



A Study of Critical Access to HCBS in Minnesota

Presentation of Study Findings
October 2015



Presentation Outline



- Study overview
 - Goals and objectives
 - DHS priority populations
 - Developing consensus specifications
- Review results of analyses
 - Current HCBS patterns and trends
 - Relationship between current and potential users
 - Size and scope of potentially-eligible population
 - Critical access correlates: providers and clusters
- Present strategies for monitoring critical access gaps



STUDY OVERVIEW



Study Goals and Objectives



- 1) Examine Minnesota residents' critical access to home and community-based services (HCBS) at both the local and community level;
- 2) Define and quantify “critical access” using service planning, assessment, claims and county survey data;
- 3) Study access issues among populations potentially facing access challenges; and
- 4) Suggest strategies for addressing these gaps.

DHS Priority Populations



- **Although access and use of HCBS was examined for all State beneficiaries, the team paid particular attention to the following subpopulations:**
 - Older adults with disabilities (ages 65+)
 - Children and “younger” adults with disabilities (< 65 years of age)
 - Children and youth with mental health conditions (< 18 years of age)
 - Adults living with mental illness (ages 18+)

Developing Consensus Specifications



- **Used SFY13 Medicaid claims, assessment, and MAXIS data, as well as State provider registries and American Community Survey (ACS) data**
- **Worked with DHS to create consensus definitions and programming specifications to identify:**
 - ***“HCBS users,”*** based on claims data;
 - Individuals ***with MH conditions***, using diagnosis code and screening assessment data; and
 - Individuals ***with other select conditions***, using diagnosis code data, and including Alzheimer’s and related conditions (ARC), autism spectrum disorders, and chemical dependency disorders.



REVIEW OF ANALYSES RESULTS



Current HCBS Patterns and Trends



- Identified **125,375 unique HCBS service users** in SFY13 who received at least one HCBS from a consensus list of **120 different HCBS service codes**.
- When compared to the overall Minnesota Health Care Programs (MHCP) population, HCBS users were **older on average**, more likely to be **dually-eligible** for both Medicare and Medicaid, and have **lower income**.

Current HCBS Patterns and Trends



- **Rate of HCBS use** varied by subpopulation

Age Category	MMIS Count by Category	Share of MMIS Population	HCBS User Count by Category	Share of HCBS Population	Rate of HCBS Use
Older Adults (65+)	84,969	7.70%	47,438	36.31%	55.89%
Children and Adults (under age 65)	1,024,445	92.87%	83,215	63.69%	8.12%
Children and Youth with MH dx (< 18)	64,331	5.83%	11,848	9.07%	18.41%
Adults with MH dx(18+)	185,135	16.78%	58,015	44.40%	31.33%

- **Types of services received** also varied by cohort
 - Older adults (65+) more likely to report receiving **homemaker, skilled nursing, and customized living services**
 - Children and “younger” adults more likely to report use of **PCA services**

Current HCBS Patterns and Trends



Service	% Total Users	% Users > 65	% Users < 65	% Users ≥ 18 with MH Dx	% Users < 18 with MH Dx
24-Hr. Customized Living	9.03%	21.72%	1.80%	8.17%	0.00%
Assistive Technology	8.32%	15.65%	4.14%	8.89%	1.39%
Case Management	48.47%	59.68%	42.08%	50.38%	25.00%
DTH Waiver, Non-Pilot (Unit: Daily)	8.71%	2.00%	12.54%	10.24%	0.00%
Home Health Skilled Nursing Visit	25.49%	22.91%	26.97%	22.08%	5.38%
Home Delivered Meals	9.60%	17.86%	4.90%	10.34%	0.00%
Home Health Service Aide	4.31%	8.90%	1.69%	4.24%	0.10%
Homemaker Services	14.45%	28.21%	6.61%	14.38%	0.47%
PCA, 1:1 Ratio	25.80%	19.14%	29.60%	22.00%	58.91%
Physical Therapy	3.37%	4.38%	2.79%	4.10%	0.60%
Respite, In-Home	1.69%	0.33%	2.47%	1.13%	3.10%
Supported Living Services Adult Corporate	5.16%	1.69%	7.14%	6.87%	0.00%
Transportation: One Way	9.20%	9.81%	8.85%	12.64%	0.22%

