Overview of Grant Activities
Over the lifetime of this grant we have been collecting quantitative and qualitative data on collaboration, looking at research on collaboration, and presenting on collaboration so that we can create a toolkit for others.

Toolkit
Much of our grant efforts this last six months have been on developing a toolkit that can be used to develop collaboration across systems. The toolkit is based on our theoretical path model of collaboration (See Figure 1).

Figure 1. Kellar-Guenther and Betts theoretical model of collaboration.

For a further explanation of the path model, please see the collaboration toolkit.
This theoretical model was based on a review of the research on:
- collaboration for small groups
- collaboration in medical homes
- theories on small group development
- relationship development

This review is explained in much more detail in the toolkit. The toolkit explains our theoretical model which illustrates why collaboration is much harder than it appears. The toolkit outlines specific steps (e.g. identifying clear goals) that lead to changes in the group that ultimately lead to collaboration. The toolkit also explains how paying attention to both structural components and relational components as a group develops will lead to collaboration. The toolkit explains how small groups develop collaboration with specific tips groups can follow. The toolkit also provides a quick and longer version of our collaboration measurement tool that groups can use to determine how well they are collaborating. The toolkit also includes a cross-walk that shows how each of the items measured relates to constructs in the model. The toolkit is Appendix A in this report.

The toolkit will be posted to our website which is currently under construction. To augment the toolkit, we have used funds from other sources to create 3 short videos to help illustrate some of the subtle difficulties small groups can run into while working together. Although we plan to only use these videos when we train on collaboration, we are willing to make links to the videos available to your grantees once we have completed the editing process. At this point, only one video is fully edited. This video can be viewed online at http://vimeo.com/34220144. You can view this and let us know if you are interested in having access to these.

The toolkit is designed to provide a complete understanding of collaboration but to be short enough that it can be read by busy professionals. Much of the literature on collaboration focuses on components that may be difficult for a group to create if it does not already exist, particularly when groups begin to collaborative for the first time. For example, many models talk about the need for a favorable political climate. Therefore, our toolkit focuses more on factors that a small group is likely to have control over. This may be a limitation of the current version of the toolkit if medical practice would like to use it to develop a medical home – it focuses more on a small group working toward a specific project rather than two practices creating a relationship to collaborate in the future. This is mostly due to the fact that our experience has been based on groups formed for grant projects. We have, however, begun talking with the Area Health Education Centers (AHECs) to see if we can partner with them to further test our model and to refine the toolkit. At this point the project is unfunded, but we believe we can do some work to move this process along and we will continue to make the updated toolkit available on our website.

**Collaboration Measurement Tools**
Another of the key activities of our project was developing tools that could be used to collect data on collaboration. Our toolkit includes the measurement tool that we developed. As mentioned in previous reports the tool was originally developed for other projects, but has been continually revised based on work done both through this project and others. These projects include a Wellness Council in Arapahoe County funded
through a State Strategic Use Fund grant, a group of state leaders interested in promoting the Medical Home concept, two communities working on a Medical Home community (this grant), groups developing community based emergency response systems (unfunded), an interdisciplinary nutrition clinic (unfunded), and a group of 3 clinics working to improve transition from pediatric to adult care (funded by a subcontract. The data collection tools are designed so that they can be administered in both hard copy and through on-line data collection systems such as SurveyMonkey or SurveyGizmo. At this point we have two versions of the questionnaire – a short and a long version (the long version was the mid-length version we reported on in June, 2011).

Changes in Collaboration for Two Sites
Overview of Data Collection
This project taps into groups who were chosen to take place in a larger grant funded by HRSA. The goal was to talk with all four communities, but funding started after two communities were largely done with the HRSA project. As a result, most of the data collected was from only two of the communities working toward Medical Home communities— one with a group of over 40 members and another with a group that went from 8 members to 9 members.

Data for this project was collected in four ways. First, all identified members of the two community groups were asked to fill out an on-line collaboration questionnaire at the beginning of the project and at the end of the project. The questionnaire had scales that had been used in previous research. We got feedback that our original scale was too long, so over the time of the project we created two shorter versions. The final questionnaire included the original items (so we could measure change) and the new items we were testing so we could see how the new items correlated to the existing scales.

