Living at Home Network Programs and Funding:

A plan for assessing outcomes, costs, and benefits associated with service delivery

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Contents

Introduction ........................................................................................................................................ 1
  Background ..................................................................................................................................... 1
Purpose of this report ....................................................................................................................... 3
Methodology ....................................................................................................................................... 3
Report contents .................................................................................................................................. 4
Study results ........................................................................................................................................ 5
  Finding #1: Significant variation exists in current programming .................................................. 5
  Finding #2: Significant variation exists in reimbursement for services ....................................... 7
  Finding #3: Program exits often result in transitions to institutional care ..................................... 8
  Finding #4: Health care plan representatives urge concentration on a core set of service offerings........................................................................................................................................ 8
Recommendations .............................................................................................................................. 10
    Evaluation focus ............................................................................................................................ 10
    Evaluation measures ...................................................................................................................... 12
Conclusions .......................................................................................................................................... 20
Appendix ............................................................................................................................................ 21
    Living at Home Network logic model ............................................................................................ 22
    Summary of LAH/BNP service offerings by region .................................................................. 23
    Potential measures and cost-benefit opportunities associated with each core service ............ 24
Introduction

Background

The Living at Home Network (LAHN) is a nonprofit organization that represents the Living at Home and Block Nurse Programs (LAH/BNPs) in Minnesota. Through their 36 member agencies, they provide and coordinate community-based services to older adults to help them stay healthy, safe, and living independently in their own homes. Informal services provided by volunteers are integrated with formal services that are provided by health care and other types of professionals. Rather than duplicate services, a primary goal of the Living at Home model is to coordinate and supplement current supports with other service options that may be available. The overall goals of the LAH/BNPs are:

- Developing and implementing service plans that address health and independent living needs of older adults
- Coordinating formal and informal services to enable seniors to remain independent for as long as possible
- Coordinating other forms of support that enhance the overall well-being of seniors
- Delaying assisted living or nursing home placement for as long as feasible
- Facilitating smooth transitions between care settings

Each of the 36 LAH/BNPs currently operating in Minnesota responds to the needs of older and disabled adults within a specific geographic area. The array of supports and services provided vary by location, but typically include the following:

- Supports for independent living
- Caregiver support
- Care coordination
- Education and health promotion activities
- Social and leisure activities including friendly visiting
- Volunteer assistance
- Transportation assistance
- Information about and referrals to other needed services
- Financial assistance
The Living at Home program model centers on the needs of the individual and the individual's family, and is supported by neighbors and health care professionals who work together to meet the independent living needs of the individual. The program model identifies the capabilities of participants and their families, organizes resources in the neighborhood, integrates them with the resources of the family and the wider community, and coordinates care and support to respond to the particular needs of each older adult. This collaborative approach is based on the knowledge that a long-term care program for elderly adults will thrive in communities where residents understand that interdependence is the foundation of their community and are committed to act in ways that benefit others.

The argument for this model is perhaps best made clear when one considers a health care referral to a Block Nurse Program following a health care episode such as a recent hospitalization or change in health status determined as part of a clinical visit. In these circumstances, individuals whose ability to remain at home might seem precarious are shored up within their home setting through such interventions as:

- An in-home assessment
- Support for family caregivers
- Identification of service needs
- Medication management
- In-home nursing care (often through a referral to a home care organization that provides licensed nursing care)
- The support of volunteers who can provide respite for caregivers or friendly visiting to the elderly or disabled resident
- Arrangements for transportation (especially for health care visits)
- Chore and housekeeping services
- Nutrition assessment and support
- Other services identified as useful or necessary in the support of the resident’s goal to remain at home

In recent years there has been increasing interest in making the economic argument for the benefits of the Living at Home model and the services it provides. LAHN now seeks to develop outcome measures that can be used to assess the impact of LAH/BNP services, as well as a framework to calculate both the costs and potential monetary benefits of network member services. This might include a calculation of costs avoided as a result of being able to maintain individuals in their own home.
Ideally, the information from these outcome measures and framework would include the impact of the full range of services available to seniors through the LAH/BNPs, and be relevant to government and policy bodies, as well as funders and donors at the national, state, and community levels.

**Purpose of this report**

Wilder Research has been contracted to:

- Identify and develop outcome measures to assess the impact of LAH/BNP supports and services
- Identify appropriate data collection strategies and consumer follow-up methods
- Create a plan for conducting routine evaluation that includes a framework for assessing costs and monetary benefits associated with LAH/BNP supports and services

Developing consistent practices and uniform metrics across programs will be necessary before further development and implementation of a complete plan to evaluate LAH/BNP activities will be feasible.