Current HCBS Patterns and Trends



- Approximately 40% of those eligible for **residential services (e.g., customized living, foster care)** reported using those services in SFY13, except for children with a MH dx
 - 43% of older adults (ages 65+)
 - 39.7% of children and adults (< 65 years of age)
 - 7.9% of children with a mental health diagnosis
 - 46.3% of adults with a mental health diagnosis
- Individuals **without a spouse or partner in the home**, and/or those **requiring assistance with select activities of daily living** were more likely to have received residential services.

Current HCBS Patterns and Trends



- More than 50% of HCBS users had a mental health (MH), autism spectrum disorder (ASD), attention deficit (ADD) or chemical dependency (CD) diagnosis, twice the prevalence of such conditions in the overall MHCP population.
 - Anxiety and mood disorders most common

- Users with these diagnoses received specific HCBS at the same rate regardless of whether they also received mental health treatment services, but used treatment services more intensely than those not receiving HCBS

Diagnostic Cohort	HCBS Users	% Total HCBS Users	MHCP Counts	% of MHCP Pop.
MH diagnoses	65,274	49.96%	258,531	23.30%
Autism Spectrum Disorder	8,907	6.82%	13,924	1.26%
Attention Deficit Disorders	12,673	9.70%	63,848	5.76%
Chemical Dependency Disorders	7,979	6.11%	49,710	4.48%
Any of the above	68,473	52.41%	282,206	25.44%

Current HCBS Patterns and Trends: Percent of HCBS Users by Service Group



Service Group	Receiving MH Treatment (Tx)	Not Receiving MH Treatment (Tx)
Adult Day Care	4%	3%
Crisis Respite	1%	0%
Customized Living	6%	9%
DT&H	1%	1%
Companion Service	2%	2%
Home Delivered Meals	8%	9%
Homemaker	12%	12%
PCA	4%	5%
Respite	2%	3%
Supported Living	9%	7%
Transportation	14%	8%
Independent Living	9%	4%

Current HCBS Patterns and Trends



- Among those in the MHCP population with a MH, ASD, ADD, or CD diagnosis roughly:
 - **22%** received HCBS and **77%** received mental health treatment services

MH Subgroup	Number	Percent
HCBS and MH Tx	42,051	18.3%
HCBS and No MH Tx	10,390	4.5%
MH Tx Only, No HCBS	135,070	59.0%
No Treatment or HCBS	41,604	18.2%

- ***Individuals with ASD were more likely to receive*** HCBS and mental health treatment services, while ***those with CD were least likely to receive*** either type of service

Current HCBS Patterns and Trends: Characteristic of HCBS Users with MH Dx



Variable	HCBS and MH Tx	HCBS and No MH Tx	MH Tx Only, No HCBS	No Treatment or HCBS
Cohort Count	42,051	10,390	135,070	41,604
Median Age	44	52	30	31
Percent White	72%	72%	75%	77%
Percent Black	20%	17%	16%	14%
Percent Male	46%	45%	45%	48%
Medicare Part A or B Recipient	50%	52%	14%	11%
Percent with ADD Diagnosis	24%	16%	28%	26%
Percent with Chemical Dependency	14%	11%	21%	25%
Percent with Autism Spectrum Diagnosis	14%	15%	3%	2%

Current HCBS Patterns and Trends



- More than 12,000 HCBS users were identified as having Alzheimer's or a related condition (ARC).
 - Roughly 50% of these users were identified as having ARC based on assessment data alone
 - Others were identified using diagnoses codes on claims

Cohort	Total Number of Users	Percentage of All HCBS Users
HCBS Users flagged as ARC	12,425	9.91%
<i>Based on diagnosis on claims</i>	<i>5,865</i>	<i>4.91%</i>
<i>Based on an MSE score at assessment</i>	<i>6,560</i>	<i>5.52%</i>