In addition to the questionnaire, key informant interviews were conducted with up to 9 representatives from the two groups every 3 months. There were 3 rounds of qualitative interviews conducted, with 9 months between each round. These interviews matched a tool used in a previous project. For the smaller community, every member participated in an interview at least once every round. For the larger community, the key players were identified by the leader and each key player was invited to participate in every round. To fill out the 9 spots, other participants were selected to participate in each round. However, by the last round it was difficult to get feedback from many people in the larger group.

A focus group with the smaller community group was conducted this summer after the interviews had ended. We discussed some of the preliminary qualitative findings and asked the group to comment as to whether these findings fit with their experiences. We also asked the group to share advice and tips that we could pass on to other groups. Because the larger group was done by this time, a final interview was conducted with the leader that followed a similar format to the focus group.

Finally, as the larger grant wrapped up last spring, a focus group was held with all the leaders from all four communities. Data from the last focus group was shared in the yearly report in June 2011.
To analyze the qualitative data, two student workers who conducted the interviews acted as the primary coders for their group sites. They began coding by using codes identified in the previous project where the key informant interviews were conducted. New codes were added each round. Twenty percent (20%) of the interviews were coded by both of the coders. They met and went over their codes to see if they matched. At the end of all 3 rounds, earlier interviews were looked over to see if a new code that had emerged should be used that hadn’t been on the list previously. The codes were counted for frequencies across sites and interview rounds.

**Quantitative Data**

For this project, an on-line version of the collaboration measurement tool was used to measure changes within the groups in both Larimer and Mesa Counties. For Larimer (a group of over 40), we got responses from 18 people (about 45%) in survey 1 but only 9 (about 4%) in survey 2. Three of the respondents were in both survey 1 and survey 2. For Mesa, a group of 9 by the end, we had responses from 5 people in survey 1 (62.5%) and all 9 in survey 2 (100%). Three of these respondents were in both survey rounds (the membership of this group shifted during the project). Because our response rate from Larimer is so low, the picture from the quantitative data may not be accurate. From Mesa, we can say we have a fairly accurate snapshot of the group in round 1 and round 2. The change in membership is typical in these groups. The aggregate scores for each site are listed in Table 1.

For both groups, increases were seen in collaboration in Larimer County (2.8 to 2.87 on a 5 point scale) and Mesa County (3.64 to 4.20). However, both communities saw only minor increases in overall trust (Larimer 4.54 to 4.58, Mesa 4.30 to 4.39 on a 7point scale), communication between members (Larimer 4.58 to 4.78 and Mesa 4.08 to 4.29 on a 7 point scale), integration among team members (Larimer 2.62 to 2.77 Mesa 3.78 to 3.84 on a 5 point scale) and satisfaction with the progress of the group (Larimer 51.11 to 55.57, Mesa 80.00 to 83.33 on a 100 point scale). These changes like these were seen in other collaborative groups that we have developed. However, the change seen in Larimer and Mesa Counties was much smaller than the change seen in these other groups. We also saw decreases in appreciation of the organizational culture of other member agencies and perceptions of group members’ promotion of the group’s mission (developing medical homes). This is was unexpected, since other collaborative groups have shown increases on these factors and the collaboration model put forth by Doherty, McDaniel, & Baird (1996) on physical health and behavioral health collaboration emphasizes the importance of appreciation of the other discipline’s organizational culture.

We also saw differences between the two groups in two of the trust subscales. One group was fairly large (over 40 members) while the other was small (8 at the beginning of the project and 9 at the end). Both groups also saw shifts in membership, which is typical with groups that run a long time. The larger group met regularly but not all members attended. When work had to get done, a smaller subgroup took on the work and reported back to the larger group. Based on our qualitative data collection, we also learned that the parent/family representatives felt that they were not always viewed as equally important by
some members of the team. These differences between the two sites may have accounted for the differences we found. Two of the differences were around scores on trust subscales. First, the larger groups’ need to watch the activities of others in the group (a trust subscale) stayed the same while for the smaller group this went up. However, the larger group felt a higher need to have written agreements rather than informal agreements toward the end of the grant (another trust subscale) while the smaller group reported less need for formal agreements. The lower need for formal agreements (MOUs) for the smaller group was echoed in the qualitative data. Some agencies already had MOUs before the group started but no one felt they had to have MOUs put in place when new members were added. The interviewees for the qualitative piece stated that MOUs are not needed to work together.