**Methodology**

Wilder Research initially met with a group of representatives from the LAHN to discuss outcome measures and program priorities. LAHN representatives provided the following information as background material for the study:

- A draft logic model outlining the activities and expected outcomes associated with each activity
- Documentation about the nature and types of services provided by each of the individual LAH/BNPs
- Supporting documents showing recent statistics (primarily counts of activities) reported to the state of Minnesota
- Records regarding client reasons for terminating services
- A description of previous strategies for assessing costs and revenues
- Information about current data collection methods
In addition to reviewing the above documentation, Wilder also:

- Convened conversations with representatives of various LAH/BNPs to learn more about service delivery and recordkeeping
- Completed telephone interviews with seven representatives of health care plans and related agencies to identify program features health care plans would consider valuable when considering referral to home and community-based service agencies
- Met with Wilder staff economists to review potential strategies for assessing costs and monetizing benefits

**Report contents**

This report includes two main sections:

- A discussion of the findings
- Recommendations for an evaluation focus, including information about measures and metrics
Study results

Finding #1: Significant variation exists in current programming

The review of program and service records revealed a diverse array of programs, each with unique characteristics customized to particular geographic service areas. While the most current LAHN logic model was helpful in describing the full range of resources, activities, and activity counts, as well as short- and long-term outcomes, it was not possible to use this single, overall logic model to describe any single LAH/BNP because the model consisted of a combination of activities and outcomes aggregated across multiple programs. (The draft logic model can be found in the Appendix.)

Conversations with program representatives and spreadsheets showing which programs offered which services were helpful in compiling a comprehensive description of client level activities and associated outcomes. (The Appendix contains a summary of service offerings by programs in each region of the state.)

An effort has been made to summarize this information in Figure 1 below. The activities shown in the figure represent the results of a consensus and discussion process between the LAH/BNP representatives and Wilder Research staff of what represent the critical activities. Again, it is important to note that no single program currently offers all of the services listed.
1. **Key client-level activities**

1. Assess client and caregiver needs including risk of institutionalization *

2. Support accomplishment of Independent Activities of Daily Living (IADLs) 
   (Note that some IADLs are addressed in other categories of service, below)
   a. Preparation of meals
   b. Washing and drying clothes
   c. Basic housework
   d. Obtaining groceries
   e. Managing money
   f. Taking medicine routinely according to directions and complying with other specific health recommendations
   g. Maintaining contact with others through phone or email

3. Promote safety in the home
   a. Safety inspection to identify risk of falls and other safety issues
   b. Installing home safety equipment and related home modifications to enhance safety

4. Provide or arrange chore services to maintain the home
   a. Mowing lawns
   b. Clearing sidewalks
   c. Raking leaves
   d. Removing ice
   e. Repairing and maintaining the home

5. Provide or arrange transportation
   a. Volunteer drivers
   b. Arrangements with other transportation services to provide pickup and return
   c. Chair-to-chair assistance (support that helps the resident to leave their home, enter the vehicle, exit the vehicle; provides accompaniment to their destination; and support to return safely home)

6. Early detection of emergent physical and mental health issues
   a. Screening for depression
   b. Help in the management of chronic diseases (may include use of evidence-based practices)
   c. Observation for changes in condition or mood
   d. Observation regarding food intake and nutrition

7. Health advocacy to support residents’ efforts to advocate for their own health, identify appropriate health care options, and be aware of changing health needs
   a. Escorting to and presence during health care appointments
   b. Obtaining information from health care providers and related sources
   c. Support conversations about and completion of advanced directives for purpose of reducing burden and unwanted medical interventions
   d. Support through the use of evidence-based interventions such as the chronic Disease Self-Management Program and other programs/practices that promote self-efficacy

*Prior to the delivery of services, a LAH/BNP typically conducts an initial assessment of current health status and care needs of the care recipient, as well as an assessment of the type and level of support provided by family caregivers. These assessment strategies are not entirely uniform across programs.*
Finding #2: Significant variation exists in reimbursement for services

A compilation of information from a diverse group of individual LAH/BNPs again showed significant variation in funding strategies associated with each service. For example:

- Some programs received reimbursement for caregiver support from Title IIE funds, others received financial support for caregiver services from county contracts, and still others reported freewill donations or no direct reimbursement for any caregiver services.

- With regard to transportation services, some programs, often using volunteer drivers, requested freewill donations. Others reported reimbursement from the Minnesota Department of Transportation at a rate of $10 per hour and $.40 per mile. Still others were funded by Elderly Waiver dollars or as part of a Title III caregiver grant. Some programs did not provide the services directly, but arranged for the services with locally available transportation providers.

- Chore services, when funded, could be reimbursed through Title IIIB or by direct payment from the consumer. Volunteers also perform chore services.

- Reimbursement for the provision of home delivered meals showed a similar pattern. Some programs were supported by Title III-C dollars, others requested donations, and still others provided services through a coordinated effort in their home community in which a local hospital prepared the meals and the program was reimbursed for delivery costs at a rate of $.35 per unit. Many providers who did not offer the service directly arranged for home delivered meals through another agency in the community.

- For a variety of services, programs did not receive any direct reimbursement. This was true for activities like home safety evaluations, medication management, grocery shopping assistance, and nutrition evaluation and education.

