Update on the Healthy Start National Evaluation

Secretary's Advisory Committee on Infant Mortality Meeting

January 24, 2008

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Outline of Presentation

- Evaluation Overview
- Site visit methods and findings
- Participant survey methods and findings
- Use of performance measures
- Lessons learned from the Healthy Start evaluation

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Evaluation Overview

- **The evaluation is a four-year effort**
  - Phase I was focused on the full universe of grantees
  - Phase II is a more in-depth evaluation of a subset of grantees
- **The evaluation is of the national program not of individual grantee performance**
- **Stakeholder inputs are critical to the evaluation effort**

Participatory Evaluation Approach with Key Stakeholders

- Continued input and feedback from a variety of stakeholders during Phases I and II
- Healthy Start grantees
  - Input and feedback on findings from Phase I
  - Information from all sites will be used in preparing the Phase II report (performance measures)
- Healthy Start federal program staff
- Healthy Start Panel (HSP)
- SACIM

Evaluation Products

- **Phase 1**
  - Chartbook
  - Benchmarks Paper
- **Phase 2**
  - Two papers submitted to MCH Journal

Presentations in 2007

- Association of Maternal and Child Health Programs
- AcademyHealth
- Healthy Start Grantee Meeting
- 2nd Preconception Summit
- American Public Health Association (2 papers)
- MCH Epidemiology

Phase II Evaluation Goals

- To obtain a more in-depth understanding of a small group of grantee project models
- To determine the methods that grantees are using to meet Healthy Start program objectives, with a particular focus on efforts that influence the system of care in the community
- To learn about Healthy Start from the participant's perspective
- To reflect input and advice from HRSA, SACIM, and HSP

Phase II Evaluation Approach

Case studies with 8 grantees include two components:

- **Site visits with individual and group interviews**
- **Survey of Healthy Start participants**

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Grantee Selection Criteria: First Stage

- **Grantees must have completed the National Survey of Healthy Start Programs**

AND

- **They must have implemented all nine required components of the Healthy Start program**

AND

- **They must track referrals to providers within and outside Healthy Start**

AND

- **They must maintain electronic records to facilitate access to data for the participant survey**

Grantee Selection Criteria: Second Stage

- From the 26 eligible grantees, 8 were selected to reflect the following grantee characteristics:
  - Four U.S. census regions
  - Mix of urban and rural sites
  - Different funding levels
  - Range in size, according to the number of live births in 2004
  - At least one grantee had to be relatively close to the United States/Mexico border, if not considered an official Border grantee
  - At least one site had to serve a predominantly indigenous population

Grantees Selected for Phase II Evaluation

- Fresno, California
- Tallahassee, Florida
- Des Moines, Iowa
- East Baton Rouge, Louisiana
- Worcester, Massachusetts
- Las Cruces, New Mexico
- Pittsburgh, Pennsylvania
- Lac du Flambeau, Wisconsin

Subset not intended to be "nationally representative"

Site Visits

Goals of Site Visits

- To gain an understanding of how projects are designed and implemented to improve perinatal outcomes
- To determine which program features grantees associate with success
- To explore how grantees implement culturally competent services/systems

Goals of Site Visits

- To understand how grantees obtain and incorporate community voice
- To ascertain grantees' perceptions of their component strengths, accomplishments, and challenges
- To assess the links between services, systems, and outcomes – test logic model

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Site Visit Methods

- **In-depth, individual interviews with project director, case managers, local evaluator, clinicians, consortium members, and other stakeholders**
- **Group interview with outreach/lay workers**
- **Two exercises**
  - Relational mapping with project director
  - Client flow graphing with case managers/outreach/lay workers
- **Document review**

Individual Site Visit Reports

- Site summary reports completed for each project (Spring/Summer 2006)
- Summary report contents:
  - Project history and background
  - Detailed project description of components and major features
  - Accomplishments and challenges
  - Promising practices

Cross–site Analysis

- Produced descriptive characteristics of 8 projects in 11 major topic areas
- Examined self-reported accomplishments and challenges
- Analyzed responses to mapping exercise with project directors

Findings

- **Major topic areas**
  - 9 required components plus cultural competence and community voice
  - Grantee reported achievements
  - Project Directors' perception of most influential components
  - Challenges
- **Cross-site conclusions**

Outreach Findings

- Respondents identified outreach as one of the cornerstones of their projects
- Paraprofessionals play a critical role in conducting outreach
- Multiple strategies are used including visits to hospitals and clinics, presentations at health fairs, neighborhood canvassing
- Incentives such as tangible goods and transportation help retain participants

Case Management Findings

- Case management is the main link between participants and needed supports and services
- Includes a multidisciplinary approach using some combination of social workers, nurses, and paraprofessionals
- Involves service planning that is participatory and flexible
- Maternally-focused prenatally; infant-focused interconceptionally
- Engage males informally, if no formal male case management is available

Health Education Findings

- Health education serves as a critical component, often within outreach and case management responsibilities
- Provided individually and in group settings
- Offered at homes, clinics, and community settings
- Delivered orally, in writing, and through videos
- Range of topics covered prenatally and interconceptionally
- Participants' disinterest is greatest challenge

Depression Screening Findings

- **Case management staff administer**
- **Projects screen all participants except one project screens high-risk only**
- **Frequency varies greatly, from a single postpartum screening to repeated pre- and postpartum screenings**
- **Projects adapt screening practices to meet cultural needs:**
  - Translate tool to different languages
  - Read tool to participants
  - Reword questions or phrases to eliminate misunderstanding
  - Simplify existing tool

Interconceptional Care Findings

- Focus is on maintaining participants rather than enlisting new enrollees
- Home visits, incentives, and health education are the main retention strategies
- Case management schedule is less frequent than during prenatal period
- Health education topics are more focused on infant care and development

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Consortium Findings

- **Projects have very different models such as**
  - Separate community and consumer groups
  - Single advisory body
  - Task forces under a local health department
- **Members include social services, housing, civic groups, law enforcement, healthcare, and participants**
- **Focus varies - from strategic planning to service enhancement and health policy changes to public relations and cultural sensitivity**
- **Transportation, childcare, evening hours encourage participants involvement**

Coordination/ Collaboration Findings

- **Title V is primarily involved via consortium and joint trainings**
- **Collaboration with Title V includes:**
  - Developing common health messages
  - Sharing assessment protocols
  - Sustainability planning
  - Data sharing
- **Other frequently cited collaborations include MDs, hospitals, CHCs, WIC, Medicaid, and mental health providers**