While there were differences in the directionality changes in the two subscales, for both groups, there was a modest increase in trust throughout the project. It should be noted that during the first round of data collection, we had some negative feedback on these trust subscales. While we used them again in round 2 so we could make a comparison, our new tools no longer use this scale. We did pilot our new trust items in round 2 as well so we could see if they matched what we learned with the old subscale. The new trust items show a higher level of trust for the group that rated their overall collaboration higher. In fact, the new items tested in round 2 showed higher levels of everything (communication, trust, understanding the other organizations, importance of all the team members, fair decision making, skill of the other members, trust, and support of the home organization) for the group that rated themselves higher on the global collaboration item.
Table 1. Mean Scores for Collaboration Scales

<table>
<thead>
<tr>
<th></th>
<th>Possible Range</th>
<th>Large Group T1</th>
<th>Large Group T2</th>
<th>Small Group T1</th>
<th>Small Group T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust- Communication</td>
<td>1-7</td>
<td>4.58</td>
<td>4.78</td>
<td>4.08</td>
<td>4.29</td>
</tr>
<tr>
<td>Trust- Surveillance</td>
<td>1-7</td>
<td>5.04</td>
<td>5.07</td>
<td>5.04</td>
<td>4.87</td>
</tr>
<tr>
<td>Trust- Informal Agreement</td>
<td>1-7</td>
<td>4.00</td>
<td>3.89</td>
<td>3.64</td>
<td>4.03</td>
</tr>
<tr>
<td>Overall Trust Score from Subscales</td>
<td>1-7</td>
<td>4.54</td>
<td>4.58</td>
<td>4.30</td>
<td>4.39</td>
</tr>
<tr>
<td>Global Measure of Collaboration (Frey)</td>
<td>1-6</td>
<td>2.80</td>
<td>2.87</td>
<td>3.64</td>
<td>4.20</td>
</tr>
<tr>
<td>Level of Integration of Team Members (Doherty, Peek)</td>
<td>1-5</td>
<td>2.62</td>
<td>2.77</td>
<td>3.78</td>
<td>3.84</td>
</tr>
<tr>
<td>Communication of Team Members (Doherty, Peek)</td>
<td>1-4</td>
<td>1.75</td>
<td>1.90</td>
<td>2.72</td>
<td>2.64</td>
</tr>
<tr>
<td>Appreciation of Organization Cultures of Team Members (Doherty)</td>
<td>1-3</td>
<td>2.01</td>
<td>1.96</td>
<td>2.67</td>
<td>2.56</td>
</tr>
<tr>
<td>Groups Influence of Team Members (Doherty, Peek)</td>
<td>1-3</td>
<td>2.16</td>
<td>1.97</td>
<td>2.79</td>
<td>2.54</td>
</tr>
<tr>
<td>Importance of Team Members (Varda)</td>
<td>1-3</td>
<td>2.45</td>
<td>2.22</td>
<td>2.75</td>
<td>2.84</td>
</tr>
<tr>
<td>Progress Satisfaction</td>
<td>0-100</td>
<td>51.11</td>
<td>66.67</td>
<td>80.00</td>
<td>83.33</td>
</tr>
<tr>
<td>Program Satisfaction</td>
<td>0-100</td>
<td>53.89</td>
<td>62.78</td>
<td>na</td>
<td>80.78</td>
</tr>
<tr>
<td>NEW*-Communication</td>
<td>1-4</td>
<td>na</td>
<td>2.11</td>
<td>na</td>
<td>2.22</td>
</tr>
<tr>
<td>NEW-Understand Organizational Culture</td>
<td>1-4</td>
<td>na</td>
<td>2.33</td>
<td>na</td>
<td>3.00</td>
</tr>
<tr>
<td>NEW –Altruism</td>
<td>1-4</td>
<td>na</td>
<td>2.67</td>
<td>na</td>
<td>3.67</td>
</tr>
<tr>
<td>NEW –Importance of Others</td>
<td>1-4</td>
<td>na</td>
<td>2.63</td>
<td>na</td>
<td>3.56</td>
</tr>
<tr>
<td>NEW –Fair Decision-making Process</td>
<td>1-4</td>
<td>na</td>
<td>3.44</td>
<td>na</td>
<td>3.56</td>
</tr>
<tr>
<td>NEW –Trust Other Skill Set</td>
<td>1-4</td>
<td>na</td>
<td>2.33</td>
<td>na</td>
<td>3.67</td>
</tr>
<tr>
<td>NEW –Trust Other Motive</td>
<td>1-4</td>
<td>na</td>
<td>2.88</td>
<td>na</td>
<td>3.44</td>
</tr>
<tr>
<td>NEW –Organizational Support for Group</td>
<td>1-4</td>
<td>na</td>
<td>3.00</td>
<td>na</td>
<td>3.56</td>
</tr>
<tr>
<td>NEW –Stakeholders</td>
<td>1-4</td>
<td>na</td>
<td>2.22</td>
<td>na</td>
<td>3.11</td>
</tr>
</tbody>
</table>

