	01	02
Did Not Smoke	71	61	69	84	87	85

Older mothers were more likely than younger mothers to report drinking during pregnancy (see Table B14).

Table B14. Alcohol Consumed During Pregnancy by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Did Not Drink	97	94	95	94	91	88
< 1 per Month	02	05	04	05	07	09
1-3 per Month	01	01	01	01	02	02
> 3 per Month	<1	01	<1	<1	01	01

Receipt of at least one prenatal care visit was very high across all of the age groups with younger groups only slightly less likely to report receiving care (see Table B15).

Table B15. Those Who Received Some Prenatal Care by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Yes	96	97	98	99	99	99

Younger mothers were less likely than older mothers to have their first prenatal visit during their first trimester, but were less likely to wait several weeks before being seen (see Tables B16-B17).

Table B16. Trimester of First Prenatal Visit by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
First Trimester	74	85	91	96	96	93
Second Trimester	23	13	08	04	04	06
Third Trimester	03	01	01	01	01	01

Table B17. Wait Time Before First Appointment by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
< 2 Weeks	74	68	59	53	51	55
2 - 4 Weeks	21	28	33	36	37	35
> Month	05	05	08	11	12	10

Younger mothers were more likely than older mothers to report being refused care during their pregnancy (see Table B18).

Table B18. Mothers Who Were Refused Care During Pregnancy by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Yes	02	02	02	01	01	01

Younger mothers were less likely than older ones to report that getting prenatal care was very easy (see Table B19).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Very Easy	79	81	86	92	93	93
2	13	12	09	05	05	05
3	06	06	03	02	01	02
4	01	01	01	01	<1	<1
Very Difficult	01	01	<1	<1	<1	<1

Older mothers were slightly more likely than younger mothers to receive more than one prenatal care visit (see Tale B20).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Yes	95	97	98	99	99	99

Younger mothers were more likely than older ones to report that they received care at a Maternal Health Center. Older mothers were more likely to report that they had received care from a private doctor (see Table B21).

	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Private Doctor Office	35	36	47	61	68	72
County or City Health Dept	07	07	04	01	01	01
Maternal Health Center	21	18	14	09	07	07
Clinic at Work or School	<1	<1	01	01	<1	<1
Clinic in a Hospital	32	36	33	27	22	19
Emergency room at Hospital	<1	01	<1	<1	<1	<1
Other	04	02	02	01	01	01
Florence Crittenden Home	<1	<1	<1	<1	<1	<1

Although at least 86 percent of all groups reported being very satisfied with their prenatal care, satisfaction with prenatal care was higher among older mothers than among younger mothers (see Table B22).

Table B22. Satisfaction with Prenatal Care by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
Very Satisfied	86	86	89	92	94	94
Somewhat Satisfied	14	12	09	07	06	06
Somewhat Dissatisfied	01	01	01	<1	01	<1
Very Dissatisfied	<1	01	<1	<1	<1	<1

Younger mothers were more likely than older mothers to report having very few prenatal care visits, and to report having more than 16 visits (see Table B23).

Table B23. Number of Visits to Prenatal Care Place by Mother's Age (%)						
	< 18	18 - 19	20 - 25	26 - 30	31 - 35	> 35
1 - 4	04	02	02	01	01	01
5 - 8	15	13	08	06	06	07
9 - 12	36	39	43	47	51	50
13 - 16	31	29	35	36	34	32
> 16	15	17	13	10	09	10

C. Analysis of Selected Variables by Feelings of Sadness or Depression

This section outlines crosstabular analyses of selected variables by feelings of sadness or depression felt by the mother during the last two weeks of pregnancy.

Data in Table C1 reveals that younger mothers are more likely than older mothers to report feeling sad or miserable during the last two weeks of their pregnancy.

Table C1. Feelings of Sadness or Depression by Mother's Age	
Age	% Sad or Miserable
<18	17
18-19	20
20-25	17
26-30	14
31-35	13
>35	12

Mothers with less education reported feeling more sad or miserable than the mothers with higher education levels (see Table C2).