Local Health System Action Plan Findings

- All projects have some form of LHSAP
- Local public health agencies, consortia, local task forces, non-profit organizations, and Indian Health Services lead development of plans
- Often build on other planning efforts in community
- Project staff involvement is common

Sustainability Findings

- **Projects use a combination of strategies to sustain services, such as**
  - Seeking supplemental State and foundation funding
  - Transferring services to other local providers
  - Working with partners to reduce service duplication
- **Consortium involvement is key to identifying funding opportunities and planning services**
- **Reductions in outreach, case management, health education, and depression screening are concerns**

Cultural Competence Findings

- **Staff training on cultural competence is done at all projects**
- **Most projects have established relationships to help with cultural competence, for example:**
  - Faith based organizations
  - Traditional healers
  - Ethnic associations
- **Bilingual staff, interpreters, and translated written materials are common efforts**
- **Challenge is keeping up with changing demographics**

Community/ Consumer Voice Findings

- **Many projects have developed mechanisms for consumer input, such as**
  - Focus groups
  - Involvement on consortium
- **Focus groups help identify community needs**
- **Project's noted several benefits of community input:**
  - Increases understanding of health care and social challenges
  - Advances recommendations for change
  - Implements solutions to reduce infant mortality
  - Contributes to discussion with public health officials

Grantee-reported Achievements

- Both system and service-level achievements were reported
- System-level achievements (34) were more frequently reported than service-level achievements (24)
- Improved birth outcomes, a long-term goal, was noted as frequently as intermediate outcomes (6 projects)

Grantee-reported Achievements

Service-level Highlights

- Provision of enabling services (5 projects)
  - Transportation
  - Child care
- Earlier entry into prenatal care (5 projects)
- Increased service use (4 projects)

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Grantee-reported Achievements

System-level Highlights

- Increased community awareness (6 projects)
- Culturally diverse staff (6 projects)
- Consumer Involvement (6 projects)
- Coordinated systems/ services (6 projects)

Project Directors' Perception of the Most Influential Components to Achievements

Service-level Components:

- **Outreach (5), case management (4), and health education (5)**

  "Outreach is the pillar of the program."

  "Case management is the life thread of our project."

System-level Components:

- **Consortium (4)**

  "It's important to have representation from the groups we're targeting, to make sure we have stakeholders from different venues."

Grantee-reported Challenges

- Projects reported between one and eight challenges

- Both contextual and organizational challenges were reported
  - Service availability, e.g. mental health (5 projects)
  - Lack of funding (5 projects)
  - Providing culturally competent care (4 projects)
  - Staff capacity (4 projects)
  - Mobile population (4 projects)

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Summary Conclusions from Site Visits

- Unique contextual and community issues influence projects' design, implementation, and successes
- There is no single "magic bullet" for reducing disparities in birth outcomes
- Service provision and systems development are both critical for successful Healthy Start projects
- System-level achievements are more likely to be identified via qualitative data collection than surveys

Summary Conclusions from Site Visits

- The roles of individuals who conduct outreach, case management and health education are interconnected, revealing these components work together
- Consortium relies heavily on the involvement of multiple collaborations within the community
- Sustainability efforts are less a priority than other areas
- Acknowledging and working to achieve cultural competence, consumer involvement, or "community voice" are key to reducing disparities

Caveats

- Findings are based on respondents' perceptions and interpretations
- Findings were not verified by examining local evaluation data
- Findings are not generalizable to other projects

Participant Survey

Survey Objectives

- **Overall Goal**
  - Gain insight into implementation of Healthy Start from the participant perspective
- **Specific Aims**
  - Develop Healthy Start participant profile (including demographic characteristics, risk factors, health status)
  - Describe services received during prenatal and interconceptional periods (including unmet need)
  - Assess satisfaction with services
  - Measure participant outcomes

Survey Overview

- Survey fielded October 2006 to January 2007
- Interviews conducted using Computer Assisted Telephone Interviewing (CATI)
- Interview took 30 minutes on average
- Sample included Healthy Start participants with infants ages 6 to 12 months at time of interview

Survey Overview

- Grantees provided enormous support in helping to locate participants
- Interviews conducted in English and Spanish
  - Interpreters available for other languages
- $25 gift card mailed to survey respondents to thank them for their time

Survey Response

- **646 completed cases across 8 sites (24 to 155 per site)**
- **Overall survey response rate was 66%**
  - More than 80% in 5 sites
  - 73 to 75% in 2 sites
  - 37% in 1 site (low response rate due to grantee requirement to obtain consent before releasing contact information)
- **Weights adjusted for non-response**

Organization of Results

- Demographic characteristics
- Health status and risk factors
- Access to and utilization of services during prenatal and interconeptional periods
- Satisfaction with Healthy Start services
- Outcomes of Healthy Start participants

Analytic Strategy

- **Developed national benchmark to place Healthy Start results in context**
- **Used the 2001-2002 round of the Early Childhood Longitudinal Survey (ECLS)**
- **Restricted ECLS sample to be similar to the Healthy Start participant sample**
  - Under 185% of the federal poverty level
  - Child's biological mother
  - Age of infant 6 to 12 months at time of interview