*NEW=the new items created and tested on what used to be called the Mid-level Collaboration Tool and is now referred to as the long tool.

Importance of technical assistance (TA). The quantitative data showed a smaller increase in overall collaboration than the other projects we have worked on where we took a more active role in providing collaboration technical assistance. Although we were available to provide TA to these groups, the leaders did not request TA often. When we did the qualitative analysis, we were surprised to see issues that we felt might weaken the collaboration. It is possible that if these groups had the toolkit they may have been able to identify some issues that they may not have realized were problematic. It is also possible that some groups in the future may benefit from more active TA early on in addition to the toolkit. In our experience, the groups that received active intervention showed improvement on objective factors that have been used to identify highly collaborative groups such as sustainability, productivity, systems change, and overall satisfaction with the group (Mattessich et al., 2008; Doherty, McDaniel, & Baird 1996; Doherty, 1995; Chrislip & Larson, 1994). Our tool was able to differentiate highly collaborative groups (those that received active intervention and met objective criteria for collaboration) from groups that were only provided with some consultation on the development of collaboration. This provides some indication that our tool is able to differentiate highly
collaborative groups from less collaborative groups. It also highlights the fact that left to
their own devices groups will develop some factors related to collaboration, but it is
unlikely that groups will develop all of the factors that promote high levels of collaboration.

**Relationships between the factors that lead to collaboration.** In addition to looking at how
the factors related to collaboration changed over the life of the project, we also examined
how these factors were related. Correlations were calculated for all factors measured by
the collaboration tool. The most surprising finding from this analysis was that there was no
correlation between measures of trust and a published global measure of collaboration that
we have been using to validate our tool. This finding is surprising because trust and
collaboration have been linked in the collaboration literature. In a survey of more than 500
college educated white collar individuals working in a South Korean corporation, Lee and
his colleagues (2011) found that willingness to cooperate is positively related to trust.
Based on our findings, we believe that the published collaboration tool may not be
sensitive enough to adequately measure all of the factors necessary for collaboration. In
part our belief is driven by the fact that the author has tried to reduce the measurement of
collaboration into a single question. In future research we hope to be able to compare out
tool to several published measures of collaboration to determine whether our tool is able to
differentiate between highly collaborative and less collaborative groups as well or better
than other measures.

While the published collaboration tool did not correlate with trust, it was highly correlated
with communication (Larimer p=.02; Mesa p<.01). In our theoretical path model (see
figure 1) we predict that communication is important for collaboration, however we theorize
that there are many mediating factors between communication and collaboration. Further
research is needed in order to determine whether the path model is accurate or whether
there is a more direct relationship between communication and collaboration. Now that a
collaboration toolkit has been developed, it must be validated by measuring a large
number of collaborative and non-collaborative groups to see if the tool can differentiate
between the two. Our current path model assumes that all factors equally impact
collaboration. However a factor analysis should also be performed to determine if some
factors are more likely to lead to collaboration than others. Currently we only have
correlational date showing that factors are closely related, however further analysis would
allow us to determine if some factors are lead to others or whether they are simply the
result of third unrelated factors. This type of research will allow us to move from a
theoretical path model to true path model based on research.