Current HCBS Patterns and Trends



- HCBS users with ARC were more often older and white, with higher levels of need for assistance with activities of daily living

	HCBS no ARC (Claims)	HCBS + ARC (Claims)	P-value	HCBS no ARC (Assess)	HCBS + ARC (Assess)	P-value
Median Age	69	79	<.00001	69	77	<.00001
Percent of Whites	77%	86%	<.00001	77%	85%	<.00001
Percent of African-Americans	12%	7%	<.00001	12%	9%	<.00001
Percent of Asian-Americans	7%	4%	<.00001	7%	2%	<.00001
Percent of Native Americans	2%	2%	0.78754	2%	1%	0.01032
Low ADL	18%	11%	<.00001	18%	13%	<.00001
Very Low ADL and 65 Years or Older	12%	9%	<.00001	12%	9%	<.00001

Current HCBS Patterns and Trends



- When compared to their non-ARC peers, a greater percentage of HCBS users with ARC used:
 - 24-Hour Customized Living
 - Assistive Technology
 - Case Management
 - Home Delivered Meals
 - Home Health and Skilled Nursing Services; and
 - Homemaker Services

- By contrast, HCBS users with ARC were less likely to use PCA

Relationship between Current Users and Potential Demand



- To examine this relationship defined mutually-exclusive cohorts (“demand groups”) of potential users* of HCBS from MMIS claims data
 - Individuals on a waiting list or assessed as eligible but not receiving HCBS
 - Institutional residents (nursing home, intermediate care facilities, Anoka, etc.)
 - Certain diagnostic groups (e.g., ID/DD, ASD, TBI, multiple chronic conditions)

**Potential users by definition are individuals NOT currently receiving one or more HCBS*

Current HCBS users and Known Potential users



125,375 – HCBS Users in SFY13

1,718 – Non-HCBS but on waiting lists or assessed

17,182 – Non-HCBS living in institutional settings

202,365 – Non-HCBS with select diagnoses
(TBI, ASD, DD, MCCs)

Current HCBS users and Known Potential users



- Fourth cohort* (“demand group”) of potential users identified using American Community Survey data from 2008-2012
 - Approximately **440,000 state residents** who reported having a disability and receiving public insurance (i.e., potential users of HCBS)
 - Roughly 3.5 times the number of HCBS users in FY13

*This cohort of potential users includes both current HCBS users and non-users

Relationship between Current Users and Potential Demand



- Found rate of HCBS use among low-income individuals increases with age...

Age Category	HCBS User Count	Number of Residents Below 200% FPL (ACS)	Percent of Residents below Poverty Line using HCBS
Between 0 and 14	17,521	140,023	12.51%
Between 15 and 17	2,846	28,166	10.10%
Between 18 and 24	9,282	113,166	8.20%
Between 25 and 34	12,977	80,325	16.16%
Between 35 and 44	10,111	56,287	17.96%
Between 45 and 64	30,472	97,525	31.25%
Between 65 and 74	16,753	22,614	74.08%
Older than 74	30,685	32,041	95.77%

Relationship between Current Users and Potential Demand



... but does **not** vary significantly by county

County	Percent HCBS Users	Percent of State's Population Below 200% FPL	Percent of Population Below 200% FPL using HCBS
Aitkin	0.29%	0.35%	18.31%
Anoka	4.49%	4.01%	25.66%
Dakota	5.26%	4.33%	27.82%
Dodge	0.23%	0.25%	20.57%
Hennepin	24.14%	24.60%	22.49%
Houston	0.31%	0.31%	22.23%
Ramsey	11.96%	14.21%	19.29%
Scott	1.31%	1.14%	26.50%
Washington	2.29%	2.27%	23.12%
Winona	0.90%	1.31%	15.10%

Critical Access Correlates: Providers



- Average caseloads varied by provider type

Service	Number of Unique Active Providers in CY13	Average Number of Users per Provider*
Adult Day Care	387	18.85
Chore Services	170	8.47
Companion Services	228	14.36
Crisis Respite	20	31.1
Customized Living	1,388	13.38
DTH	458	52.98
Home Delivered Meals	331	44.1
Home Health Services	293	8.74
Homemaker Services	1,272	16.95
Independent Living Skills	331	22.23
PCA	49,951	2.51
Respite	522	8.04
Supported Living Services	1,514	17.91
Transportation Services	711	22.65