Table C2. Feelings of Sadness and Depression by Mother's Education	
Education	% Sad or Miserable
<HS	21
HS	18
Some College	15
College	09
Graduate School	08

Mothers within the black, Native American, or Native Alaskan races reported more feelings of sadness or depression than other racial or ethnic backgrounds. Those with white or Hispanic backgrounds reported the least amount of sadness or depression (Table C3).

Table C3. Feelings of Sadness or Depression by Race/Ethnicity	
Race/Ethnicity	% Sad or Miserable
White	14
Black	24
Asian or Pacific Islander	15
Native American or Native Alaskan	23
Hispanic	14

A much smaller percentage of married mothers were sad or miserable than were mothers who were not married (see Table C4).

Table C4. Feelings of Sadness or Depression by Marital Status	
Marital Status	% Sad or Miserable
Single, never married	21
Single, living with partner	19
Married	12
Widow	50
Divorced	21
Separated	24

Mothers with lower family income levels reported more sad and miserable feelings than the mothers with higher family income levels (see Table C5).

Table C5. Feelings of Sadness or Depression by Family Income	
Income	% Sad or Miserable
<\$10,000	23
\$10-19,999	18
\$20-29,999	17
\$30-39,999	14
\$40-49,999	12
>\$50,000	10

According to Table C6, feelings of sadness or depression had a positive correlation with the number of children born before. The mothers with no children had the least amount of sadness, and those with two or more children reported the most feelings of sadness.

Table C6. Feelings of Sadness or Depression by Giving Birth to Other Children	
Other Children	% Sad or Miserable
None	13
Yes, given birth to 1 other child	15
Yes, given birth to 2 or more children	16

The lower the amount of involvement the father was expected to have with the child, the higher the percentage of mothers reporting feeling sad and miserable (see Table C7).

Table C7. Feelings of Sadness or Depression by Involvement of Father	
Involvement of Father	% Sad or Miserable
More involvement than I will	16
About the same involvement as I will	14
Less involvement than I will	18
No involvement	23

Mothers who did not smoke or quit smoking during their pregnancy reported the lowest amount of sad or miserable feelings. The mothers who smoked reported a significant amount of more sad and miserable feelings during their pregnancies (see Table C8).

Table C8. Feelings of Sadness or Depression by Cigarettes Smoked per Day	
Cigarettes	% Sad or Miserable
Never Smoked	12
Quit	18
1-10 Cigarettes	44
11-20 Cigarettes	49
>20 Cigarettes	42

Data in Table C9 shows another positive association between sad and miserable feelings with the amount of alcohol consumed during the pregnancy. The more alcohol was consumed, the more sad and miserable feelings were experienced.

Table C9. Feelings of Sadness or Depression by Alcohol Consumed per Month	
Amount of Alcohol	% Sad or Miserable
Did not drink	14
<1 per month	18
1-3 per month	18
>3 per month	19

Mothers who did not intend to become pregnant report more sad and miserable feelings than those who wanted to become pregnant (see Table C10).

Table C10. Feelings of Sadness or Depression by Intention to Get Pregnant	
Intended	% Sad or Miserable
Intended	12
Unintended	20

Those with no prenatal care during their pregnancies were more likely to report feelings of sadness or depression than those who received care (see Table C11).

Table C11. Feelings of Sadness or Depression by Receipt of Prenatal Care	
Amount of Prenatal Care	% Sad or Miserable
No Prenatal Care	22
One or More Visits	14

Data in Table C12 and C13 shows that mothers who were employed outside the home full time during and after their pregnancy were less likely to report sad or miserable feeling than those who worked part time or did not work at all. However, mothers who did not work after the birth were less likely to report sad or depressed moods.

Table C12. Feelings of Sadness or Depression by Employment Outside the Home During Pregnancy	
Employment Outside the Home During Pregnancy	% Sad or Miserable
Full Time	14
Part Time	15
Not Employed	16

Table C13. Feelings of Sadness or Depression by Employment Outside the Home After the Birth	
Employment Outside the Home After Birth	% Sad or Miserable
Full Time	14
Part Time	16
Not Employed	13

D. Trend Analysis of Barriers Project 1997 - 2002

Demographics

All percentages in this section reflect statewide proportions. Overall, the age of mothers increased slightly in 1998 but the age distribution has more recently returned to the earlier patterns for age (see Table D1).

