The National Survey of Children with Special Health Care Needs (NS-CSHCN) is a national telephone survey that was conducted in 2001, 2005-2006, and most recently in 2009-2010. The survey assesses health and functional status, access to care, health insurance status and adequacy of coverage, care coordination, family-centeredness of care, and impact of child’s health on the family among Children with Special Health Care Needs (CSHCN). The six core outcome measures for CSHCN as defined by the Maternal and Child Health Bureau are reported in this survey. Information in this report comes from the 2009-2010 NS-CSHCN. Results from the NS-CSHCN are available through the Data Resource Center for Child and Adolescent Health (http://www.childhealthdata.org/home).

The purpose of this brief report is to show Colorado data for two of the six CSHCN outcome measures. There are six outcomes assessed in the CSHCN survey:

1. CSHCN’s families are partners in decision making at all levels, and are satisfied with the services they receive.
2. CSHCN have coordinated, ongoing, and comprehensive care within a medical home.
3. CSHCN have adequate private and/or public insurance to pay for the services they need.
4. CSHCN are screened early and continuously for special health care needs.
5. Services for CSHCN are organized in ways that families can use them easily.
6. Youth with special health care needs receive the services necessary to make appropriate transitions to adult health care, work, and independence.

Colorado data for outcome number two and the subcomponent of number two and outcome number five are detailed in this report. Data on outcomes number two and the subcomponent of number two are comparable between the 2005-2006 and the 2009-2010 surveys. Data between these two surveys for outcome number five are not comparable due to significant changes in the questions asked. The percent of CSHCN meeting these two outcomes and the subcomponent are shown along with a breakdown by three subgroups: race/ethnicity, insurance type, and specific type of special health needs. Due to the small sample size, results for race/ethnicity are available for only white non-Hispanic CSHCN and Hispanic CSHCN.

CSHCN were categorized into four mutually exclusive subgroups based on responses to the CSHCN screener criteria (http://www.cahmi.org/pages/Sections.aspx?section=10). The following is a description of each mutually exclusive subgroup (type of special needs).

**Prescription (Rx) meds only**: Children in this group experience chronic conditions that are managed through the use of prescription medication. These children qualify on the prescription medication screening criteria.
**Elevated or above routine services use**: This group includes children who qualify on one or more of three screening criteria: above routine use of services, use of specialized therapies, or mental health. These children rely upon one or more types of services to manage their chronic conditions.

**Elevated services use and Rx meds**: This group includes children who qualify on one or more of three screening criteria: above routine use of services, use of specialized therapies, or mental health AND who qualify on the prescription medication screening criteria.

**Functional limitations**: This group includes children who qualify on the criteria for functional limitations. They may also qualify on one or more of the other screening criteria. These children have functional limitations resulting from their chronic conditions and may have other special health care needs.

**Outcome #2: CSHCN have coordinated, ongoing, comprehensive care within a medical home.**

The percent of CSHCN meeting outcome #2 is approximately the same in Colorado (43.7 percent) as compared to the United States (43.0 percent). Just under half of CSHCN have coordinated, ongoing, comprehensive care within a medical home (Figure 1). The difference between Colorado and the United States was not statistically significant.

Figure 1. Percent of CSHCN meeting outcome #2 — Colorado and United States, 2009–2010

![Graph showing percent of CSHCN meeting outcome #2](image)


Almost half (47.8 percent) of white non-Hispanic CSHCN received care within a medical home compared to 42.4 percent of Hispanic CSHCN (Figure 2). This difference was not statistically significant.
CSHCN in households with incomes at 400 percent of the federal poverty level or higher (55.2 percent) were significantly more likely to receive care within a medical home compared to CSHCN in households with incomes between 100-199 percent of the federal poverty level (33.7 percent) (Figure 3).
Over half (50.3 percent) of CSHCN solely insured with private insurance received care within a medical home compared to 28.7 percent of CSHCN solely insured with public insurance (Figure 4). This difference was statistically significant.

Figure 4. Percent of CSHCN meeting outcome #2 by insurance type — Colorado, 2009–2010


Approximately six in ten (60.4 percent) CSHCN with chronic conditions managed primarily by prescription medications met outcome #2. Approximately one in four CSHCN with functional limitations received care within a medical home (28.8 percent). CSHCN with conditions managed by prescription medication were significantly more likely than CSHCN with functional limitations to receive care within a medical home (Figure 5).

Figure 5. Percent of CSHCN meeting outcome #2 by qualifying type of special needs — Colorado, 2009–2010
Summary
Fewer than half of CSHCN in Colorado have coordinated, ongoing, comprehensive care within a medical home. CSHCN in lower income households were less likely than CSHCN in higher income households to receive care within a medical home. CSHCN with functional limitations were less likely to receive care within a medical home compared to CSHCN with chronic conditions managed primarily by prescription medications.