- Health monitoring was occasionally reimbursed through a county contract, but for the most part, it was performed by a volunteer medical advocate and not reimbursed.

Overall, study results show that reimbursement for services is not uniform across programs and that many LAH/BNPs rely heavily on grant dollars and volunteers to provide services for which they receive no reimbursement at all.
Finding #3: Program exits often result in transitions to institutional care

The most recent data on program exits for 162 participants show that 40 percent moved to a nursing home or an assisted-living setting at the time that LAH/BNP services ended. Figure 2 shows these results for 33 of the 36 programs over a 12-month period.

<table>
<thead>
<tr>
<th>Exit to:</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing home</td>
<td>37</td>
<td>23</td>
</tr>
<tr>
<td>Assisted living</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Different housing</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>Death</td>
<td>57</td>
<td>35</td>
</tr>
<tr>
<td>Refused further services</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Unable to reach/unknown</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>100%</td>
</tr>
</tbody>
</table>

These data suggest that LAH/BNP programs are managing people with serious health needs and that their departure from the program is most often because of death or because of the need to transition to a higher level of care and services.

Finding #4: Health care plan representatives urge concentration on a core set of service offerings

Not surprisingly, health care plan representatives encouraged the Living at Home/Block Nurse Programs to concentrate on a core set of service offerings and focus on demonstrating the outcomes associated with those offerings. They felt that this was important because of the recent emphasis on the creation of integrated care system partnerships and the recent push by the federal Administration on Aging to better integrate the use of home and community-based services into the service strategies adopted by health systems and Minnesota's Health Care Homes. To do this, however, would require greater model consistency and more uniform program offerings on the part of home and community-based service programs. In addition, it would likely require more uniform referral mechanisms and assessment strategies, as well as an improved ability to measure and track outcomes of interest to health care systems.

This is generally seen as a tall order for the LAH/BNPs since these programs grew up independently of health systems, relied substantially on local volunteer efforts, and were designed to respond to local needs. Moreover, since many of the client needs served by these programs focus on the support of Independent Activities of Daily Living rather than specific health care needs, it is often difficult to draw a direct link between health system needs and program activities.
All of the health system representatives acknowledged the importance of community supports as part of an overall strategy to help older and disabled adults to remain in their own homes and avoid or delay institutionalization. However, they also noted that any care coordination was expected to meet federal and state requirements, that the documentation required regarding the delivery of these services was quite prescriptive, and that most contracting for services would be based on the demonstrated ability to manage risk and produce specific outcomes.

Overall, in order for health plans to consider paying for any of the LAH/BNP services, it appears that there would have to be:

- Greater consistency in service offerings
- More uniform referral and assessment strategies
- Well-defined and consistent coverage across geographical areas
- Potential expansion of the services supported by Elderly Waiver and Alternative Care grants
- Assured financial and service stability among provider organizations
- More consistent access to these services by health care providers

Exploration of the prospects for achieving these goals for the full range of home and community-based services has already begun under Minnesota's recent Integrated Systems Grant to the Minnesota Board on Aging (funded by the federal Administration on Aging). Wilder's independent evaluation of this work is beginning to show progress in the areas of more standardized referral protocols, greater potential for connecting consumers to home-based services through the statewide Senior LinkAge Line®, and improved acceptance of services based on these referrals. However, there is still much ground to cover in order to fill gaps in reimbursement for the types of supports consumers and their caregivers will need to remain at home.

Considerable work also remains to fill other gaps between the services and supports available through home and community-based providers and the needs and expectations of health care providers. Specifically, there are still many issues to work out with regard to:

- Making limited health care information available to home and community-based service providers (as needed and appropriate)
- Enabling home and community-based service providers to offer reliable feedback to health care providers when a client's ability to remain at home is threatened
- Developing and demonstrating effective measurement strategies that allow home and community-based providers to demonstrate clear service outcomes
Recommendations

Evaluation focus

This section presents recommendations for designing an evaluation focus that is based on a uniform set of core client-level activities, directed by a core set of LAH/BNP services. Also included are suggestions for potential strategies for assessing needs and tracking services, and possibilities for assessing impact and benefit, including potential ways for assessing cost savings that might reasonably be attributed to the work of LAH/BNPs.

These recommendations are based on the following information:

- Conversations with Living at Home/Block Nurse Program representatives
- A review of service offerings across the 36 program LAH/BNP entities
- A review of current funding supports
- Consideration of views among health care providers and agency representatives regarding their expectations for home- and community-based service providers

The rationale behind the selection of these core client-level activities (outlined on the following page) is based on the need to distinguish basic home and community-based service supports from the specific health-related supports provided and managed by a consumer’s primary health care provider. The selection of these activities assumes that home and community-based service providers such as LAH/BNPs share as their primary goal the reduction or elimination of barriers that would prevent a person from remaining in their own home (or a friend or relative’s home or other home-like setting). It also assumes that the need for these services is often triggered by a discharge from a hospital or rehabilitation center, or a significant change in overall health status. However, it does not assume that the job of providing primary health care shifts to a community-based program. That responsibility still resides with the consumer’s primary health care provider. This provider may decide, based on an individual's health status, to extend services like care coordination, rehabilitative therapy, or ongoing licensed nursing care (either directly or through a contractual relationship with an appropriate licensed provider) to the client’s home. These services are seen as distinct and separate from what is offered by a LAH/BNP.

