



Minnesota LTSS Projection Model: MN-LPM Preliminary Results

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April 26th, 2018

MN LTSS Projection Model

- Developed with collaboration from the Minnesota Department of Human Services, Aging Services
- Interested in Medicaid-funded LTSS for the elderly, 65 years and older
 - Primarily interested in future utilization and cost of LTSS
 - Use of MMIS 2015 claims data for baseline
- Projections to 2020 and 2030
- Excludes disabled under age 65; excludes acute care services
- Prioritizes the use of Minnesota-specific data

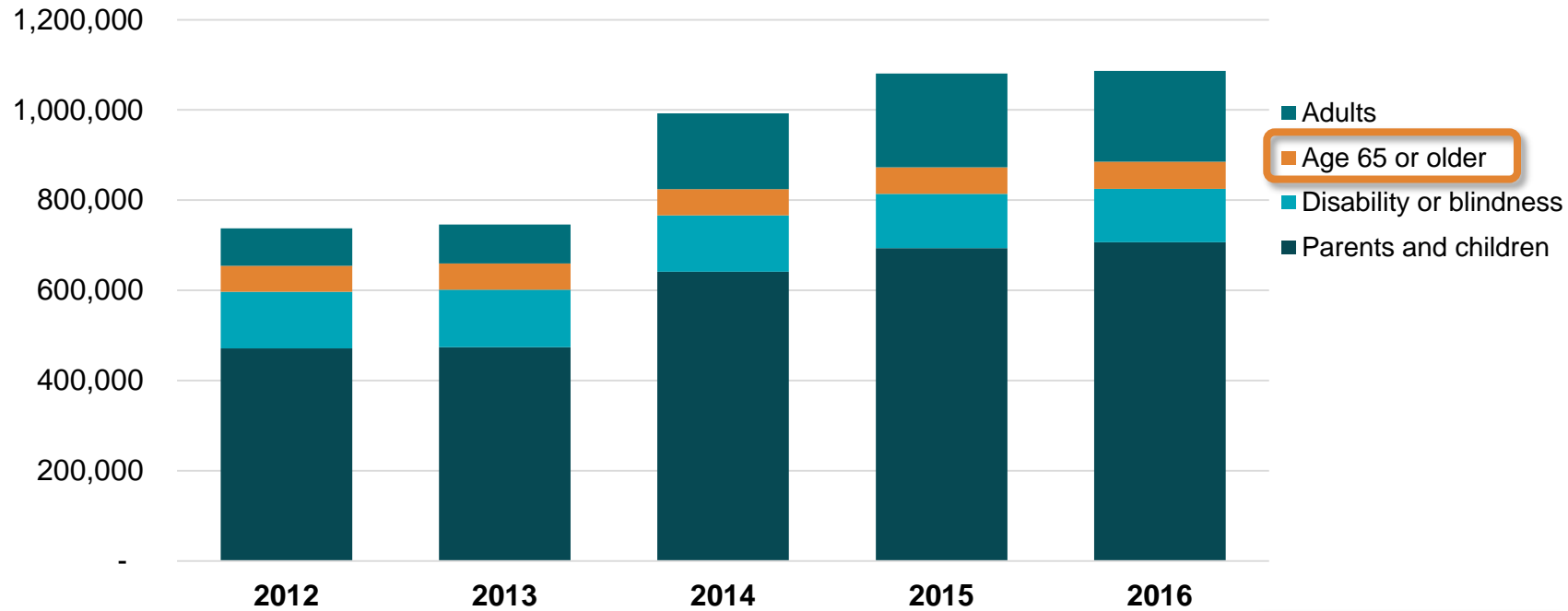
Outline

- Background on MN Medicaid and Demographic Trends
- Overview of the Model
- Policy Options
- Utilization and Cost Projections
- Closing Remarks

Background

Focus: elderly 65+ enrolled in Medicaid

Minnesota Medicaid enrollment by Eligibility category: 2012-2016



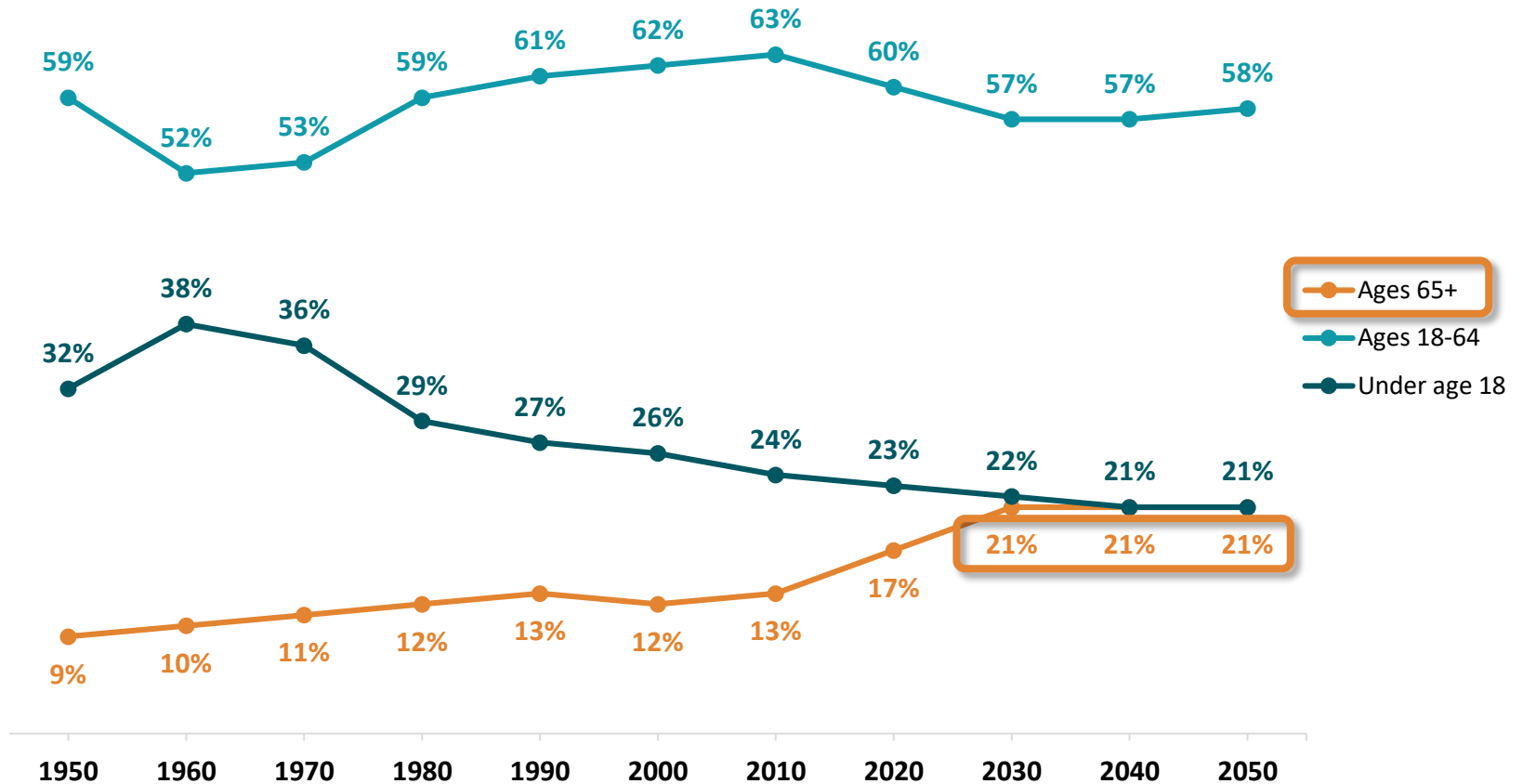
	2012	2013	2014	2015	2016
Adults	82,908	86,567	168,118	207,649	201,457
Age 65 or older	58,073	58,090	58,511	58,937	60,384
Disability or blindness	125,335	127,230	124,830	120,588	118,076
Parents and children	471,126	474,013	641,024	693,269	706,729
Total Medicaid enrollment	737,442	745,900	992,483	1,080,443	1,086,646