**Note: Average calculated over a 1-year period.*

Critical Access Correlates: Providers



- When using providers' and beneficiaries' street addresses and aggregating services by type (i.e., all DTH rates consolidated), minimal differences were noted by service type

Service Category	Count	Max Distance* in Miles	Minimum Distance in Miles	Median Distance in Miles	Mean Distance in Miles	Number of Instances of the Same Address
Adult Day Care Services	1,317	899	0	6	11	12
Crisis Respite Services	59	754	0	11	34	6
DTH Services	947	754	0	5	15	2,163
PCA Services	42,504	983	0	6	13	6,981
Respite Services	416	870	0	7	23	16
* Note: If distance greater than 1000 Miles, assumed to be Corporate Headquarters						

Critical Access Correlates: Clusters



- Examined common clusters or combinations of services used by each cohort.
 - For HCBS users with a mental health diagnoses who received three or more HCBS, the most **common cluster of HCBS** were **administrative care management, home aide, homemaker, personal emergency response system (PERS) and nursing services.**
 - For HCBS users **under age 65**, the most common cluster of services was **administrative case management, DT&H, and respite.**
 - **Home health, homemaker, personal emergency response system (PERS) and nursing services** was the most prevalent combination for **adults 65 and older.**

Critical Access Correlates: Clusters



Subgroup	Most Common Cluster of Services	Population Using the Cluster	Population of Subgroup	Percentage of Population Using that Cluster*
Older Adults (65+ yrs.)	<i>Case management, home health, homemaker, PERS, and RN services</i>	1,036	13,577	7.63%
Children & Younger Adults (< 65 yrs.)	<i>Case management, DT & H, and Respite</i>	976	13,087	7.46%
HCBS Users with a MH Diagnosis	<i>Case management, home health, homemaker, PERS, and RN services</i>	444	14,559	3.05%
All HCBS Users	<i>Case management, home health, homemaker, PERS, and RN services</i>	1,140	26,664	4.28%

**Note the denominator used for these calculations includes all HCBS users who received at least three services but who did not receive residential services in SFY13; the numerator reflects these same criteria.*

Critical Access Correlates: Supply



- Examined the effect of provider supply on whether services were “planned” on the assessment form and whether planned services were actually received.
 - Number of providers per 10,000 low-income (<200% FPL)
 - Model controlled for patient characteristics, including:
 - Gender, race, ethnicity
 - Marital status, Medicare eligibility,
 - Waiver, age group, employed in baseline
 - CCS mental health categories,
 - Partial and total dependence variables for self-care, daily living, money management, transportation, and mobility, other assessment variables
 - Select diagnoses
 - Results stratified by county and economic development region

Critical Access Correlates: Supply



- Provider supply had a statistically significant association with **planning** at the **county level** for:
 - **adult day care, meal delivery, nursing, home health aide, PERS, employment services, and DTH**
- Looking at economic development regions, providers supply had a statistically significant association with planning for:
 - **Residential services, Respite, PCA, meal delivery, nursing, Home Health Aide, employment services, PERS, and DTH**
- **Areas with a higher supply were more likely to see these services planned.**

Critical Access Correlates: Supply



- Provider supply had a statistically significant association with whether individuals **received** planned services at the **county level** for:
 - **transportation, respite, and nursing**
- Looking at **economic development regions**, providers supply had a statistically significant association with **receiving** planned services for:
 - **DT&H.**
- **Areas with a higher supply were more likely to see receipt of these planned services.**



PRESENT STRATEGIES

Suggested Areas for Future Monitoring of HCBS to Assess Critical Access



- Utilization rates by county
- Utilization rates by sub-population
- Combinations of services in key areas
- Active provider caseloads
- Number of active providers in distinct geographic areas for key services
 - Providers relative to low-income (potential) users
- Align with Gaps Survey results

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