Finally, this model assumes that once the services of a LAH/BNP are in place, they may become part of an ongoing service plan, if such a plan is deemed necessary for the continued achievement of the primary goal (remaining at home). When remaining at
home is no longer possible, the LAH/BNP may also be engaged in assisting the client in their transition to a more appropriate care setting.

The following activities are recommended as part of the core service offerings of LAH/BNPs:

1. An in-home assessment process that examines each client’s ability to accomplish Independent Activities of Daily Living (IADLs), determines the client's level of risk for institutional care, and assesses the capacity of any available family caregivers to provide support for IADLs (and other tasks they may perform).

2. Service activities intended to resolve barriers that prevent clients from accomplishing IADLs.

3. Service activities that help to reduce burden and stress on family caregivers and support their care efforts.

4. Service activities that help to maintain the home and ensure that it is a safe environment for clients and caregivers.

5. Service activities that help clients to obtain and comprehend necessary health information, consider what health care related actions they would choose to have performed in the event of a health crisis, and to record these intentions in some form of advance directive.

6. Service activities that enable clients to get to, and return safely from, destinations outside of their homes, particularly for medical appointments and other health related needs (this is a component of addressing IADL needs)

[Note: It is not necessary for each program to provide all of the above services directly. It will likely be sufficient if some services are provided through coordinated arrangements with other local service providers.]

While there are additional activities provided by some LAH/BNPs that are clearly of benefit to both consumers and health providers (such as the use of home health aides and skilled nursing care), these services are not offered consistently enough across the majority of programs to form the basis for an overall evaluation plan. And while even some of the recommended activities are not fully implemented as core services in all current programs, these activities are thought to represent the best prospects for program development within the current policy environment.

Another consideration in the identification of core service components is the need to have a clear differentiation between the focus of activities expected of primary health care
providers and the focus of activities expected of what is now a very diverse group of home and community-based service providers. The policy and reimbursement environment clearly favors health plans serving in the role of coordinating and controlling the vast majority of health related services. Moreover, they see this as their legitimate responsibility. These providers are generally looking for home-based service organizations to support the nonmedical service needs of their clients. The extent to which they can obtain quality, uniform, accessible, and reliable nonmedical home-based supports for their patients will likely drive a wide range of future funding decisions related to the support of home and community-based service providers. Thus, it is critical for programs like LAH/BNPs to clearly delineate their model, agree on what it includes, and deliver the services in accordance with these decisions. In fact, it is likely that in the long run, a wide range of home and community-based service providers will need to work together on these service models if they wish to achieve more stable and long-term funding and demonstrate clear benefits to consumers and other stakeholders.

**Evaluation measures**

This section outlines core client-level activities, as well as a discussion of the rationale for the recommended measurements related to each activity and record-keeping tasks. The information is summarized in table form in the Appendix.

1. **An in-home assessment process that examines each client’s ability to accomplish Independent Activities of Daily Living, assesses the capacity of the family caregivers to provide support for these activities, and determines level of risk for institutional care**

A focus on resolving barriers that prevent clients from accomplishing Independent Activities of Daily Living (IADLs) first requires an assessment of the extent to which the client experiences barriers in any of the IADL areas. These areas include shopping for food and other needed supplies, preparing meals, washing laundry, using the telephone, basic cleaning and housekeeping, taking medications and supplements on a prescribed schedule, getting to and from appointments and activities outside the home, and managing finances including basic bill paying.

To fully assess barriers to accomplishing these activities it is important to not only know the consumer’s ability to perform these tasks, but to also understand the ability of any family caregiver to perform these activities if the consumer is not able to do one or more of the IADLS on his or her own.
Thus, the assessment process identifies both the activities that the program may need to address as well as the family caregiver’s ability to meet these needs (if such a caregiver is available), along with supports that the caregiver may need to continue providing.

Measurement in this service area involves several elements:

- Completion of an in-home IADL assessment
- Identification of if and how each IADL is currently being accomplished (including by one or more family caregivers)
- Development of a plan for addressing the IADL needs that are currently not being met
- Execution of the plan

With regard to the metrics to be used related to the assessment process itself, record keeping needs to focus on:

- Whether or not the assessment was completed, including a record of the number of assessments completed by each LAH/BNP
- A record of which IADLs are expected to require some type of intervention
- A determination and record of whether or not one or more family caregivers is available to provide support
- A determination and record of whether or not the LAH/BNP will provide services to support the caregiver(s)
- A determination and record of whether or not the client would likely be eligible for some form of institutional care based on need (perhaps by using the Rapid Screen® tool or a simplified version of questions used by the state of Minnesota in determining case-mix classification)