5.5% of Total Medicaid Population

Source: Medicaid Matters, DHS 2018

Minnesota's aging population continues to grow as baby boomers age

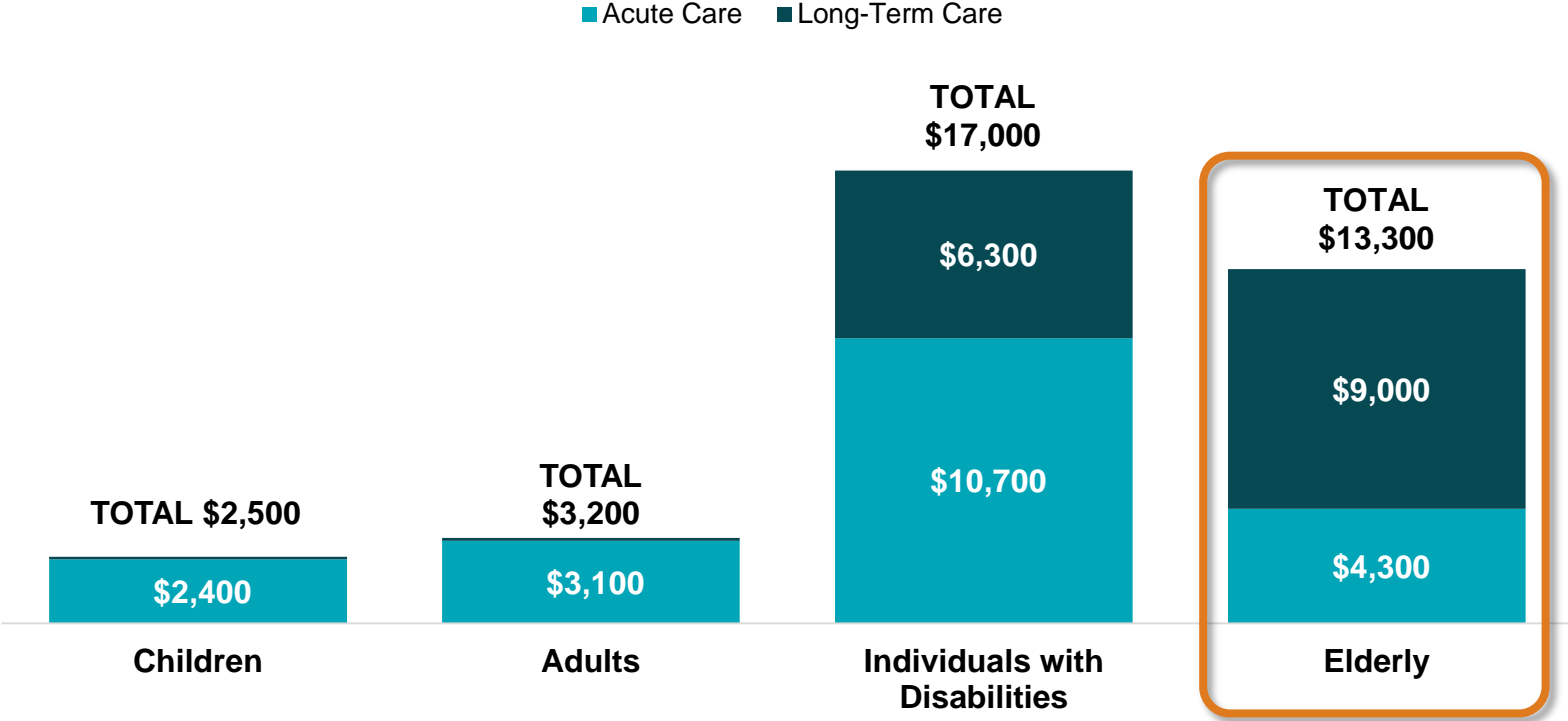
Historical and Projected Population Shares By Three Major Age Groups, Minnesota, 1950-2050



Source: U.S. Census Bureau, decennial census, and Minnesota State Demographic Center Projections.

While enrollment is only 5.5% of Medicaid, the costs are high

Medicaid per enrollee spending is significantly greater for the elderly and individuals with disabilities compared to children and adults.