Healthy Start
Participant Characteristics

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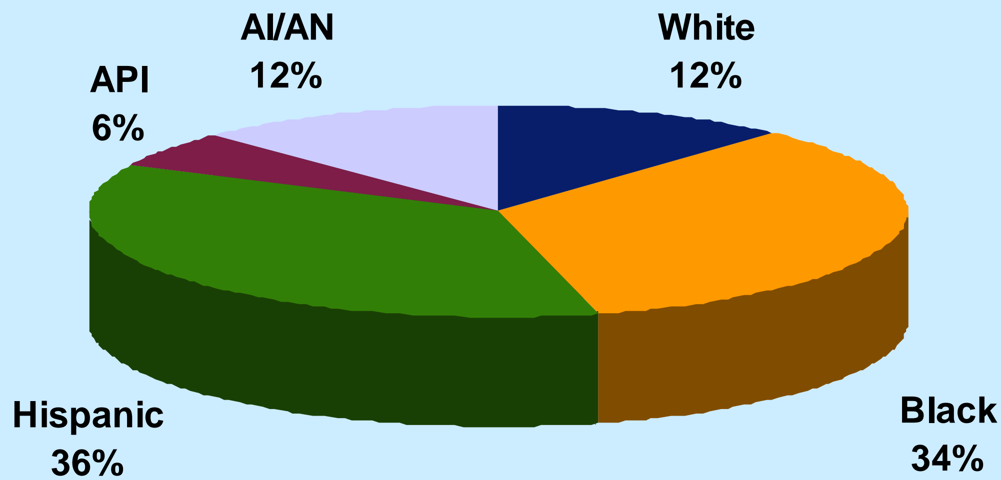
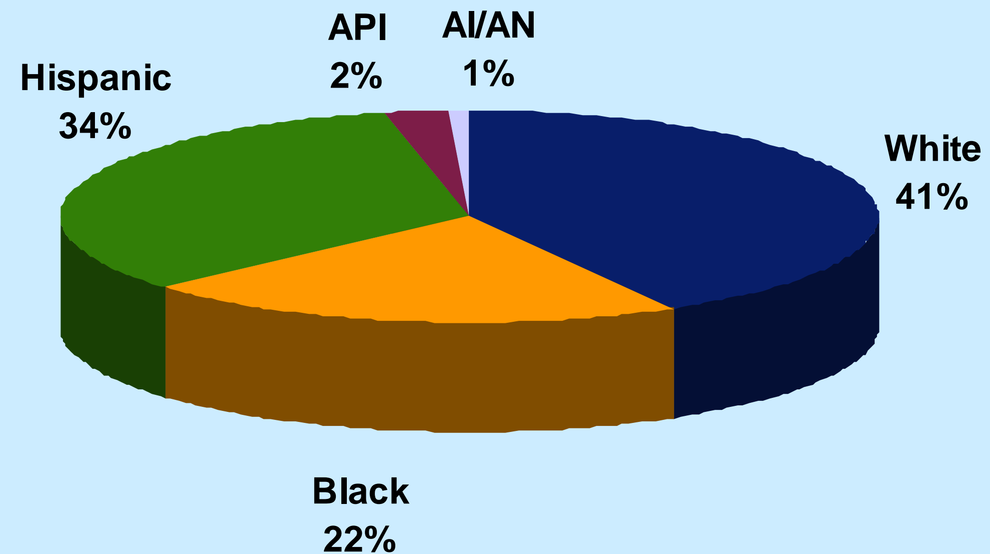
Race/Ethnicity

Healthy Start Participants (8 sites)

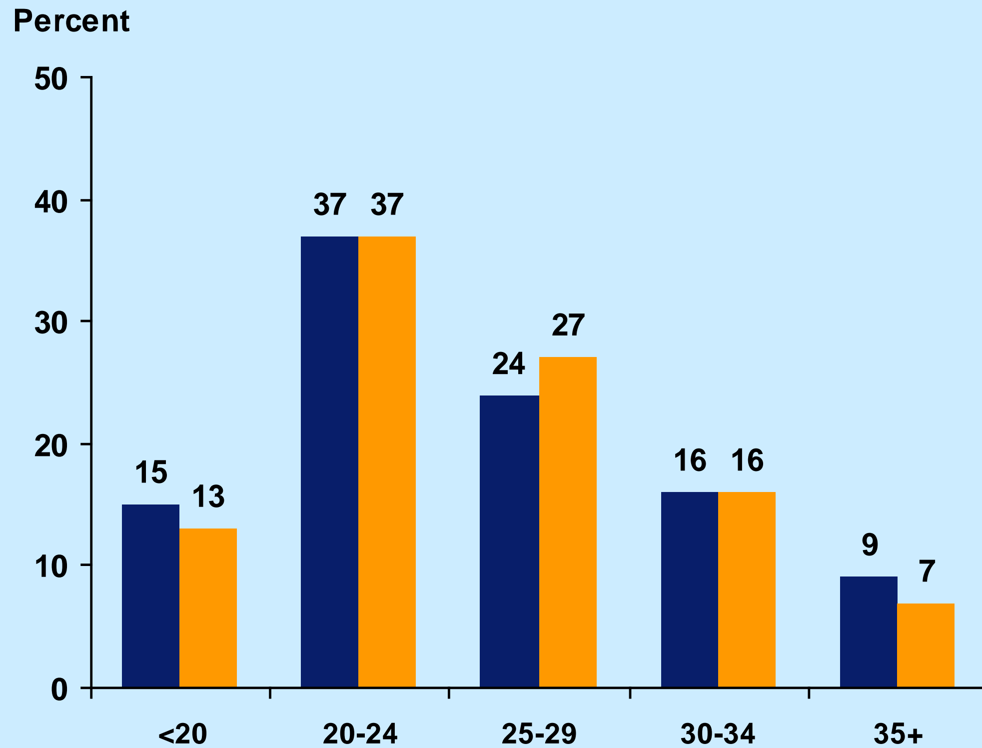


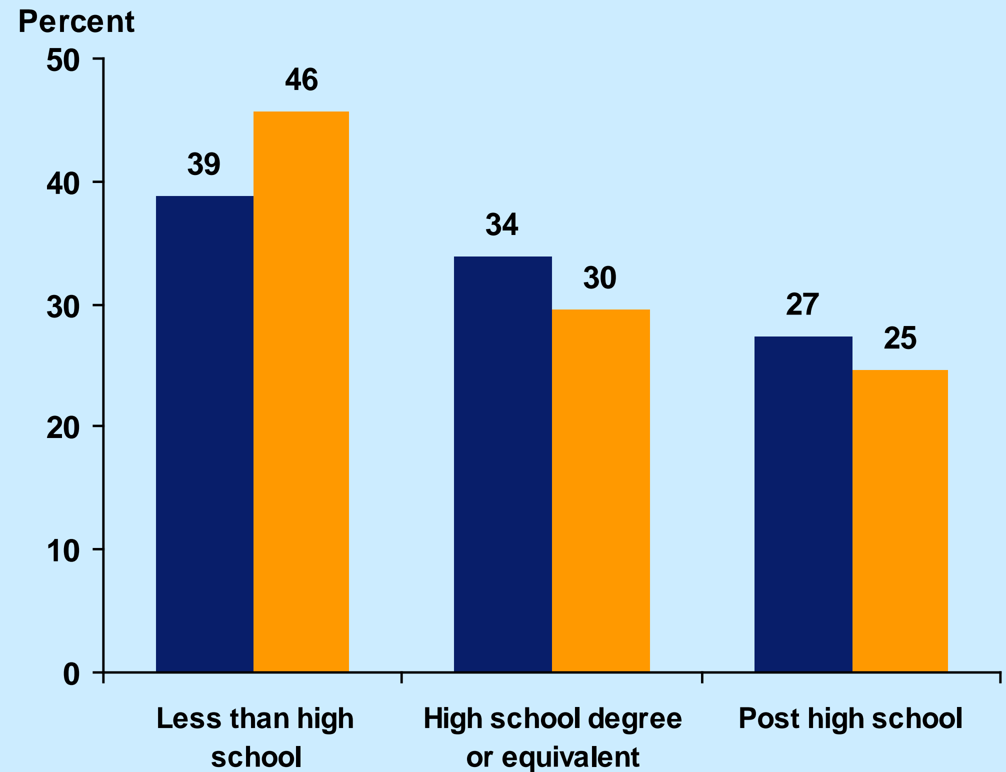
Low-Income Mothers (ECLS)



SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

Age and Education





■ Healthy Start Participants (8 sites) ■ Low-Income Mothers (ECLS)

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SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

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Marital Status, Employment Status, Language, and Country of Birth

Percent

	Healthy Start Participants (8 sites)	Low-Income Mothers (ECLS)
Married	26	48
Employed full-time	20	25
Primary language English	63	83
Born in US	60	66

SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

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Health Status and Risk Factors of Healthy Start Participants

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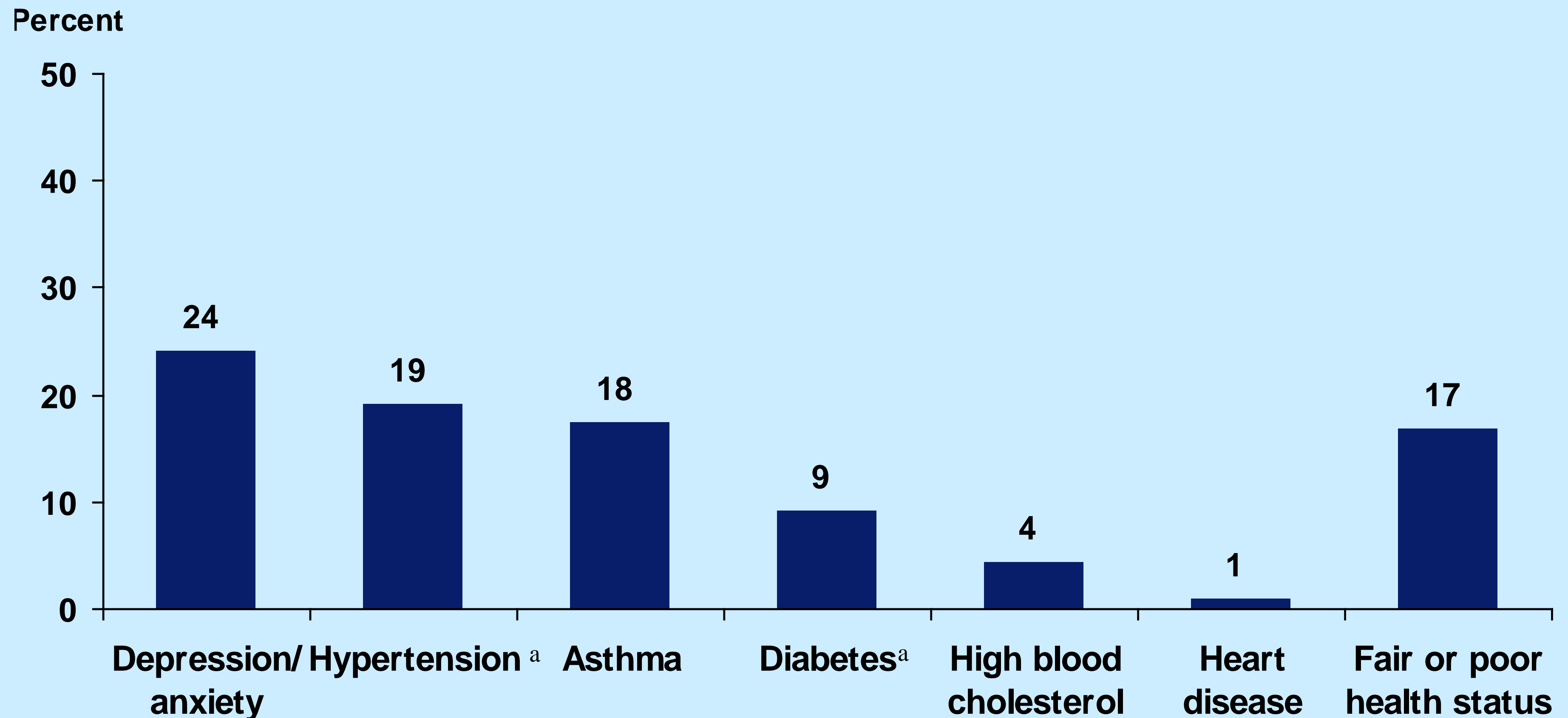
Self-Reported Health Status and Conditions



[a]Includes those who were diagnosed during pregnancy.