As mentioned above, we believe that the published collaboration tool was not sensitive
enough to measure changes in factors that measure collaborative changes in a group.
This hypothesis was further supported when we examined the correlation between the
factors we measured and satisfaction. Satisfaction is often used as a proxy measure of
the success of a collaborative group (Chrislip & Larson, 1994). The theory is that if group
members were happy, the group must have been successful. In both Larimer and Mesa
Counties, when we first measured satisfaction with the progress of the group it was
correlated with whether consumers or their families were included in the group (in both
cases p<.01). However, the second time we measured satisfaction it was correlated to a
variety of interpersonal factors such as way the group communicated (Larimer p=.018),

...
how groups made decisions (Larimer p=.006, Mesa p=.012), if group members had the skill sets needed (Mesa p=.005), and whether group members put the goals of the group before the gain of their agency (Larimer p=.021, Mesa p=.013). Clearly there is a complex relationship between the collaboration factors that lead to satisfaction with groups. Given how often the satisfaction with a project is used as a measure of success, it is important that to understand what an increase in satisfaction really means. Further research needs to be done to examine the exact relationship between collaboration and satisfaction.

**Qualitative Data**
The qualitative data paints a slightly different picture than the quantitative data, but also provides insight into the quantitative findings. For example, in the quantitative data, there is an increase in overall collaboration for both groups, but Larimer (the larger group) shows less change than Mesa (the smaller group). When looking at the qualitative data, this may be because the level of collaboration peaked a few months before the second set of quantitative data was collected. Larimer met all their goals early and the group made a decision to disband.

**Compare and Contrast of the Groups**
Larimer and Mesa differed in a few key ways. First, Mesa was a much smaller group, having between 8 and 9 members. Larimer reported being “over 40 members”, but there was never a clear count as to how many individuals were actually members of the group. To handle their large size, Larimer choose early on have smaller subgroups do the work and report back to the larger group. These size differences are important because we believe they explain some of the differences we found in our qualitative analysis. In the analysis we refer to the communities by the size of their group (smaller group=Mesa; larger group=Larimer) rather than by their community name.

Another key difference was that the larger group had other medical home efforts going on, including clinic-based medical home efforts. This group had a few events (e.g. a parade of medical homes) that they ended up canceling when they learned that the Medical Society already had a similar event. Instead of putting the event on themselves, they joined committees and helped. This desire to avoid repetition is important as this group choose to dissolve at the end of the grant and join other efforts. Also, as the larger group came to an end, it became difficult to complete the last rounds of interviews. As a result, when looking at the data, it appears that some things decreased, but really it may be a reflection of interviewing less people. As a result, we do not report decreases between round 1 and round 3 for the larger group unless a story supports the decrease.

Finally, another key difference was in the number of goals the group set out to accomplish. The smaller group developed approximately 10 goals during the course of this project, while the larger group had nearly 30. Both groups were similar, though, in that they both completed their goals. The smaller group went on to focus on new health events (e.g. Cavity Free by Three) while the larger group decided to support the other Medical Home efforts in their community.

Another similarity was that both groups were led by strong leaders who represented the family voice in the Medical Home. The following topics are constructs that are part of our
theoretical path model of collaboration. Please note that the coders were not aware of the model when they coded the data.

Leadership and Group Membership/Cross section
For both groups the leader was the most frequently mentioned key member. However, for Larimer, the larger group, the importance of the leader decreased in round 3 while in Mesa, the smaller group, the leader was still the most frequently mentioned, even in round 3. This makes sense though because during round 2, the smaller group leader was in danger of losing her job and ended up switching jobs so that she could keep doing work on Medical home and with families. At one point, the group thought she might have to leave the field which really drove home to the group how important she was. The group was very relieved when she got a new job that allowed her to continue her work and provide her expertise. It should be noted that the smaller group leader was also key in building the group. A few members mentioned that she was able to get people to originally join the group because they trusted her. Her social contacts were also seen as a resource for the group, especially in rounds 1 (mentioned 6 times) and 2 (mentioned 5 times).

As mentioned above, the leader of the larger group was also most frequently mentioned, but the frequency went down. This pattern fits what we saw in previous projects where we more actively helped the group form.