This last point is critical because a determination of eligibility for admission to a nursing home or assisted living facility opens up a range of possibilities for cost-benefit analysis. In fact, if the LAH/BNP can determine an approximate case-mix classification, even within a range of possible classifications, it is possible to attach a daily dollar value for every day that the client is maintained at home. This is the area where the Living at Home Network is likely to demonstrate its greatest potential cost savings.
2. Service activities intended to resolve barriers that prevent clients from accomplishing Independent Activities of Daily Living (IADLs)

Activities intended to support and resolve IADL barriers represent the core of service provision by the LAH/BNPs. Since the resolution of these barriers represent the first critical line of defense in preventing or delaying the need for institutional care, an evaluation plan that seeks to assess outcomes as well as costs and benefits must concentrate data collection efforts in these areas. This requires the following:

- Repeat of the IADL assessment periodically after interventions have begun (e.g., at 2-4 month intervals)
- Review and adjustment of the IADL plan based on results of periodic IADL reassessment
- Identification of the costs associated with the provision of LAH/BNP services for each of the IADL areas addressed (overall program costs can serve as a proxy if a finer breakdown is too difficult)
- Identification of anticipated costs if other services are required to meet each IADL need
- Measures of client and/or caregiver satisfaction with both the services provided and the perceived benefits (outcomes) of the services received to meet IADL needs

Estimating alternative costs is probably easiest in IADL areas like preparing meals, washing laundry, housekeeping, transportation to needed services, or shopping, all of which have commercial service counterparts for which one can obtain average costs. It becomes more difficult in an area like managing medications. Nonetheless, estimates of such costs can be derived from estimates of hourly staff costs for providing medication management services within an assisted living facility.

Potential recordkeeping for each LAH/BNP client would include:

- Records of the number and types of IADL reassessments completed, at what intervals the assessments were completed, and the results of the assessments
- Documentation of IADL plan revisions based on periodic IADL reassessment
- Records of which IADLs received an intervention, the type of intervention/service, frequency and duration of intervention, and who provided it
- Records of estimated costs associated with each of the IADL interventions
- Results of surveys of client and/or caregiver satisfaction with services and outcomes
3. Service activities that help to reduce burden and stress on family caregivers

We know from our discussions with LAH/BNP representatives that any connections program staff or volunteers might make with a consumer involves some assessment, either formal or informal, of the availability of support from family caregivers. Since most in-home support is provided by such caregivers, it would seem to be a critical part of LAH/BNP services to not only determine how these caregivers are doing, but to also determine what supports the caregivers might need and what other family members or friends may be available to provide additional in-home support.

If this is determined to be a core service element for Living at Home/Block Nurse Programs, the programmatic goals would likely be to fully utilize family caregiver assistance to reduce or eliminate barriers to accomplishing IADLs, provide support or coaching to caregivers in ways that reduce their sense of burden, and provide some form of respite for caregivers in the form of home respite care or arrangement for occasional adult day health participation for the consumer.

Potential measures would include:

- Both initial and follow-up assessment of caregiver depression, burden, or role strain (depending on the focus of caregiver supports, the completion of a brief caregiver burden scale at two points-in-time would likely be the simplest)

- Development, periodic review, and adjustment of plans to utilize family caregiver assistance and to address caregiver needs

- A cost estimate of the daily value of a caregiver remaining engaged in providing care to a family member who remains in their home (estimates of the value of this care would vary depending on the consumer's risk for institutional placement and might be calculated based on PCA rates or hourly rates for home care aides)

- Measures of caregiver satisfaction with both the services provided and the perceived benefits (outcomes) of the services received to support the caregiver

Potential recordkeeping for each LAH/BNP caregiver would include:

- Records of the number of initial and follow-up caregiver assessments completed, kinds of assessments completed, at what points-in-time assessments were completed, and results of the assessments

- Documentation of initial plans to support caregiver and adjustments to plans based on results of assessments
• Records of types of supports caregiver received, frequency and duration, and who provided each type of support

• Records of the estimated cost of the daily value of a caregiver providing assistance to a family member, based on type of care and level of care receiver’s need

• Results of surveys of caregiver satisfaction with services of the LAH/BNP

4. Service activities that help to maintain the home and ensure that it is a safe environment for clients and caregivers

Several LAH/BNP representatives talked about home safety, often from the standpoint of what could be done to prevent falls or increase safety through special equipment or home modifications. If this is determined to be a core service area, it would likely be necessary for each LAH/BNP to routinely use a common and validated home safety checklist and to document any plan to improve home safety if deficits are identified. Programs may decide to use a home safety assessment similar to the one done as part of the Minnesota Long-Term Care Consultation Services Assessment.