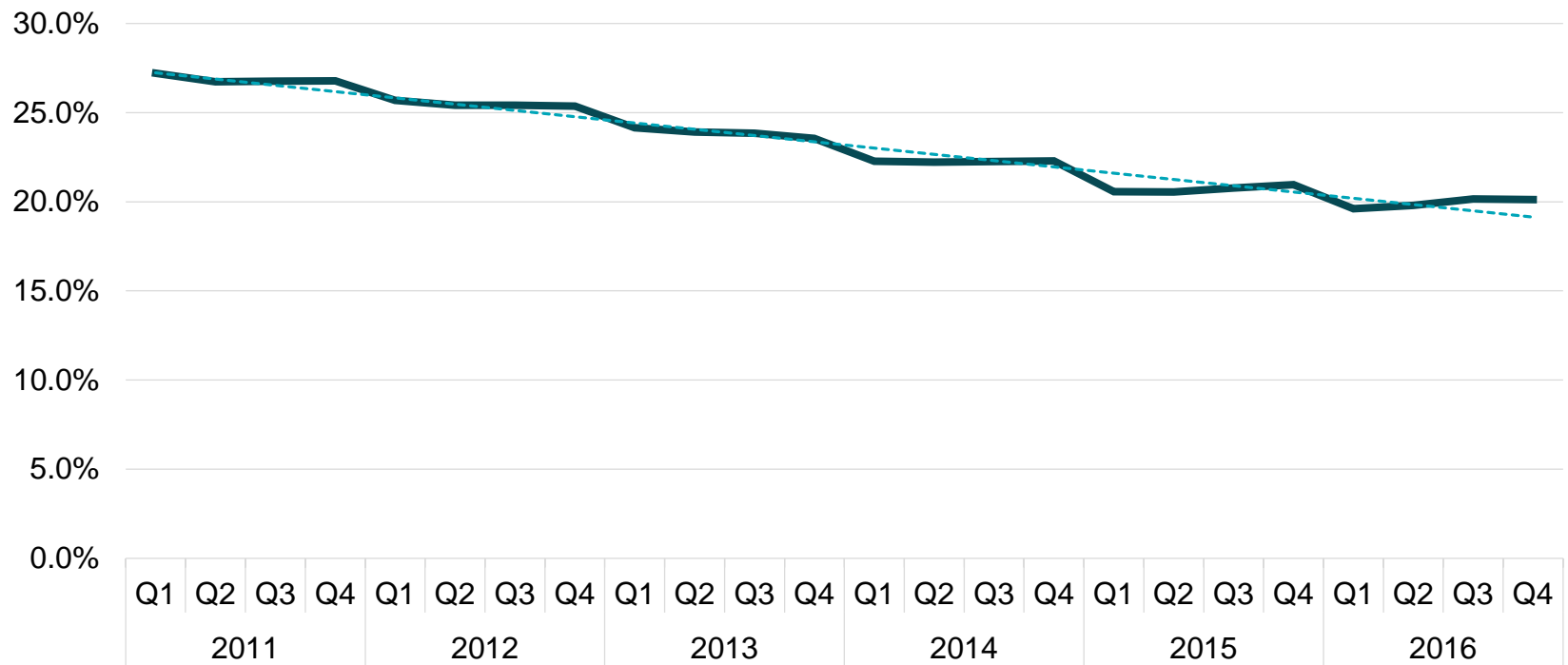
Note: Rounded to nearest \$100. Spending may not sum to totals due to rounding.
Source: Kaiser Family Foundation and Urban Institute estimates based on data from FY 2013 MSIS and CMS-64 reports. Due to lack of data, does not include CO, KS, NC, or RI

Long Term Services and Supports

- LTSS encompasses the broad range of paid and unpaid medical and personal care assistance that people may need — for several weeks, months, or years — when they experience difficulty completing self-care tasks (Kaiser Family Foundation 2015)
- Examples:
 - Personal Care Assistance
 - Nursing facilities
 - Adult foster care
 - Companion services
 - Chore services
 - Transitional services