<table>
<thead>
<tr>
<th>Time 1 (# of times mentioned during interviews)</th>
<th>Time 3 (# of times mentioned during interviews)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leader Key Person In Group</strong></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>24</td>
</tr>
<tr>
<td>Large Group</td>
<td>21</td>
</tr>
<tr>
<td><strong>Right People/Agencies Part of Group</strong></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>3</td>
</tr>
<tr>
<td>Large Group</td>
<td>See text</td>
</tr>
<tr>
<td><strong>Like/Appreciate Other Team Members</strong></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>5</td>
</tr>
<tr>
<td>Large Group</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition to the leader being mentioned less, in past groups we’ve seen “everyone is important” or “many people are important” go up over the life of the group. For these groups, that was not the case. In the larger group this only came up during round 2 (2 people said this of the 3 interviewed) while in the smaller group this came up in round 1 and 2 (2 people each time), but not round 3. The smaller group, though, was the one where the leader almost had to leave. Concerns about her leaving may account for this not being reported in round 3. These groups also had more members join and leave the groups than in the previous groups we’ve worked with.

When asked if the right people/agencies were part of the group, there was a large increase in the number of people saying the right agency/person was part of the group for the smaller group to meet the group’s mission. The smaller group also had a large increase in
the number of members saying that they liked or appreciated other team members. This increase is expected because as the group meets smaller goals they begin to value what the other members bring to those successes.

While the larger group did not report that they had the right agency/or person (mentioned 1 time in round 2), there was an increase in people saying they liked or appreciated the work individuals were doing. The focus on specific people and their actions may be because the group met all their goals, but a lot of the work in the larger group was done by smaller subcommittees. In the last rounds of interviews with the larger group, interviewees said that work was completed even though the larger group is not meeting.

Communication

<table>
<thead>
<tr>
<th></th>
<th>Time 1 Frequency</th>
<th>Time 3 Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Large Group</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Informal Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Large Group</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Emails/Mass Emails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Large Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Before and After meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Large Group</td>
<td>0</td>
<td>2 (in round 2 &amp;3)</td>
</tr>
</tbody>
</table>

As expected, we saw communication between members increase for the small group. Both formal and informal communication increased over the 3 rounds of data collection. In the smaller groups, people mentioned getting together more and more outside of regular meetings. One example of some of a mix of formal and informal communication was a parent representative from the smaller group saying that she had lunch and coffee and the representatives from the early childhood council to discuss her involvement with their organization and to socialize (smaller group).

Formal communication also increased. Members in the smaller group said they starting working together on events like “Cavity Free Before Three” and giving presentations in the community together on Medical Home. The smaller group also mentioned that there was an increase in emails/mass emails to the group members to keep everyone updated on what was going on.

For the larger group, formal communication stayed the same while informal communication did go down. The larger group also relied on technology for communication vs. face-to-face communication. This was so that not everyone had to attend the meetings. The formal communication may also have stayed constant because group members tended to see others at functions. The informal communication went down just because it became difficult to know who was still actively participating and who had moved on.
Both groups saw an increase in people coming early and staying later in the meeting to make connections and talk with others. The larger group also found time to talk before and after the meetings—in some cases members stayed after for another hour talking. This type of informal communication is an indicator of strong collaboration.

**Decision making/how things get done**
For the smaller group there were more reports of a centralized person coming up with a set of options, presenting these options to the group and then the group discussing their choices and coming to an agreement. Also, throughout all 3 rounds interviewees stated that when decisions were being made, people would “come together and share what they have.” When we conducted a focus group in the smaller community we heard that this community has a history of working together. The group was able to share a story that happened 30 years ago where the decision was made to work together. The group went on to say that new providers were told that the culture in the town was to work together.

The larger group made decisions by voting—even when they broke into smaller groups, those small groups voted to make decisions. At the same time, the group reports that the leader would use delegation for tasks and then hold members accountable to report back to the group. To delegate tasks, the leader would ask for volunteers.

It is surprising that the group that made decisions by voting rated themselves as having lower collaboration than a group where the leader limited the decision set. This does not fit with the collaboration literature on procedural justice. It is possible that the smaller group had requested that the leader limit the response option prior to larger group discussions but we did not probe for that. The smaller group has asked that we present our findings to them in the spring; at that time we will ask them to explain this finding for us.

**Celebration of Milestones/Quick Successes**
When asked if they celebrated milestones, on a personal or group level, most members reported that the groups do not. Yet, during the interviews the smaller group mentioned that when a group task was completed, the group would give a round of applause and say “good job”.