Table D1. Mother's Age						
	1997	1998	1999	2000	2001	2002
< 20 years	08	05	08	08	10	09
20-25 years	29	28	31	32	34	33
26-30 years	32	32	31	30	30	31
31-35 years	22	24	21	20	20	19
> 35 years	09	11	10	09	07	08

The number of other children has remained basically the same over the last six years. The 2000 and 2001 data indicates a small increase in the number of mothers with other children (see Table D2).

Table D2. Other Children						
	1997	1998	1999	2000	2001	2002
No	37	37	37	36	36	36
One other child	35	36	35	36	36	36
2 or more children	27	27	28	29	29	29

Percent of mothers receiving prenatal care during their last pregnancy has remained at about 96 percent over the time period (see Table D3).

Table D3. Prenatal Care Last Pregnancy						
	1997	1998	1999	2000	2001	2002
Yes	96	96	96	97	97	96
No	04	04	04	04	04	04

A slight increase in education level occurred between 1997 and 1998 with 35 percent of mothers having at least some college education in 1998 compared to 31 percent in 1997. The father's education level has also showed increases since 1997. Between 1997 and 2002 fathers with at least some college level of education has increased from 25 percent to 30 percent.

Table D4. Education						
	1997	1998	1999	2000	2001	2002
Mother						
< High School	12	10	11	12	12	12
High School	31	27	26	27	26	25
Some College	31	35	34	34	35	35
College	20	22	23	21	21	22
Graduate School	06	06	06	06	06	06
Father						
< High School	10	10	10	12	12	12
High School	36	36	35	36	34	33
Some College	25	26	26	27	30	30
College	18	17	19	16	17	18
Graduate School	09	09	09	08	07	07
Not Sure	02	02	02	02	<1	<1

Consistent with population changes in the state, racial and ethnic backgrounds of respondents have become more diverse during the last six years, with the highest increase in Hispanic mothers. (see Table D5).

Table D5. Race/Ethnicity						
	1997	1998	1999	2000	2001	2002
Mother						
White	92	92	92	91	91	90
African American	02	02	02	02	02	02
Asian/Pacific Islander	02	02	02	02	01	02
Native American	01	01	01	01	01	01
Hispanic	03	03	03	04	04	05
Father						
White	89	88	89	88	87	86
African American	05	04	04	04	04	04
Asian/Pacific Islander	01	02	02	02	02	02
Native American	01	01	01	01	01	01
Hispanic	04	05	05	06	06	07

Mothers' full-time employment plans following pregnancy have increased somewhat from 47 percent in 1997 to 50 percent in 2002. Fathers' employment status has fluctuated slightly across the years (see Table D6).

Table D6. Employment Plans (after Pregnancy)						
	1997	1998	1999	2000	2001	2002
Mother						
Full Time	47	48	48	49	49	50
Part Time	28	27	27	27	26	26
Not Employed	25	25	25	24	25	24
Father's Status						
Full Time	88	89	89	87	86	85
Part Time	04	04	04	04	04	05
Not Employed	08	07	07	09	10	10

Marital status has changed across the years, with a decrease in married mothers from 74 percent in 1997 to 71 percent in 2002. There is an increase of single mothers living with their partners (see Table D7).

Table D7. Marital Status						
	1997	1998	1999	2000	2001	2002
Single, Never Married	12	11	12	12	12	12
Single, Lives W/ Partner	11	12	12	13	14	14
Married	74	73	73	71	71	71
Divorced	02	02	02	02	02	02
Separated	01	01	01	01	01	01

Participation in the WIC has increased slightly over the years from 34 percent to 35 percent (see Table D8).