SOURCE: 2006 Healthy Start Participant Survey

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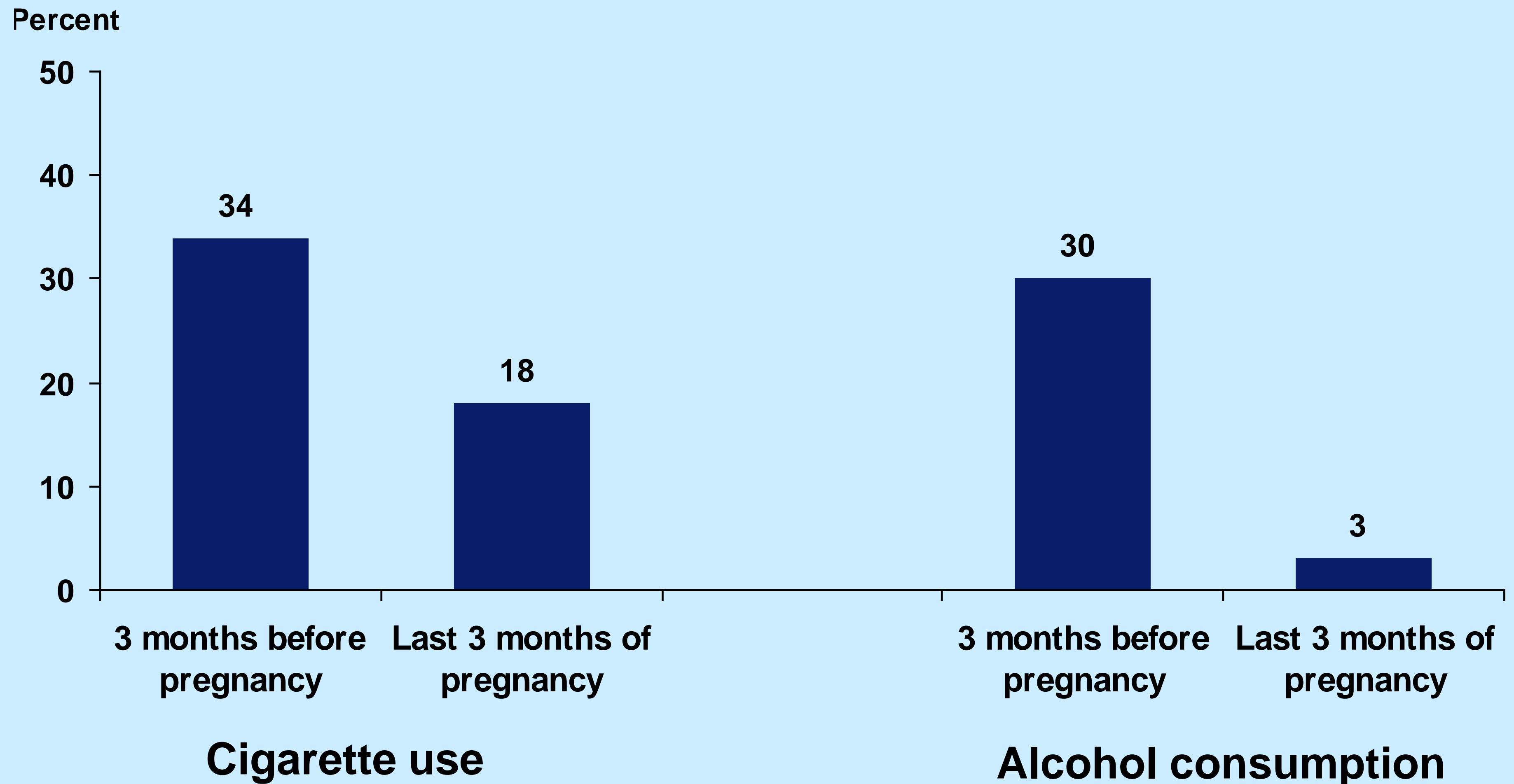
Cigarette and Alcohol Use Before and During Pregnancy



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SOURCE: 2006 Healthy Start Participant Survey

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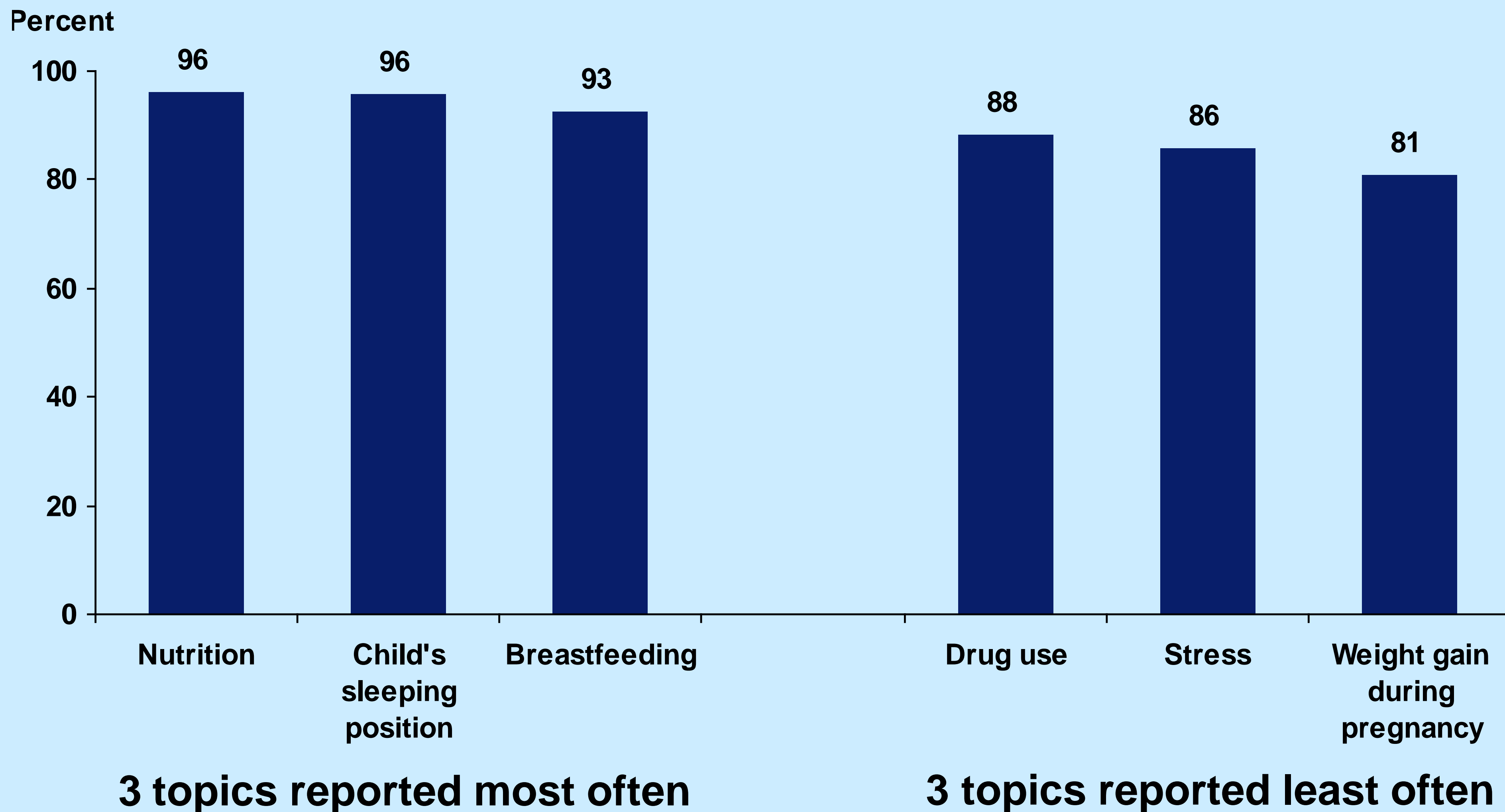
Utilization of Healthy Start Services