Minnesota's use of Nursing Facilities have declined over time

Use of Nursing Facilities by Medicaid Enrollees

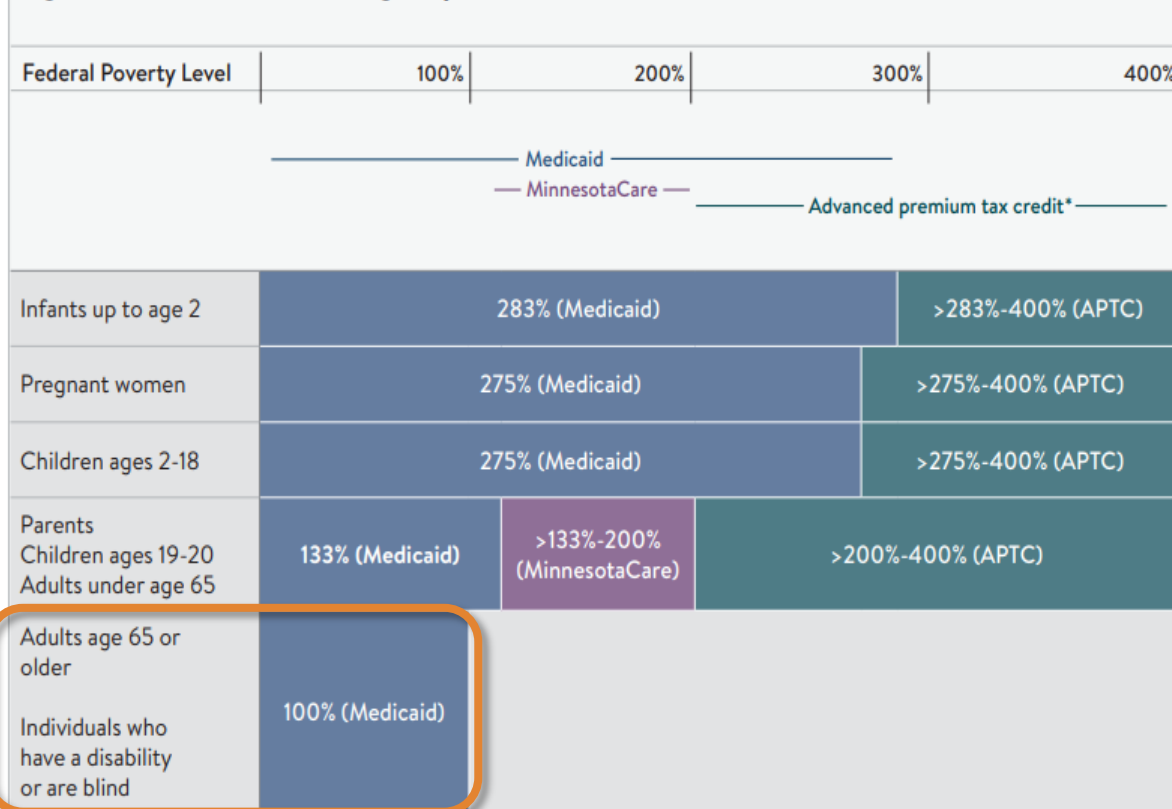


**Decline of 9,354 Medicaid enrollees
From 27% to 20%
between 2011 and 2016**

Source: SHADAC analysis of MMIS, 2011-2016

One has to be very poor to be eligible for regular Medicaid at age 65

Figure 2: Minnesota's income eligibility levels for Medicaid, MinnesotaCare, federal tax credits



100% FPG – 2015 Baseline

Family Size	2015 Gross Income
1	\$11,770
2	\$15,930
3	\$20,090

There is a complex eligibility determination process for LTSS funding

INCOME

- Eligible up to **100% FPG**
 - (\$11,770 annual income for household of one)
- Deductions and transfers
 - Spousal allowance (max. \$35k /yr)
 - Personal needs/home maintenance allowances (approx. \$1k - \$11k /yr)
 - Insurance premiums deduction

SPENDDOWN

- Deduct medical expenses up to reaching a disposable income of **80% FPG**
 - (\$9,416 annual income for household of one)

ASSETS

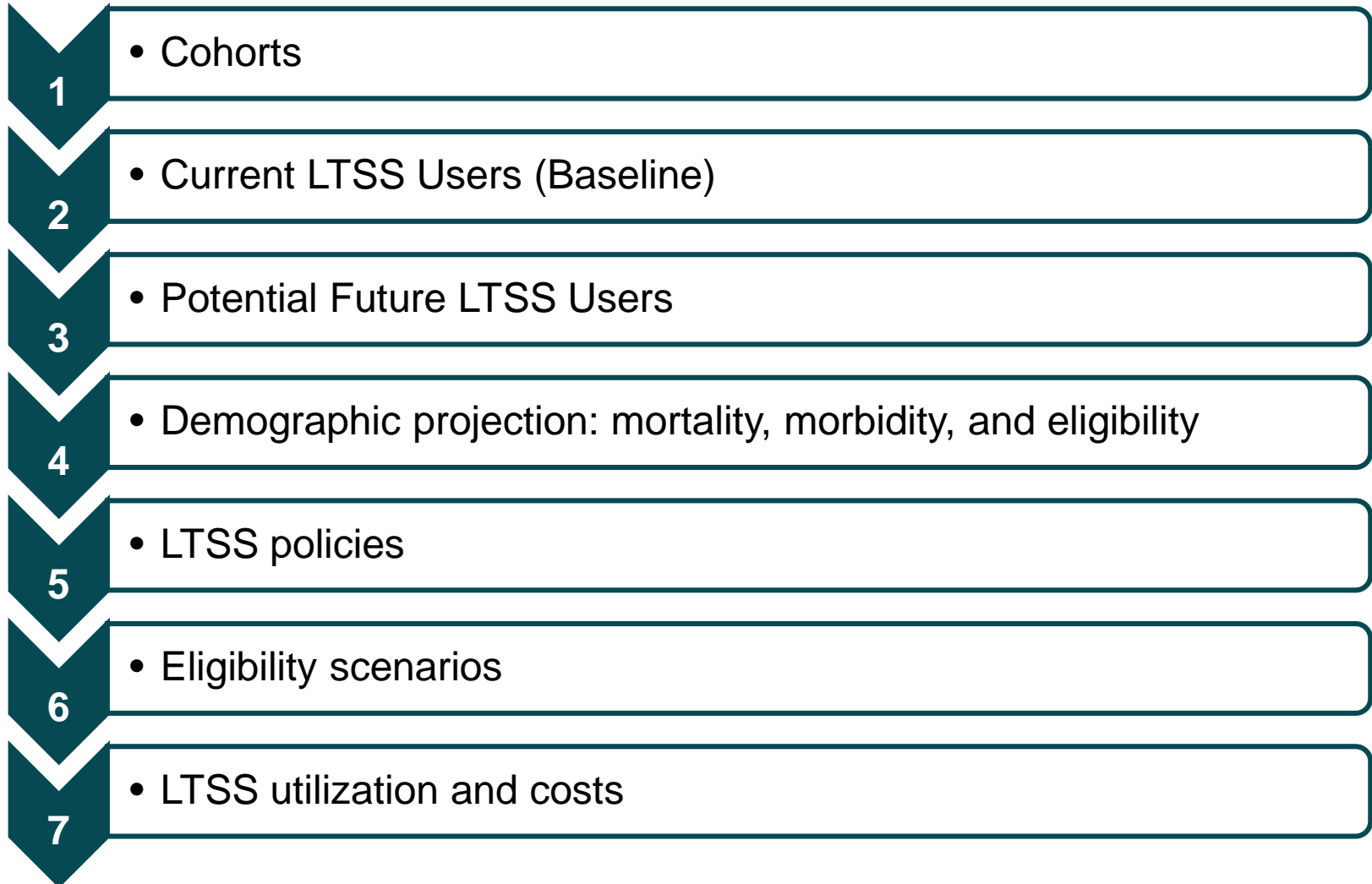
- Eligible up to **\$3,000**
- **\$560K** home equity limit
- Deductions and transfers
 - Primary home (if living at home)
 - Value of one vehicle
 - Spousal allowance (approx. \$121k)

Overview of the Model

General Overview

- Our model:
 - projects the use and costs of LTSS for MN's Medicaid elderly population (*excludes disabled population under age 65 and acute care services*)
 - estimates potential future costs of Medicaid based on current use
 - allows for estimating impact on costs of key policy interventions
- We prioritize the use of MN-specific data
 - And when not available, we adjust national data to Minnesotans' characteristics
- Baseline: 2015
- Projections: 2020 and 2030