Table D8. WIC Participation						
	1997	1998	1999	2000	2001	2002
Yes	34	34	33	35	35	35

Family income has increased somewhat among respondents with the biggest increase occurring in the over \$50,000 income bracket from 24 percent in 1997 to 36 percent in 2002. This may reflect actual increases in family income but may, in part, result from sampling bias across hospitals (see Table D9).

Table D9. Family Income						
	1997	1998	1999	2000	2001	2002
Under \$10,000	15	13	13	13	13	14
\$10,000 - \$19,999	14	14	13	13	12	12
\$20,000 - \$29,999	16	16	15	15	13	12
\$30,000 - \$39,999	16	17	16	16	15	13
\$40,000 - \$49,999	15	15	14	15	14	13
> \$50,000	24	26	30	28	32	36

Hospital Care

Although satisfaction with hospital care was very high across all six years, with the overwhelming majority of mothers reporting that they were very satisfied, nearly one percent of respondents indicated that they were at least somewhat dissatisfied in each of the last six years (see Table D10).

Table D10. Satisfaction with Hospital Care						
	1997	1998	1999	2000	2001	2002
Very Satisfied	91	93	92	93	93	93
Somewhat Satisfied	08	06	07	06	06	07
Somewhat Dissatisfied	01	01	01	01	<1	<1
Very Dissatisfied	<1	<1	<1	<1	<1	<1

Payment of hospital fees remained fairly consistent with insurance being reported by about two-thirds of participants across all six years. Reports of the use of Medicaid increased slightly in 2001 and 2002 (see Table D11).

D11. Payment of Hospital Fees							
	1997	1998	1999	2000		2001	2002
Own Income	04	04	04	04	Your Own or Other Family Income*	03	03
Parents, etc.	<1	<1	<1	<1			
Insurance	67	68	69	67	Insurance	66	66
Medicaid	28	27	26	28	Medicaid	30	30
Govt. Assistance	01	01	01	01	Govt. Assistance	01	01

*Analysis examined different categories beginning in 2001.

The travel time from home to the hospital remained consistent with more than 80 percent of mothers traveling 30 minutes or less (see Table D12).

Table D12. Minutes from Home to Hospital						
	1997	1998	1999	2000	2001	2002
< 15 Minutes	45	44	43	47	46	45
15 - 30	39	40	41	38	39	40
31 - 60	14	14	14	13	13	13
61 - 90	02	01	01	01	01	01
91 - 120	01	01	01	<1	<1	01
> 120	<1	<1	<1	<1	<1	<1

Prenatal Experiences and Care

The most widely used form of birth control of mothers who desired pregnancy was the birth control pill between 1997 and 2001. The 2002 data shows a significant increase in the use of condoms (9 percent). Most mothers chose to use no birth control (82 percent) (see Table D13).

Table D13. Birth Control Used at Conception (Includes Mothers who Desired Pregnancy)						
	1997	1998	1999	2000	2001	2002
No Birth Control Used	85	84	81	81	83	82
Birth Control Pills	07	07	08	08	08	<1
Diaphragm	<1	<1	<1	<1	<1	05
Spermicidal Foam/Insert	01	01	01	01	01	02
Condom	05	06	06	06	06	09
Rhythm Method	02	02	02	02	02	01
Other	<1	01	01	01	01	01

In 1997, 2000, and 2001 the desirability of pregnancy was slightly lower (63 percent) compared to the other years (64-65 percent) (see Table D14).

Table D14. Desirability of Pregnancy						
	1997	1998	1999	2000	2001	2002
Yes and Earlier	31	32	32	31	31	31
Yes, at that Time	32	33	33	32	32	33
No, But in Future	32	31	31	32	33	32
No, Nor in Future	04	04	04	05	05	05

In 1997 and 1998, the use of birth control has decreased within those categories of women who did not desire pregnancy. The proportion increased in 1999, but dropped off again in 2000 (see Table D15-D20).