Access and Utilization

- **Nearly all Healthy Start participants reported receiving prenatal and interconceptional health education on a wide range of topics**
  - Least frequent topics were drug use, stress, and weight gain during pregnancy
- **Healthy Start participants reported high unmet need for housing, childcare, and dental services**
- **Infants had greater access to care than their mothers**

Selected Health Education Topics



SOURCE: 2006 Healthy Start Participant Survey

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Unmet Need for Selected Health Care Services

	Received service	Needed but did not receive service (unmet need)
Making prenatal care appointments	70	1
Finding provider that spoke same language	61	3
Making checkup appointments for self	60	3
Making checkup appointments for child	59	1
Making dental appointments for self	45	11
Managing diseases	40	2
Getting help to quit smoking	27	1

0 20 40 60 80 100 Percent

■ Received service ■ Needed but did not receive service (unmet need)

SOURCE: 2006 Healthy Start Participant Survey

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Unmet Need for Other Selected Services

	Received service	Needed but did not receive service (unmet need)
Obtaining transportation	55	6
Applying for health insurance	53	3
Obtaining food	49	6
Applying for public assistance	43	6
Finding childcare	31	11
Obtaining housing	26	13
Getting help with a crisis	22	4

0 20 40 60 80 100 Percent

■ Received service ■ Needed but did not receive service (unmet need)

SOURCE: 2006 Healthy Start Participant Survey

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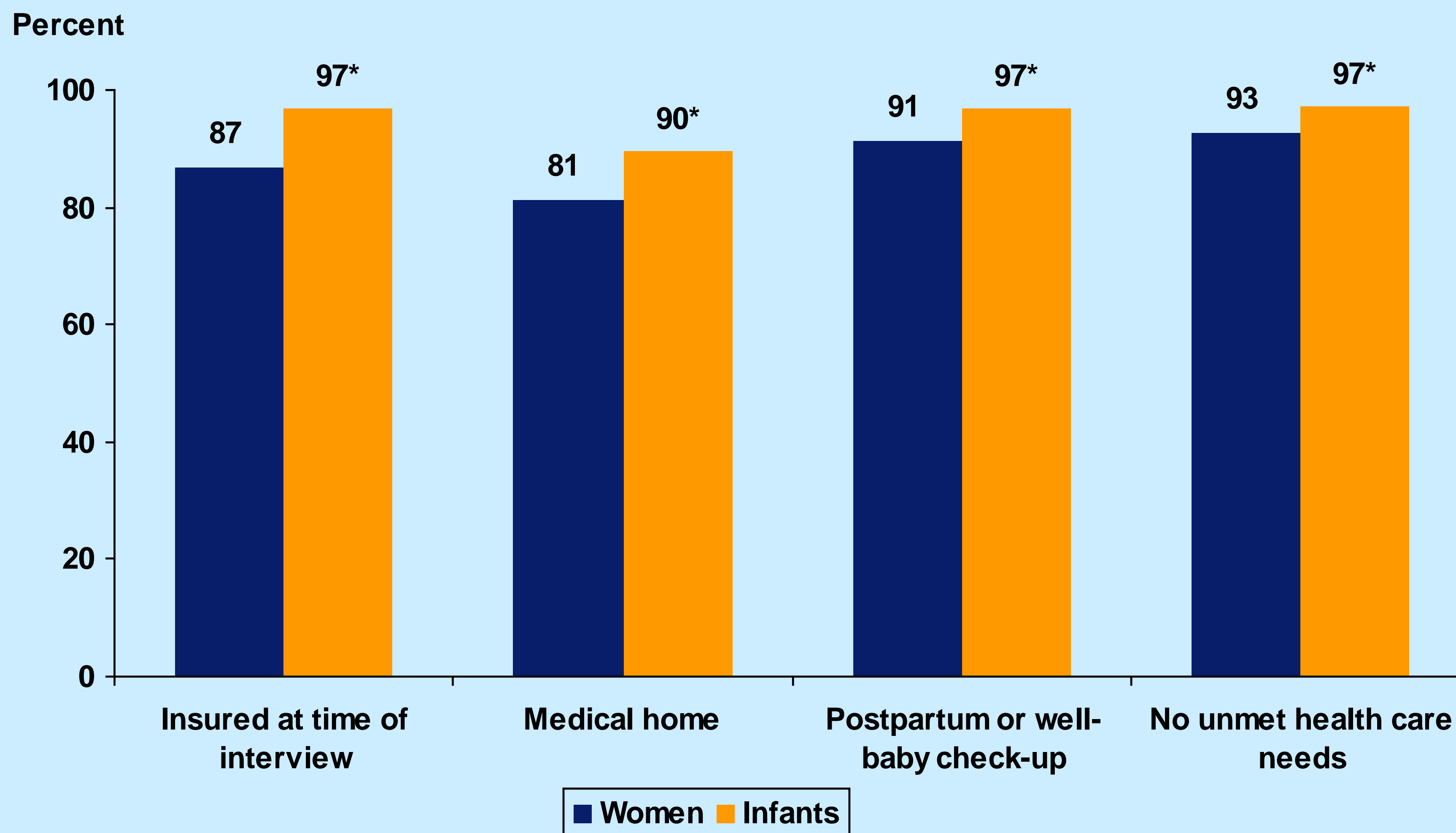
Access to Care Among Women and Infants



*Significantly different (P<.01)

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SOURCE: 2006 Healthy Start Participant Survey

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Interconceptional Care

- 83% reported having a birth control or family planning method (among those not pregnant at time of survey)
- 63% reported that they received advice about how long to wait before their next pregnancy
- 32% reported multivitamin use at least once a week

Satisfaction with Healthy Start Services

Satisfaction with Healthy Start Services

Percent

	Very Satisfied	Somewhat Satisfied	Total
Overall Relationship With Staff	84	12	96
Frequency of Contact	72	24	96
Treatment by Staff	91	7	98
Amount of Time with Staff	79	18	96
Services Received	78	15	93