Model's Steps



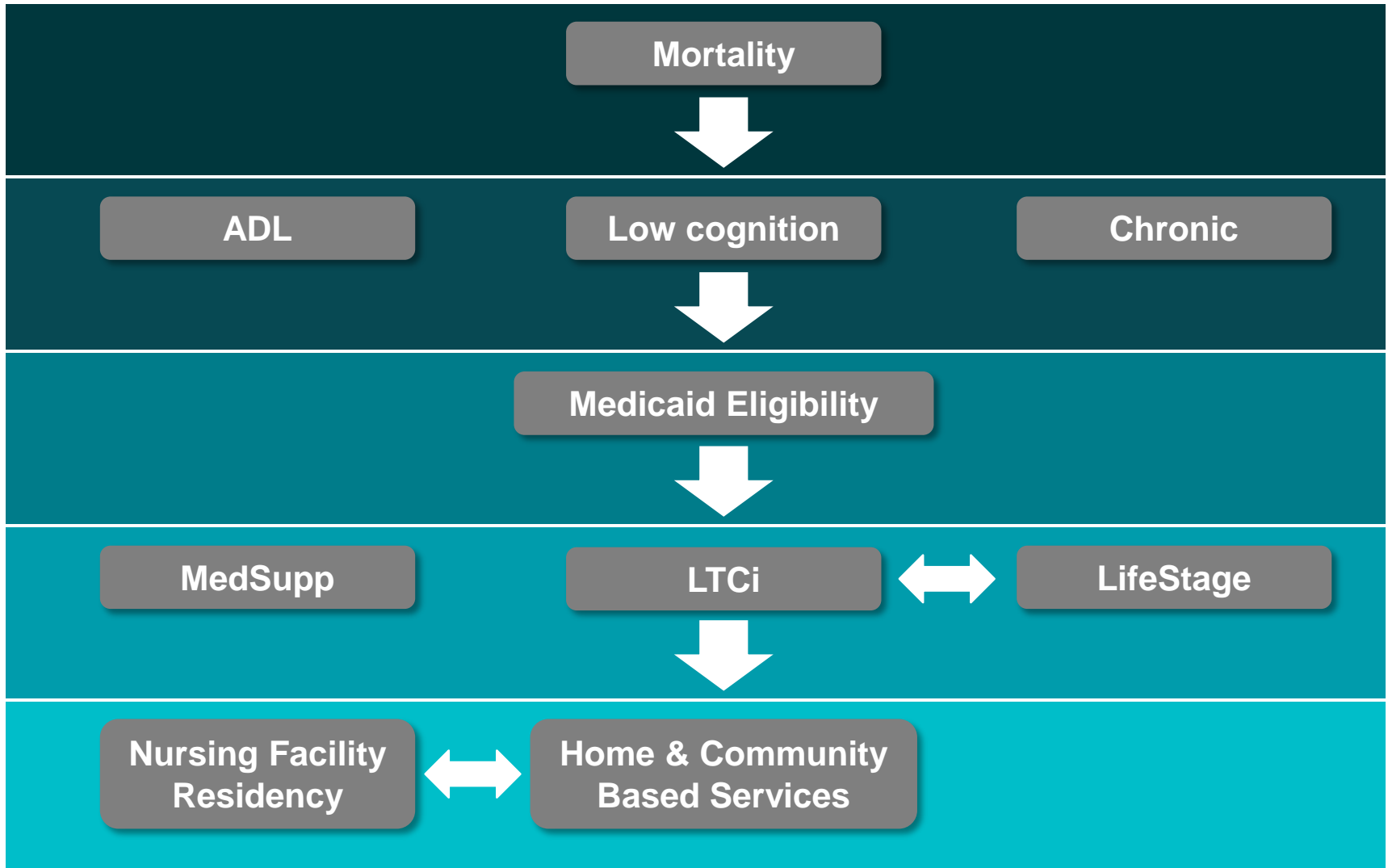
Baseline

- Comprised of Minnesotans aged 65 or older who use LTSS
- Divided into 96 cohorts:
 - (Eligibility for Medicaid)
 - Type of service: nursing facility resident, HCBS
 - Age: 65-74, 75-84, 85+
 - Sex
 - Urbanicity: TC metro area resident, Greater Minnesota resident
 - Activities of Daily Living (ADL) limitations: 0-1, 2 or more
 - Race/ethnicity: white, non-white
- Data source: Medicaid Management Information System (MMIS)

Projection: 2020 and 2030

- Our main objective is to estimate LTSS utilization and costs for 2020 and 2030 under different contexts and scenarios for policy implementation
- The model projects demographic transitions and changes in relevant characteristics
 - Mortality
 - Morbidity: ADL, stroke & diabetes, low cognitive function
 - Medicaid eligibility
 - Long Term Care insurance (LTCi)
- 2 policies evaluated:
 - Enhanced Home Care (EHC) benefit embedded in Medicare supplement plans
 - LifeStage, a blended product of life insurance (-64) and LTCi (65-)

Projection (cont'd)