In the larger group, the focus seemed to be more on individual milestones (e.g. new job, birthday) vs. group milestones (e.g. meeting a goal like creating the medical home brochure) (this was reported 2 times in round 1 to 3 in round 3), but this may be because a lot of the work was done by a few key people who were part of various subgroups.

The lack of recognition of milestones and celebrations of milestones mirrors what we found in our previous work. Even when we, as leaders, celebrated group milestones and personal milestones such as birthdays, the group did not report them when they were interviewed. There is research on personal relationship development that shows that people expect to hear and see positive things, and, as a result, the positive do not always stand out. Gottman says that couples need to give 5 positive comments for every negative comment to seem balanced. Gottman’s point was that people expect to hear positive
comments so they do not stand out. In other words, there may be a recognition of milestones but people do not remember them because they expected to hear the positive response. Negative responses, however, are not expected so these stand out more. A lack of a positive response, as a result, would stand out where a “good job” may be quickly forgotten. In previous groups, prior to this grant, we saw that groups grew better at pointing out milestones during meetings and between meetings. Group members were more likely to initiate recognition of other’s achievements, thus changing the group culture. In the future, we intend to develop better measures of how groups celebrate milestones.

Understanding Organization Culture/Learning about Other Agencies
When asked what they hoped to gain/learn from working collaboratively with the other agencies in the group, the smaller group followed our theoretical path model quite closely. In earlier rounds, the smaller group reported needing more communication as well as the desire to learn more about what the services provided by the other agencies. By the later rounds, however, the need for communication and learning about each other decreased and, the smaller group more frequently mentioned wanting to build sustainable relationships with people in the group and helping the community.

What Hope to Gain from Working Closely with Other Agencies – Smaller Group

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<thead>
<tr>
<th></th>
<th>Round 1 # of times mentioned</th>
<th>Round 2 # of times mentioned</th>
<th>Round 3 # of times mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Communication</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Learn More About What Other Agencies Do</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Build Sustainable Relationships</td>
<td>10</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Help the Community</td>
<td>7</td>
<td>10</td>
<td>11</td>
</tr>
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Although appreciation of organizational culture goes down in the quantitative data, in the qualitative data it seems that there was a high appreciation of organizational culture. As stated above, one of the early goals of the small group was to learn about what other agencies did and, once accomplished, the goal was to build sustainable relationships. When asked about barriers to collaboration, the smaller group mentioned the biggest barrier was that different groups used different terminology, a problem because of different organizational cultures. This barrier was overcome by the members explaining what they meant when they used a term. This issue went from being identified as a problem 6 times in round 1 to only once in round 3. A final piece of evidence that the group embraced the other organizational cultures is stories that members were invited to be part of other groups as well as invited to co-present. As a result of the inconsistency between the qualitative and quantitative data, we will look at our data tools and see if the items measuring organizational culture need to be changed.

The larger group did not follow the path model – they increased in wanting to build relationships between round 1 and round 2, but then decrease between rounds 2 and 3. In fact, the only increase in this area was an increase in members reporting that they want to help their agency (from 0 times in round one to 4 times in round 3). As mentioned earlier, this may be because the larger group chose to dissolve. When looking at the group’s
accomplishments, much of the work was completed by the end of round 2 (where group identity scores are the highest). No new goals were set at this point because the group felt there were others in the community doing Medical Home work and felt they could support those efforts individually rather than continuing to meet as a group.

The larger group also had some tension between different family participants and provider participants. Some of the family members reported starting feeling “not including” or “not heard”, both of which led to a lack of trust (mentioned 1 time in round 1, 6 times in round 2). To deal with some of these decreases in trust, the group shifted to smaller group meetings and, as a result, people with similar ideas, approaches, and expectations teamed up together. While this led to reports of more trust, the group did not handle the larger conflict and never really came back together as a large group.

Commitment to Shared Goals/Members Share Stake in Outcome and Process (Value of the Collaborative Group)
One of the signs that the collaboration is not going well is that people stop coming to the meetings. As a result, we were happy to see that over time, the smaller group reported a decrease in the number of reasons people gave for why they could not attend the meeting and an increase in the reasons why attending the group was important. The members did miss a few meetings over the two years, but they all returned. People only left the group when their job changed and they tried to get representation from someone else in their agency. It should be noted that the number of members increased from 8 to 9 over the two years.