Measures would likely include:

• Identification of specific safety issues in the home

• Identification of specific interventions intended to increase home safety and their costs

• Identification of any equipment or home modifications that are implemented and their associated costs

Monetizing the benefits associated with enhanced safety is somewhat more difficult. If an initial assessment reflects a high risk for falls, it might be possible to describe costs avoided based on a period of time without falls following a determination of high risk. However, in this area it is unlikely that programs would be able to make convincing arguments for the provision of safety-focused services based on cost avoidance alone.

We know that some programs provide home modifications or other safety improvements at a reduced cost from what would be available from a commercial vendor. If program costs were tracked, these programs would be able to compare the differences between the costs at which the program is able to provide services versus the cost at which a commercial vendor could do so.

It may also be useful to collect consumer or caregiver feedback regarding perception of benefits, although it is unlikely that one would be able to monetize such an estimate of benefits.
With regard to home safety, basic information that LAH/BNPs would need to collect would include whether a home safety assessment was conducted, the completed assessment tool (hopefully everyone would use a common tool), whether or not safety risks were identified, what actions were taken in response to those safety risks, and routine reassessment to ensure that safety risks do not reappear.

Potential recordkeeping related to home safety would include:

- Number of home safety assessments completed
- Documentation of the specific safety issues identified in the home and a plan to address them, including estimated costs
- Documentation of home safety modifications, equipment, or other safety improvements provided, including costs
- Records of results of surveys of caregiver satisfaction with services

5. **Service activities that help clients to obtain and comprehend necessary health information, consider what health care related actions they would choose to have performed in the event of a health crisis, and record these intentions in some form of advance directive**

A significant amount of staff energy is currently expended in activities that might be considered health advocacy. The ability of LAH/BNPs to do this for their clients varies across programs. At a minimum, it is necessary for clients to understand what health actions they must take for themselves (or have others help them with) in order to support stable health. This is an essential element in avoiding institutional care.

Measurement for this area is not well developed, but at a minimum, LAH/BNPs should record any activity that helps the client:

- Understand how to manage symptoms and conditions
- Carry out activities that are recommended by the primary care providers
- Accompany client to medical or related health visits to help interpret or clarify health information needed to manage care in the home

With regard to advance directives, basic information that LAH/BNPs would collect would include whether or not a conversation regarding advance directives is initiated and whether or not the client was ready to have such a conversation. If the client appeared ready to have the conversation the program would collect information about health care
preferences, probably using a form like one from *Honoring Choices* (long or short form version), and record information about where the form was filed (or to be filed) once complete.

These are some of the questions that seem most relevant for starting a conversation:

- Have you given much thought to what you would like people to know about how to care for you if an illness made it difficult for you to express your thoughts?
- Have you ever thought about preparing a living will or an advance directive concerning your health care?
- Where would you prefer to spend your last days if you are ill? At home, with a family member or another caregiver? Or in a nursing home, or in the hospital?
- Who do you want to make medical decisions for you if you are unable to speak for yourself?
- Do you believe that life should always be preserved as long as possible?
- If not, what kinds of mental or physical conditions would make you think that life-prolonging treatment should no longer be used? For example, if you were:
  - Unaware of your surroundings
  - Unable to appreciate or continue important relationships
  - Unable to think well enough to make everyday decisions
  - In severe pain or discomfort

If the client is amenable to the idea of having this conversation and creating an advance directive, the information might be gathered using one of the forms pre-approved in Minnesota.

6. **Service activities that enable clients to get to, and return safely from, destinations outside of their homes, particularly for medical appointments and other health related needs**

Transportation services, whether provided directly by the program (through volunteer drivers or under a service contract), or provided indirectly by coordinated arrangements with a local area transportation service vendor, are seen as critical in supporting an ill or frail person who seeks to remain at home. Transportation provides a critical link to ongoing medical care and related service needs.
A number of programs report that they provide chair-to-chair transportation, meaning that they provide assistance that begins inside a person's home and ends after the person is safely delivered to the specific location of their appointment or meeting, or is returned home again. Some also report that consumers are accompanied to their visits and receive the support of a health advocate to understand follow-up instructions so that they can maintain compliance with medical expectations following their return home. These services are quite valuable to a consumer and infrequently available from standard transportation vendors. Monetizing such benefits is more difficult.

For purposes of this evaluation the following measures are recommended:

- Records of all rides provided and the cost of all rides (based on distance, contract costs, gas reimbursements for volunteers, etc.). If volunteers provide services, volunteer service hours can also be monetized.

- Records of the purpose of all rides provided.

- Records of how many (and what percentage) of rides are provided for medical purposes.

- Records of the level of assistance required for the rides provided: door-to-door; chair-to-chair; accompanied by another person on entire trip, including the kind of support provided by the person accompanying the client.

- An estimate of the cost of providing these rides and additional assistance/support during the trip if they had to be purchased independently by the consumer through commercial services, such as taxi or van transportation.
Conclusions

As the Living at Home/Block Nurse Programs developed, they created similar but not necessarily identical program models. This makes sense, since programming designed to respond to local needs does not necessarily lend itself to a uniform and consistent service model throughout all geographic areas served.