Outcome #2, Subcomponent #5: Getting needed care coordination

About half (53.2 percent) of CSHCN in Colorado needing care coordination received effective care coordination (Figure 6).

Figure 6. Percent of CSHCN who received effective care coordination — Colorado, 2009–2010

Over half of white non-Hispanic CSHCN (55.7 percent) and Hispanic CSHCN (55.1 percent) needing care coordination received effective care coordination (Figure 7).
Among those needing care coordination, a significantly higher proportion of CSHCN in households with incomes at 400 percent of the federal poverty level or higher (63.1 percent) received effective care coordination compared to CSHCN in households with incomes between 100-199 percent of the federal poverty level (37.4 percent) (Figure 8).

Figure 8. Percent of CSHCN who received effective care coordination by federal poverty level — Colorado, 2009–2010

A higher proportion (59.2 percent) of CSHCN solely insured with private insurance needing care coordination received effective care coordination compared to CSHCN solely insured with public insurance (41.3 percent) (Figure 9). This difference was not statistically significant.

Figure 9. Percent of CSHCN who received effective care coordination by insurance type — Colorado, 2009–2010

Approximately two-thirds (67.8 percent) of CSHCN with conditions managed by prescription medications received care coordination. CSHCN needing care coordination with chronic conditions managed primarily by prescription medications were significantly more likely than CSHCN with functional limitations to receive effective coordinated care (Figure 10).

Figure 10. Percent of CSHCN needing care coordination who received effective care coordination by qualifying type of special needs — Colorado, 2009–2010
Summary
About half of CSHCN in Colorado who needed care coordination received effective care coordination. Among CSHCN needing care coordination, children in lower income households were less likely than children in higher income households to receive effective care coordination. Among those needing care coordination, CSHCN with functional limitations were less likely to receive effective care coordination than CSHCN with chronic conditions managed primarily by prescription medications.

Outcome #5: Services for CSHCN are organized in ways that families can use them easily.
Note: Data between the 2005-2006 and 2009-2010 surveys for outcome number five are not comparable due to significant changes in the survey questions.

The percent of CSHCN meeting outcome #5 is about the same in Colorado (60.1 percent) as compared to the United States (65.1 percent) (Figure 11). Six in ten CSHCN can easily access community based services. The difference between Colorado and the United States is not statistically significant.

Figure 11. Percent of CSHCN meeting outcome #5 — Colorado and United States, 2009–2010


Approximately six in ten White non-Hispanic CSHCN (63.5 percent) and Hispanic CSHCN (57.4 percent) can easily access community based services. There was no statistically significant difference between white non-Hispanic CSHCN and Hispanic CSHCN who met outcome #5 (Figure 12).
A significantly higher proportion of CSHCN in households with incomes at 400 percent of the federal poverty level or higher (75.1 percent) had no difficulties using needed services compared to CSHCN in households with incomes between 100-199 percent (43.4 percent) and 200-399 percent of the federal poverty level (55.6 percent) (Figure 13).

Almost seven in ten (68.7 percent) of CSHCN insured solely by private insurance met outcome #5 compared to less than half (45.5 percent) of CSHCN insured solely by public insurance.
significantly higher proportion of CSHCN insured solely with private insurance can easily access community based services compared to CSHCN insured solely with public insurance (Figure 14).

Figure 14. Percent of CSHCN meeting outcome #5 by insurance type — Colorado, 2009–2010

![Bar chart showing percentage of CSHCN meeting outcome #5 by insurance type]


CSHCN with chronic conditions managed primarily by prescription medications (76.5 percent) and CSHCN with elevated services and prescription medication utilization (65.9 percent) were significantly more likely than and CSHCN with elevated services utilization (41.7 percent) and CSHCN with functional limitations (41.0 percent) to easily access community based services (Figure 15).

Figure 15. Percent of CSHCN meeting outcome #5 by qualifying type of special needs — Colorado, 2009–2010

![Bar chart showing percentage of CSHCN meeting outcome #5 by qualifying type of special needs]

CSHCN with chronic conditions managed primarily by prescription medications (76.5 percent) and CSHCN with elevated services and prescription medication utilization (65.9 percent) were significantly more likely than and CSHCN with elevated services utilization (41.7 percent) and CSHCN with functional limitations (41.0 percent) to easily access community based services (Figure 15).

Summary
Although 60 percent of CSHCN in Colorado can easily access community based services, there are still differences among subgroups in meeting outcome #5. CSHCN with public insurance and in low income households were less likely to easily access community based services. CSHCN with elevated use of services or with functional limitations were less likely to easily access community based services.

For additional data and information, please visit the Data Resource Center for Child and Adolescent Health at http://www.childhealthdata.org/home.