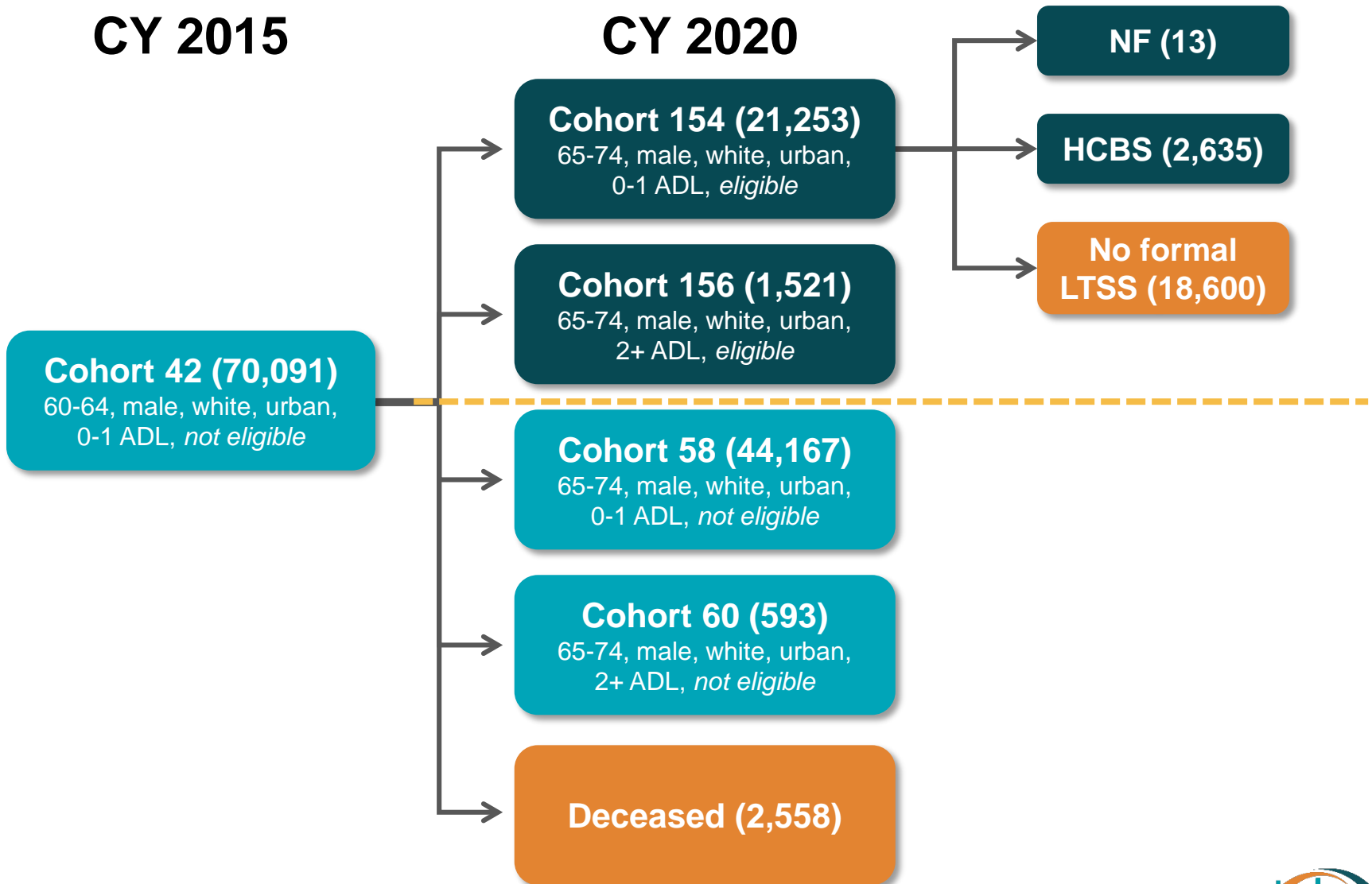
Projection (cont'd)

- Data sources:
 - American Community Survey, five-year file (2015)
 - Health and Retirement Survey (2000, 2006, and 2014)
 - Minnesota Health Access Survey (2015)
 - Survey of Older Minnesotans (2015)
 - Behavioral Risk Factor Surveillance System (2015)
- Universe: Minnesota residents aged 50 or older in 2015 (who will be 65 or older in 2030)
- Our projection model creates a longitudinal dataset into the future (2020 and 2030)

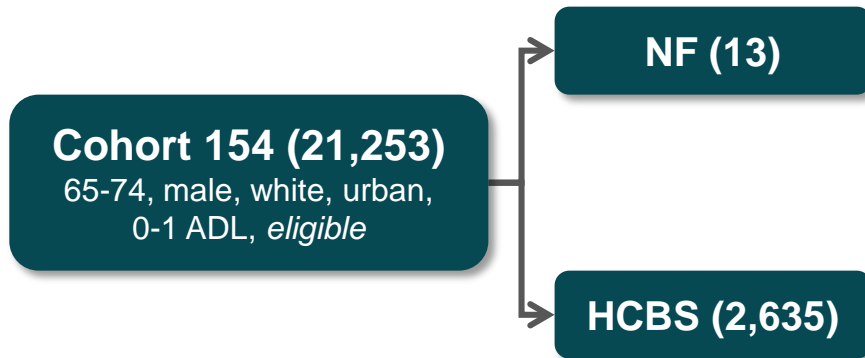
Example

CY 2015

CY 2020



Example (cont'd)



MN-LPM

Average cost **Total cost**

\$37,882 → **\$492,466**

\$9,953 → **\$26,226,155**

**Medicaid Management
Information System (MMIS)**

Policy Options and Projections

- Regular LTC insurance
- Enhanced Home Care Benefit Embedded in Medicare Supplement Plans
- LifeStage Insurance

Regular Long Term Care Insurance

- LTCi is the only current, relevant option to protect assets
- 16% Minnesotans over 65 have this coverage
- This is a market with decreasing sales
 - By 2030 we project that the rate of policy holders will halve

Medium	2015	2020	2030
65-74	73,000 (16.2%)	74,000 (13.2%)	34,000 (4.9%)
75-84	43,000 (18.5%)	44,000 (15.8%)	47,000 (10.9%)
85+	14,000 (12.1%)	18,000 (14.8%)	22,000 (14.4%)
Total	131,000 (16.3%)	136,000 (14.1%)	103,000 (8.0%)

Source: MN-LPM
Take up rates in parentheses

EHC Benefit in Medicare Supplement Plans

- Medicare Advantage, Medicare Cost, and Medigap plans would include a Enhanced Home Care benefit plan
- Benefit package (currently funded by Medicaid) includes:
 - Personal Emergency Response System (“PERS”)
 - Homemaker Services
 - Chore Services
 - Training and Education of Family Caregivers
 - Home Delivered Meals
 - Adult Day Care Services
 - Service Coordination
 - Add-on: Personal Care Assistance
- Maximum daily benefit of \$100 and lifetime benefit of \$50,000

EHC Benefit in Medicare Supplement Plans (cont'd)

- Estimated premium addition: ~\$20 per month
- Take up is high; 84% of the elderly Minnesotans bought a supplement plan in 2015
- Estimated number of Medicare supplement plan policy holders in Minnesota

Age	2015	2020	2030
65-74	374,000	445,000	543,000
75-84	213,000	225,000	359,000
85+	86,000	100,000	121,000
Total	673,000	770,000	1,023,000