Table D15. Desirability of Pregnancy by Birth Control Use for 1997		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	03	97
Yes, at that Time	05	95
No, But in Future	35	65
No, Nor in Future	45	55

Table D16. Desirability of Pregnancy by Birth Control Use for 1998		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	03	97
Yes, at that Time	06	94
No, But in Future	37	63
No, Nor in Future	43	57

Table D17. Desirability of Pregnancy by Birth Control Use for 1999		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	03	97
Yes, at that Time	06	94
No, But in Future	39	63
No, Nor in Future	50	52

Table D18. Desirability of Pregnancy by Birth Control Use for 2000		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	04	96
Yes, at that Time	05	95
No, But in Future	36	64
No, Nor in Future	45	55

Table D19. Desirability of Pregnancy by Birth Control Use for 2001		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	04	97
Yes, at that Time	06	95
No, But in Future	37	63
No, Nor in Future	46	54

Table D20. Desirability of Pregnancy by Birth Control Use for 2002		
	Birth Control Used	No Birth Control Used
Yes, and Earlier	06	94
Yes, at that Time	06	93
No, But in Future	39	61
No, Nor in Future	46	54

Alcohol consumption remained constant with more than 90 percent of mothers reporting that they did not drink alcohol during their pregnancy. This percentage jumped to 94 percent in 2000 but returned to 93 percent in 2001 and 2002 (see Table D21).

Table D21. Alcohol Consumed During Pregnancy						
	1997	1998	1999	2000	2001	2002
1 to 3 Drinks/Month	01	01	01	01	01	01
< 1 Drink/Month	06	06	06	05	05	05
Did Not Drink Alcohol	92	92	92	94	93	93

More than 80 percent of mothers reported that they did not smoke during their pregnancy. The data from each of the last six years indicates that about seven percent of mothers smoked 11 or more cigarettes per day (see Table D22).

D22. Cigarettes Smoked During Pregnancy							
	1997	1998		1999	2000	2001	2002
0 Per Day	81	81	Never Smoked*	69	69	68	69
1 - 10	12	12	Quit	12	12	12	12
11 - 20	06	06	1-10 Per Day	12	13	13	13
> 20	01	01	11 - 20	06	06	06	05
			> 20	01	01	01	01

*Analysis examined different categories beginning in 1999.

In 1997, a question was added to assess whether or not mothers recalled being warned by their health care provider about the dangers of smoking during pregnancy. About 20-22 percent of mothers reported that their health care provider warned them about smoking during pregnancy (see Table D23).

Table D23. Warned by Provider about Smoking						
	1997	1998	1999	2000	2001	2002
Yes	22	22	21	22	22	20
No	02	02	02	02	02	02
Did Not Smoke	76	76	77	76	76	78

Mothers' preferred sleep position has changed substantially during the past six years from a "side" preference of 63 percent in 1997 to a "back" preference of 77 percent in 2002 (see Table D24).

Table D24. Preferred Sleep Position for Baby						
	1997	1998	1999	2000	2001	2002
Stomach	01	01	01	01	01	01
Side	63	55	42	29	19	16
Back	30	38	51	65	75	77
No Preference	02	03	02	02	02	02
Don't Know	03	04	04	04	03	04

Ninety-eight to 99 percent of mothers reported at least one prenatal care visit in each year (see Table D25).

Table D25. Received Prenatal Care						
	1997	1998	1999	2000	2001	2002
Yes	98	98	98	99	99	99

During the last six years, over 90percent of the mothers' first prenatal care visits occurred during their first trimester (see Table D26).

Table D26. Months Pregnant At 1st Prenatal Care Visit						
	1997	1998	1999	2000	2001	2002
1st Month	24	24	24	26	27	27
2nd Month	44	44	45	45	45	45
3rd Month	24	23	23	21	20	21
4th Month	05	05	05	04	04	04
5th Month	02	02	02	02	02	02
6th Month	01	01	01	01	01	01
7th Month	01	01	01	01	01	<1

Table D26. Months Pregnant At 1st Prenatal Care Visit						
	1997	1998	1999	2000	2001	2002
8th Month	<1	<1	<1	<1	<1	<1
9th Month	<1	<1	<1	<1	<1	<1

The mostly widely reported method of payment for prenatal care during the six years was insurance (67-70 percent) with Medicaid being the second most likely form of payment (24-29 percent) (see Table D27).