As a practical problem, however, this means that the development of a core set of outcome measures needs to rely on some level of agreement as to what will constitute the core services across the network. This makes it essential to review the recommendations provided above, assess what will and will not be included in the core service structure, and to agree that a common assessment process will be used for each agreed upon measurement concept.

The work ahead will require significant consensus building across programs and specific agreement on core service metrics. It is recommended that the monetization of all benefits associated with particular program activities be based on conservative estimates of market costs. It is also recommended that complicated metrics be avoided until fidelity to the core service model across all LAH/BNPs is reasonably achieved.

A further consideration is the issue of geographic coverage and the extent to which health care providers have sufficient access on a timely basis to a reasonably uniform set of home-based supportive services from the LAH/BNPs. This is a problem that the Living at Home/Block Nurse Programs cannot resolve on their own. For this to occur there has to be a larger coming together across the world of providers involved in home and community-based services such that the resources available from providers as diverse as Faith in Action Programs, Parish Nurses, Block Nurse Programs, community-based senior service organizations, and other home service providers are more transparently coordinated and more uniformly available across geographic areas. This is a problem that only a larger entity, such as the state of Minnesota, can ultimately resolve. This could happen through increased incentives for programs to work together, increased financial support for specific core services, and increased attention to the availability of services in more isolated geographic areas of the state.
Appendix

Living at Home Network Logic Model

Summary of LAH/BNP service offerings by region

Potential measures and cost-benefit opportunities associated with each core service
Living at Home Network logic model

The logic model created by the Living at Home Network describes the expected resources, activities, outputs and outcomes of the Living at Home/Block Nurse Program interventions.

**DRAFT LAHN Logic Model. 4-11-13 – From discussion at statewide meeting and logic models from Owatonna, Holdingford, and SE Seniors programs.**

<table>
<thead>
<tr>
<th>1 Resources/ Inputs</th>
<th>2 Activities</th>
<th>3 Outputs</th>
<th>4 Outcomes</th>
<th>5 Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resources Important to your program.</strong></td>
<td></td>
<td></td>
<td>What do you believe happens because of the activities and outputs?</td>
<td>What do you hope happens in the long-term because of the outcomes?</td>
</tr>
<tr>
<td>Volunteers</td>
<td></td>
<td></td>
<td>Cost savings due to:</td>
<td>Older adults healthier</td>
</tr>
<tr>
<td>Board members</td>
<td></td>
<td></td>
<td>- nursing home care averted or delayed</td>
<td>Quality of life of older adults improved</td>
</tr>
<tr>
<td>Staff</td>
<td></td>
<td></td>
<td>- spend down for medical assistance averted or delayed</td>
<td>Older adults stay in the community</td>
</tr>
<tr>
<td>Geographic good will and strong community support</td>
<td></td>
<td></td>
<td>- less hospitalizations</td>
<td>Community becomes stronger</td>
</tr>
<tr>
<td>Financial support - neighborhood individuals, businesses and churches; Hennepin County, state; NRP, and foundations</td>
<td></td>
<td></td>
<td>- catching problems sooner</td>
<td>Community becomes financially better off due to money kept local</td>
</tr>
<tr>
<td>Partnerships/ Collaboration</td>
<td></td>
<td></td>
<td>People able to transition home from nursing homes and assisted living</td>
<td></td>
</tr>
<tr>
<td>Nursing agencies (for some programs)</td>
<td></td>
<td></td>
<td>People with diagnosis such as dementia that would usually not be able to live at home, able to be at home</td>
<td></td>
</tr>
<tr>
<td>Support of elected officials</td>
<td></td>
<td></td>
<td>Hospital readmission reduced</td>
<td></td>
</tr>
<tr>
<td>Facilities - office space, furnishing, computer</td>
<td></td>
<td></td>
<td>Clients live at home with health maximized</td>
<td></td>
</tr>
</tbody>
</table>

Activities performed by your organization. Activities vary by program and include:

- Service coordination
- Assessment for services
- Friendly visiting
- Transportation to doctor
- Transportation to shopping
- Transportation to social events
- Grocery shopping assistance
- Minor repairs
- Yard care
- House keeping
- Nursing services
- Home health aid services
- Health promotion
- Paperwork assistance
- Respite for caregivers
- Recycling program
- Information about services
- Intergenerational activities
- Outreach
- Newsletters
- Fundraising
- Recordkeeping and administrative work
- Work with other agencies

Services provided by volunteers and staff, integrated to meet needs

Quantifiable, Immediate results from activities:

- Number of people receiving advocacy and/or service coordination
- Number of people receiving volunteer services
- Number of NEW people receiving volunteer services
- Number of people receiving nursing services
- Number of NEW people receiving nursing services
- Total people served (records keep)
- Estimate of additional people served
- Estimate of NEW additional people served
- Advocacy and Service Coordination Hours
- Advocacy and Service Coordination Visits
- Number of Volunteer Hours
- Number of Individual Volunteers
- Number of NEW Individual Volunteers
- Client Related Nursing Hours
- Nursing Visits
- Client Related Home Health Aide Hours
- Home Health Aide Visits
- Health promotion contacts
- Outreach contacts