Source: MN-LPM

LifeStage

- LifeStage is a combination of life insurance and LTCi
 - Life insurance benefit up to age 64
 - LTCi starting at age 65
 - same annual premium
 - same level of coverage
 - \$100,000 - \$135 per day
 - \$150,000 - \$205 per day
 - \$200,000 - \$275 per day
 - \$300,000 - \$275 per day
- Target market:
 - employed adults aged 35-55
 - household income \$50,000-\$500,000
- Our model shows results of what the outcomes would be if LifeStage had been implemented in 2000

LifeStage (cont'd)

- Other assumptions
 - By 2015, awareness rates range from 50% (low) - 95% (high)
 - Take up rate ~20%
 - Lapse rate reaches 1% by 2004
- Growing number of LifeStage policy holders

	2020	2030
Low	9,900	39,000
Medium	12,400	52,600
High	21,400	75,700

Source: MN-LPM
These projections assume a medium scenario for LTCi

LifeStage and aging

Age in 2000	Age in 2015	Age in 2020	Age in 2030
35	50	55	65
45	60	65	75
55	70	75	85
65	80	85	95

Utilization and Cost Projections

PRELIMINARY RESULTS

Baseline: Utilization and Costs

- In 2015, 54,773 Minnesotans made claims for LTSS they received at home (or community) or in nursing facilities
- Our baseline Medicaid spending on LTSS is \$990.5 million

	Users	Total Cost (millions)
NF residents	16,942	\$620
HCBS	37,831	\$371
Total	54,773	\$991

Source: SHADAC's analysis of MMIS, 2015

- We compare our projections against this baseline (using 2015 dollars)

Utilization and Projections, *Status Quo*

Preliminary Results

- If no policy is implemented, we project that by 2030 the number of Medicaid enrollees who are nursing facilities residents will grow slightly (12%), whereas the number of using HCBS will double (104% growth)

	2015	2020	2030	2015-2030
NF residents	16,942	12,000	19,000	12%
HCBS	37,831	59,000	77,000	104%
Total	54,773	71,000	96,000	76%

Source: MN-LPM

These projections assume a medium scenario for Medicaid eligibility and LTCi

Utilization and Projections, *Status Quo*

Preliminary Results

- Using “deflated” dollars, we project that by 2030 Medicaid expenditures on LTSS will grow by 29% (\$284.2 million)

	2015	2020	2030	2015-2030
NF residents (in millions)	\$620	\$453	\$720	16%
HCBS (in millions)	\$371	\$467	\$555	50%
Total (in millions)	\$991	\$920	\$1,275	29%

Source: MN-LPM

These projections assume a medium scenario for Medicaid eligibility and LTCi

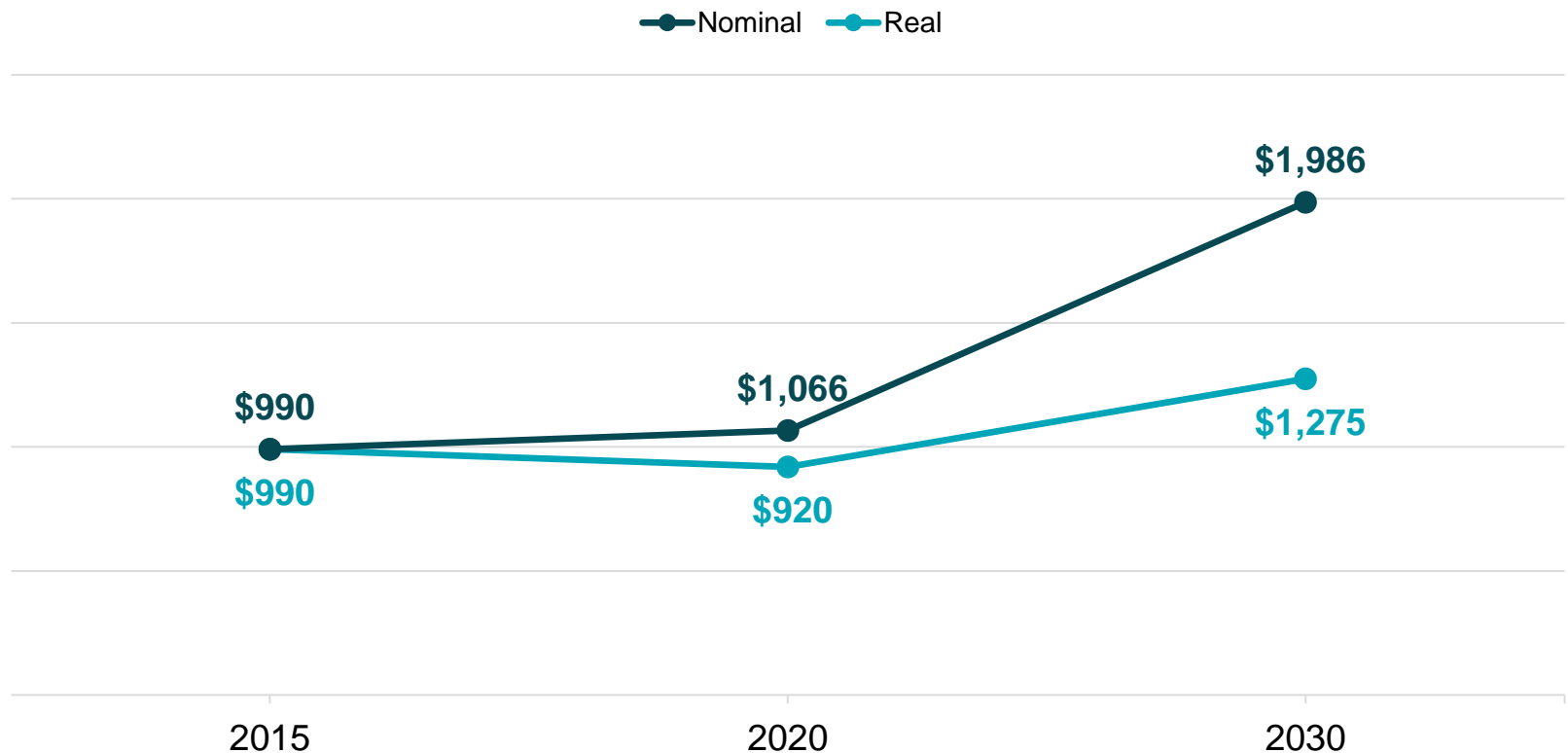
Estimates are “deflated” (expressed in 2015 dollars)