For the larger group, the opposite was true. Over the three years, there was an increase in people leaving because they “don’t have time to meet”, especially in round 2 when the grant goals were completed. Reasons people left include new jobs, moving, lack of funding at the home agency, and the mission of the group not really fitting the person or the agency’s interests. In round 3, the group chose to dissolve. When looking at the barriers to collaboration, one big barrier for this group was that there was a Medical Home community effort (the HRSA grant that led to this group being developed) and a clinic-based Medical Home effort. These two efforts led people to question the need for two groups working to develop Medical Homes. This led to disagreement between providers and family/youth representatives as stated above under organizational culture.

The other big barrier identified by both groups was scheduling conflicts. Scheduling conflicts peaked in round 2 for the smaller group (around the holidays), but by round 3 was no longer an issue. For the larger group, scheduling conflicts came up in each round (round 1, 1 time; round 2, 2 times; round 3; 2 times).

The need for funding was also brought up by both groups consistently when asked to discuss barriers. When talking about lack of funding, both groups said that they could overcome the lack of funding. Regardless of the lack of funding, the group continues to smaller group continues to meet.
Lack of funding came up as an issue in the focus group with all four leaders as well, but they all stated that the work would have gotten done without the funding. The funding just helped the work get done quicker.

Describe any deviations from the initially predicted results as specified in your grant agreement.
There only deviation from the original grant is that funding began later than expected. As a result, two medical home community sites – Boulder and Summit counties – completed their first year of HRSA activities. We were not able to get a baseline for these two communities. However, we have continued finding other groups to help test the survey and provide feedback. These two groups also took part in the final focus group.

Medicaid Eligible Children Served
This project is a capacity-building and quality improvement project. However, in both medical home community sites, there are practices that are part of the team and serve Medicaid eligible children. In Mesa, there are 18 providers (1 practice) that are part of medical home community team. Mesa County had 1,233 approved cases for Medicaid between June and November. This includes children who were already on Medicaid as well as new cases. When they look at their totals number of cases in June 1\textsuperscript{st} vs. their total number of cases November 30\textsuperscript{th}, there was a difference of +169.
In Larimer there are 8 providers on their council, but only 7 are seeing patients. They did not serve any new children on Medicaid during the past 6 months.

Successes and Challenges
1. This section should address the following topics:
   - Please describe the significant successes and challenges the organization experienced related to the funded grant.

Successes, Challenges, and Changes Made
This project has been very successful in that it has really advanced our way of looking at and talking about collaboration. One major outcome of this project is our collaboration theoretical path model that is put forth in the toolkit. We presented this model at the Colorado Public Health Association yearly meeting this past spring. While several members of the audience really liked the visual model of the collaboration process, others said the model was overwhelming. When designing the toolkit, we tried to explain the model in smaller steps to make it easier to understand.
Another major success of this grant is the completion of the collaboration toolkit. Prior to the toolkit, we have only been able to provide information on collaboration through in-person training and individual consultation with groups. We hope that the toolkit will allow us to disseminate our knowledge of how groups collaborate to a much wider audience. Ultimately we hope that this information will allow groups of providers to better serve the people of Colorado by collaborating.

There are two challenges, though, with the toolkit. First, we have not yet had time to get feedback from others. In January/February 2012, someone in the Colorado Center for Public Health Practice has agreed to look over the toolkit and provide feedback. We are also looking for others to provide feedback and are currently reaching out to others.

Another challenge with the toolkit was to make it user-friendly. As part of this decision, we choose to focus on paths and constructs that group leaders and members had more control over. This meant that there are several paths in the path model that are not covered at all in the toolkit.

A second success of this project is the development of tools to measure collaboration. We believe that these tools will allow groups to better identify their needs and funders, like the Colorado Health Foundation, better assess the progress of collaborative groups. While many funders encourage grantees to collaborate, there are few good measures of collaboration available.

A challenge of the new data collection tools is that we have still not been able to examine enough groups to provide solid statistical support for our collaboration measurement tool. We have begun to reach out to the AHECs. Because of AHEC’s mission, we believe that we may be able to measure collaboration in enough groups with a similar mission to calculate the validity and reliability of our tool.