SOURCE: 2006 Healthy Start Participant Survey

Perinatal Outcomes of Healthy Start Participants

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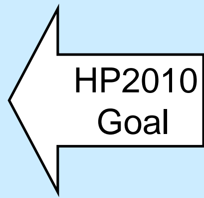
Analytic Strategy

- Compared Healthy Start rates to those of low-income mothers nationally based on age- and race-adjusted ECLS rates
- For some measures, Healthy Start rates were disaggregated by race/ethnicity and compared to rates for low-income mothers based on the ECLS



Also compared rates to Healthy People 2010 goal, where possible

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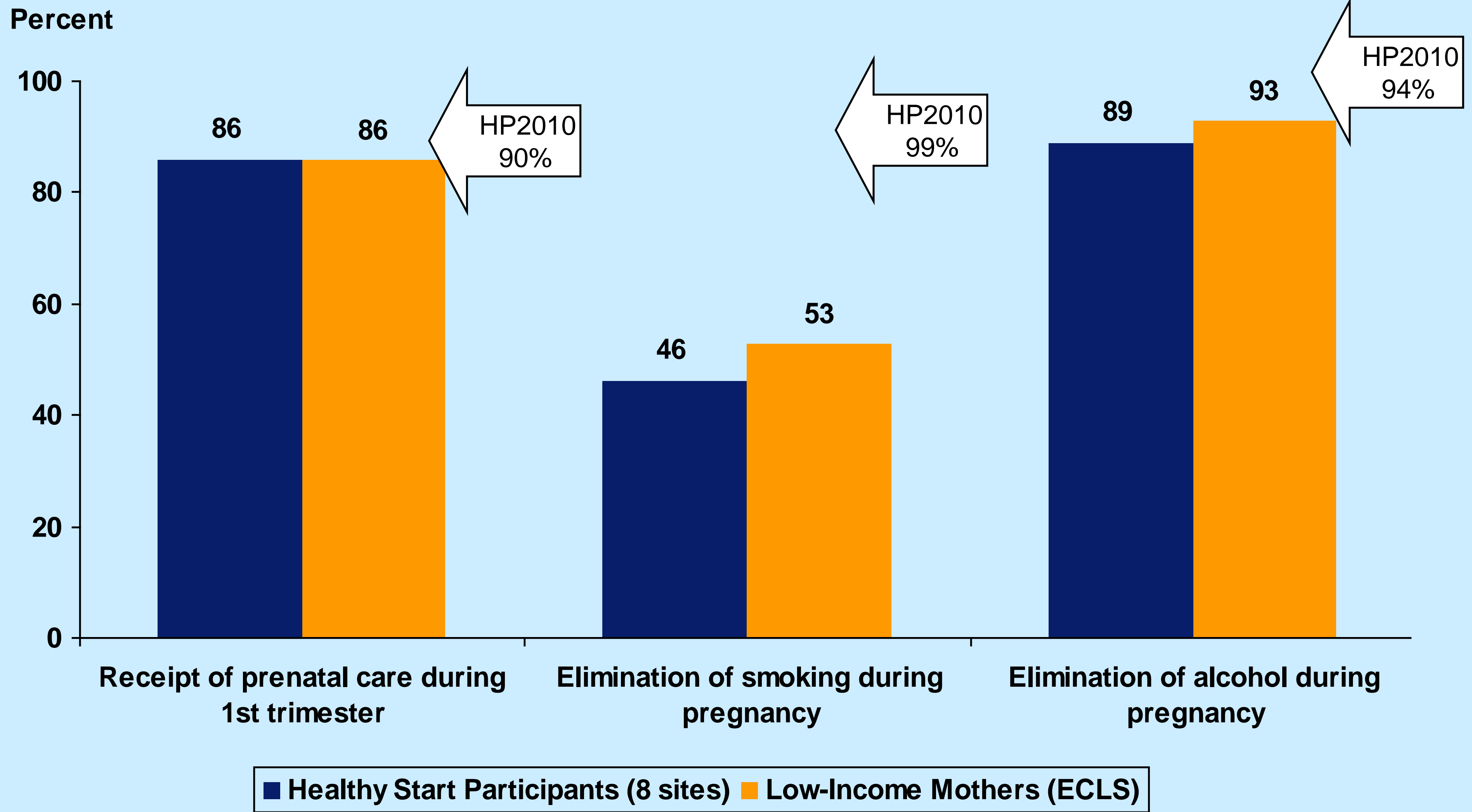
Prenatal Outcomes



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SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

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Birth Outcomes

	Healthy Start Participants (8 sites)	Low-Income Mothers (ECLS)
Low birthweight	8	8
Longer hospital stay due to medical problems at birth	12	13

Percent

HP2010 5%

SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

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Low Birthweight by Race/Ethnicity