Outcomes:

- Cost savings due to:
  - nursing home care averted or delayed
  - spend down for medical assistance averted or delayed
  - less hospitalizations
  - catching problems sooner
- People able to transition home from nursing homes and assisted living
- People with diagnosis such as dementia that would usually not be able to live at home, able to be at home
- Hospital readmission reduced
- Clients live at home with health maximized
- Older adults and have increased social ties/perceived social support
- Visiting volunteer clients experience positive impact, such as increased companionship, help with tasks, and/or opportunities to engage in activities of interest
- Community residents are aware of program as an organization to call for assistance
- Community has increased interactions between active retired citizens, between generations, and between agencies that serve older adults; is more supportive of older adults; and is more diverse age-wise from older adults being able to stay in the neighborhood longer
- Older adults able to volunteer and contribute to the community more and for a longer period of time
- Caregivers are able to provide care for longer and report less strain and burden
- Caregivers have increased social ties/perceived social support
- Reduced falls
- Older adults have control of where and how they live
- More community connections
- Older adults do not feel alone and are less isolated
- Older adults keep dignity
- Crises averted
- Outcomes from the Live Well screening
# Summary of LAH/BNP service offerings by region

<table>
<thead>
<tr>
<th>Service</th>
<th>Northwest (5)</th>
<th>Arrowhead (3)</th>
<th>North (5)</th>
<th>Central (5)</th>
<th>Southeast (2)</th>
<th>Pine Island</th>
<th>Minneapolis (3)</th>
<th>St. Paul (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In home assistance</td>
<td>X</td>
<td>X</td>
<td>2/5</td>
<td>4/5</td>
<td>X</td>
<td>--</td>
<td>1/3</td>
<td>10/12</td>
</tr>
<tr>
<td>Caregiver support</td>
<td>4/5</td>
<td>X</td>
<td>2/5</td>
<td>1/5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>10/12</td>
</tr>
<tr>
<td>Care coordination</td>
<td>X</td>
<td>X</td>
<td>1/5</td>
<td>2/5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Education/Health promotion</td>
<td>X</td>
<td>X</td>
<td>4/5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Leisure activities</td>
<td>4/5</td>
<td>X</td>
<td>4/5</td>
<td>4/5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>7/12</td>
</tr>
<tr>
<td>Independent living</td>
<td>2/5</td>
<td>1/3</td>
<td>1/5</td>
<td>4/5</td>
<td>1/2</td>
<td>--</td>
<td>--</td>
<td>2/12</td>
</tr>
<tr>
<td>Volunteer assistance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>10/12</td>
</tr>
<tr>
<td>Transportation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1/2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>General information</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>3/5</td>
<td>1/3</td>
<td>--</td>
<td>3/5</td>
<td>1/2</td>
<td>X</td>
<td>1/3</td>
<td>3/12</td>
</tr>
</tbody>
</table>

* X= Core service for all BNPs in region
  
  * Fraction=Core service for some BNPs in region
### Potential measures and cost-benefit opportunities associated with each core service

<table>
<thead>
<tr>
<th>Core service focus</th>
<th>Measurement tasks</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Activities of Daily Living</td>
<td>Assessment of capacity</td>
<td># assessments completed</td>
</tr>
<tr>
<td></td>
<td>Plan for addressing IADL needs</td>
<td>Record of services that are provided</td>
</tr>
<tr>
<td></td>
<td>Resolve barriers</td>
<td>Eligibility for institutional-based care</td>
</tr>
<tr>
<td></td>
<td>Value of IADL costs</td>
<td># repeat assessment completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation of plan revisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfaction with services</td>
</tr>
<tr>
<td></td>
<td></td>
<td># days of care at home</td>
</tr>
<tr>
<td>Caregiver stress and burden</td>
<td>Assessment of caregiver burden</td>
<td># assessments completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td># and type of caregiver interventions</td>
</tr>
<tr>
<td></td>
<td>Value of caregiver assistance</td>
<td>Satisfaction with services</td>
</tr>
<tr>
<td>Maintain safe home</td>
<td>Assessment of home safety</td>
<td># assessment completed</td>
</tr>
<tr>
<td></td>
<td>Value of interventions</td>
<td># and type of safety issues identified</td>
</tr>
<tr>
<td></td>
<td>Value of modifications</td>
<td>Satisfaction with services</td>
</tr>
<tr>
<td>Advance directives</td>
<td>Assessment of health advocacy</td>
<td># of advance directives completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td># and type of advocacy activities</td>
</tr>
<tr>
<td>Transportation</td>
<td>Assessment of transportation needs</td>
<td># of rides provided</td>
</tr>
<tr>
<td></td>
<td>Value of transportation</td>
<td># of types of rides provided</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of levels of assistance provided</td>
</tr>
</tbody>
</table>