D27. Payment of Prenatal Care							
	1997	1998	1999	2000		2001	2002
Own Income	05	05	04	04	Your Own or Other Family Income*	04	04
Parents, etc.	01	01	01	01			
Insurance	67	68	70	67	Insurance	67	66
Medicaid	27	26	24	27	Medicaid	28	29
Govt. Assistance	01	01	01		Govt. Assistance	01	01

*Analysis examined different categories beginning in 2001.

The percentage of mothers reporting that they visited a private doctor for their prenatal care has dropped during the last six years, and the percentage reporting that they went to a clinic in a hospital has increased up until 2001. In 2002 that trend has shifted back slightly again (see Table D28).

Table D28. Place of Prenatal Care						
	1997	1998	1999	2000	2001	2002
Private Doctor	62	61	59	54	55	57
Health Department	02	02	02	03	03	03
Maternal Health Center	10	10	10	10	11	11
Clinic at Work or School	01	01	01	01	01	<1
Clinic in Hospital	24	25	26	32	31	28
Hospitalized until Delivery	01	<1	01	<1	<1	<1

Satisfaction with prenatal care was very high throughout the years with more than 90 percent of the mothers reporting that they were very satisfied (see Table D29).

Table D29. Satisfaction with Prenatal Care						
	1997	1998	1999	2000	2001	2002
Very Satisfied	91	91	92	92	91	91
Somewhat Satisfied	08	08	07	08	08	08
Somewhat Dissatisfied	01	01	01	01	01	01
Very Dissatisfied	<1	<1	<1	<1	<1	<1

The number of reported prenatal care visits has remained consistent across time with the majority of mothers visiting their place of prenatal care 9-16 times in each year (see Table D30).

Table D30. Times Visited for Prenatal Care						
	1997	1998	1999	2000	2001	2002
1 - 4 times	03	03	02	03	02	01
5 - 8 times	09	08	09	09	07	07
9 - 12 times	45	46	43	45	46	46
13-16 times	32	32	34	32	34	34
> 16 times	11	11	12	11	11	11

The majority of mothers reported that they were within 30 minutes of their prenatal care provider (see Table D31).

Table D31. Travel Time to Place of Prenatal Care						
	1997	1998	1999	2000	2001	2002
< 15 Min	45	44	43	45	43	41
15 - 30	41	42	42	40	44	45
31 - 60	12	13	13	13	12	12
61 - 90	01	01	01	01	01	01
91 - 120	01	<1	01	<1	<1	<1
> 120	<1	<1	01	<1	<1	<1

Percentages of exclusive breastfeeding between 1997 and 2002 have fluctuated slightly with the peak being in 1999 at 50 percent. The 2002 data for breastfeeding are slightly lower than the last two years.

Table D32. Method for Feeding Baby						
	1997	1998	1999	2000	2001	2002
Now						
Breast Milk Only	48	49	50	48	49	47
Mostly Breast Milk	09	09	09	10	09	10
Breast Milk=Formula	03	04	04	04	04	05
Mostly Formula	02	02	02	02	02	03
Formula Only	38	37	35	37	35	35
In Six Weeks						
Breast Milk Only	30	33	34	33	35	34
Mostly Breast Milk	17	16	17	16	15	16
Breast Milk=Formula	08	08	08	08	08	09
Mostly Formula	05	05	04	05	04	04
Formula Only	40	38	37	38	37	37

Difficulty obtaining prenatal care remained stable throughout the years with the overwhelming majority of mothers reporting that obtaining care was easy (see Table D33).

D33. Difficulty Getting Prenatal Care						
	1997	1998	1999	2000	2001	2002
Very Easy*	49	88	88	89	89	90
2	48	08	08	08	07	07
3	02	03	03	03	03	03
4	01	01	01	01	01	01
Very Difficult	<1	<1	<1	<1	<1	<1

* Scale was changed from a dichotomous scale to a Likert scale during 1997.