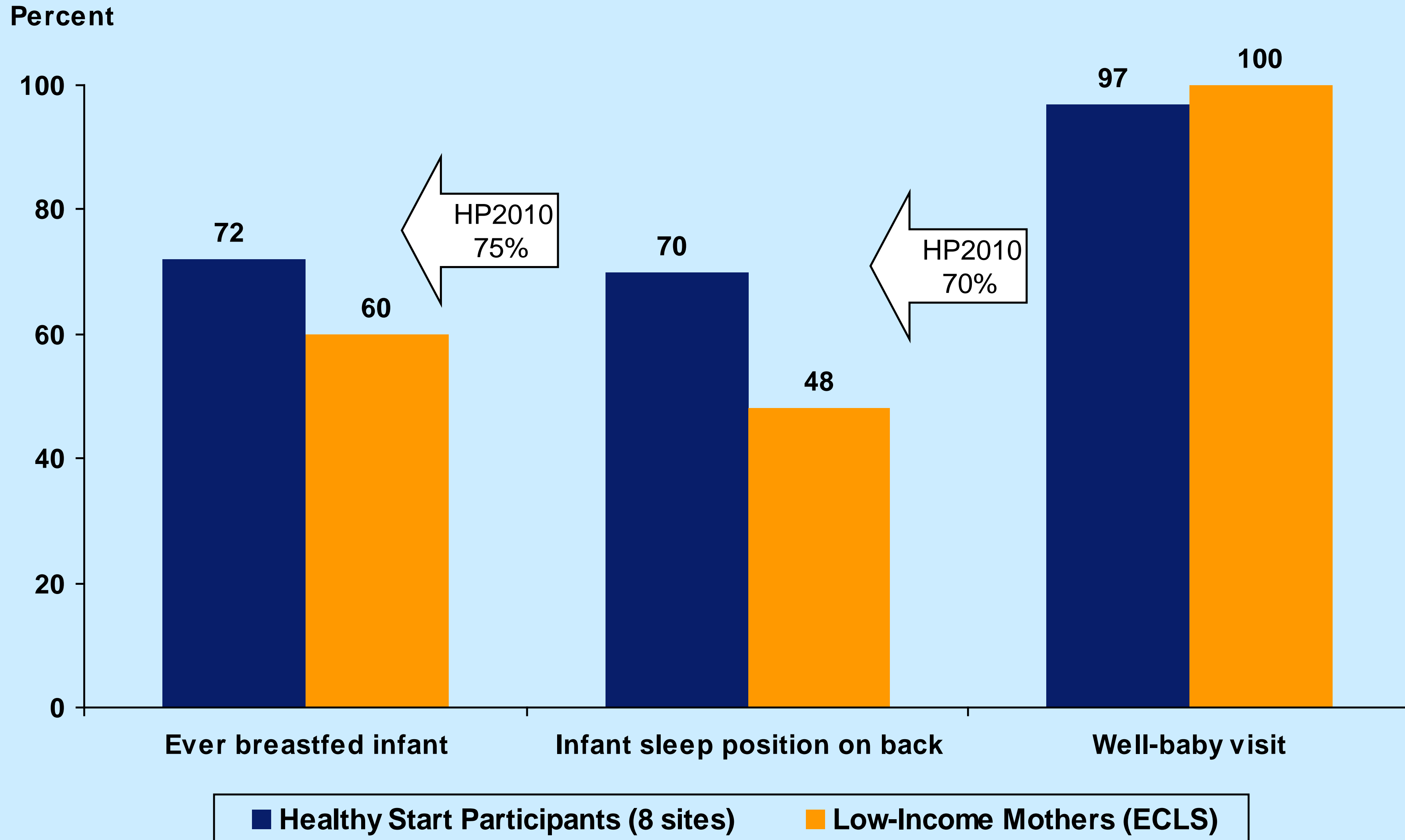
Percent

	Healthy Start Participants (8 sites)	Low-Income Mothers (ECLS)
White	5	6
Black	14	11
Hispanic	5	6

HP2010 5%

SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

Infant Health Outcomes



SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

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Infant Health Outcomes by Race/Ethnicity

Percent

	Healthy Start Participants (8 sites)	Low-Income Mothers (ECLS)
Ever breastfed infant		
White	57	58
Black	61	46
Hispanic	90	76
Infant sleep position on back		
White	75	57
Black	69	47
Hispanic	61	46

HP2010 75% (Ever breastfed infant)

HP2010 70% (Infant sleep position on back)

SOURCES: 2006 Healthy Start Participant Survey; 2001-2002 Early Childhood Longitudinal Survey.

Summary of Key Findings

Access, Utilization, and Satisfaction

- Healthy Start participants received health education on many topics (less frequent topics were drug use, stress, and weight gain during pregnancy)
- Highest unmet need was for housing, childcare, and getting help with dental appointments
- Infants had higher levels of access to care than their mothers
- Satisfaction with the program was high for all measures

Outcomes

- **Compared to a national population of low-income mothers, Healthy Start participants in 8 sites were more likely to:**
  - —Breastfeed their infant
  - —Put their infant to sleep on his/her back
- **Compared to a national population of low-income mothers, Healthy Start participants had similar rates of low birthweight**

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Caveats

- These are not causal relationships
- Differences may represent selection into the program rather than the impact of the program
- We cannot say what would have happened in the absence of Healthy Start

Performance Measures Used by Healthy Start

Services-Oriented Performance Measures

- Percent of children (of program participants) 0-2 years of age with a medical home
- Percent of women program participants who have an ongoing source of primary care
- Percent of pregnant program participants who have a prenatal visit in the first trimester of pregnancy

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Services-Oriented Performance Measures

- Number of women program participants who receive a completed referral

- Degree to which programs facilitate screening for risk factors

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Systems-Oriented Performance Measures

- Degree to which programs ensure family participation
- Degree to which programs have incorporated cultural competence
- Degree to which morbidity/mortality review processes are used
- Percent of communities having comprehensive systems for women's health services

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Outcomes-Related Performance Measures

- Percent of very low birth weight infants among all live births
- Percent of live singleton births weighting <2500 grams among all live births to program participants

Outcomes-Related Performance Measures

- Infant mortality rate per 1000 live births
- Neonatal mortality rate per 1000 live births
- Post-neonatal mortality rate per 1000 live births
- Perinatal mortality rate per 1000 live births

Performance Measure Reporting

- **Number of 96 sites reporting measures**
  - –For 2003 (range = 0 to 71 grantees)
  - –For 2004 (range = 8 to 75 grantees)
  - –For 2005 (range = 56 to 85 grantees)
- **Longitudinal data not available to monitor improvements**
- **Can only make one-time estimates**

Summing Up Findings Across All Data Sources

- Project Directors' Survey
- Site Visits
- Participant Survey
- Performance Measures

What are the lessons learned about Healthy Start?

Lessons Learned

- Both services and systems, as hypothesized in the logic model, are important
- There is no “magic bullet” for how to structure services or systems that works for all sites
- Implementation of the program components needs to be tailored to the culture and resources in the community
- Healthy Start fills important gaps for very vulnerable women and infants; Healthy Start is the “glue” and support for very vulnerable populations

Lessons Learned

- Services must be provided from many sectors (health, social services, housing, food, etc.) to address "root causes" of health disparities
- Two service components (outreach, case management) are interconnected and serve as the "heart" of all programs
  - Health education is an integral part of these two components
- Although all use multidisciplinary teams, there is no one model for delivery of services

Lessons Learned

- **Healthy Start is the first national program to emphasize the interconceptional period**
  - Focus remains on the prenatal period in all sites
  - Interconceptional focus in 8 projects is the infant
- **Developing systems of care is considered as important for achieving improved birth outcomes as are the individual services**
- **Collaborations, especially through a consortium, are critical for success and ultimately, sustainability**

Lessons Learned

- The consortium is the “glue” to creating a system of care and a major way of promoting consumer involvement
- Service integration with other partners, such as Title V, is important for developing sustainable systems
- Consumer and/or community voice is a “hallmark” of Healthy Start and necessary for addressing cultural competence
- Sustained consumer involvement needs support from individual projects