- This increase in expenditures is driven by the growth in HCBS utilization (104% growth)
 - HCBS expenditures only increase 50% because of changes in the characteristics of HCBS users and HCBS utilization patterns

Utilization and Projections, *Status Quo*

Preliminary Results

- Using a projected inflation rate of 3% we estimate that total costs for Medicaid will double by 2030



Source: MN-LPM

Notes: These projections assume a medium scenario for Medicaid eligibility and LTCi

Real estimates are "deflated" (expressed in 2015 dollars)

Nominal estimates assume an annual inflation rate of 3%

Policies Effects, EHC in Medicare Supp

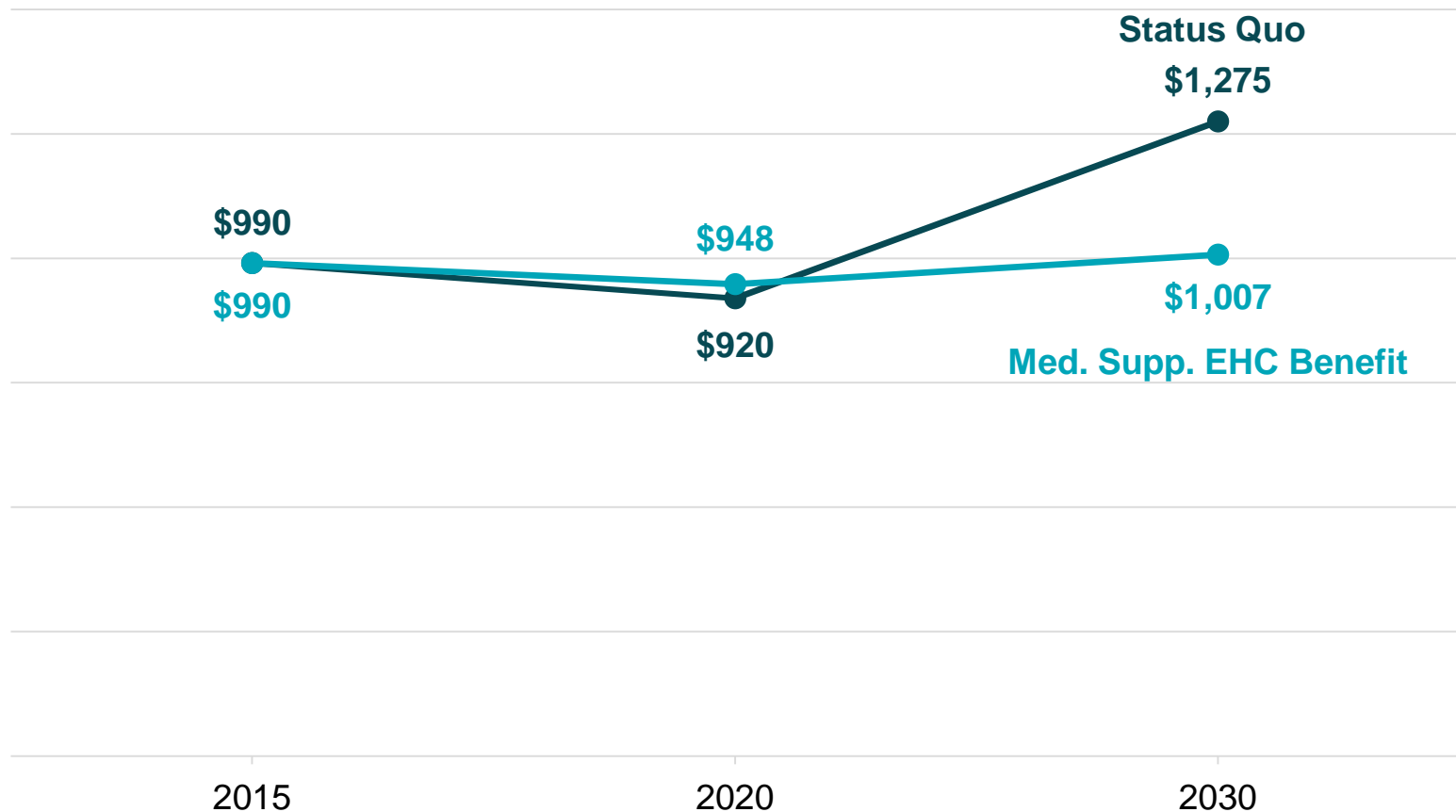
Preliminary Results

- Our model finds that an Enhanced Home Care benefit package in all Medicare Supplement plans would reduce costs by 2030
 - Although the estimates under this policy for 2020 also differ from those of the *status quo* scenario, they are not statistically different
- Our model observes a shift in the type of service produced by this policy:
 - A decrease in the use of nursing facility care
 - An increase of HBCS

EHC Benefit in Medicare Supp. Plans

Preliminary Results

Medicaid LTSS Cost Projections (Millions of 2015 Dollars)



Source: MN-LPM

These projections assume a medium scenario for Medicaid eligibility and LTCi

Estimates are "deflated" (expressed in 2015 dollars)

Policies Effects, LifeStage

Preliminary Results

- During the period of analysis, our estimates do not show Medicaid LTSS costs under the LifeStage implementation scenario that are statistically different than the *status quo* scenario
 - LifeStage has a relatively young market target
 - A portion of policy holders are unlikely to become eligible for Medicaid
- An evaluation of LifeStage would require:
 - including annual projections beyond 2030
 - considering other outcomes
 - Out-of-pocket expenditures
 - Minnesotans' assets and income

Closing Remarks

Closing Remarks

- Our model used MN-specific data on the characteristics of elderly Minnesotans
- It used data on current distribution of Medicaid spending
- We used these two main data sources to develop a projection model that forecasts the future patterns of LTSS utilization and expenditures, in particular those paid by Medicaid
- Our pilot assessment of two policy options are preliminary, but show the potential value of our projection model
- The MN-LPM provides the state with a platform that can be added to and developed over time to produce additional analysis and policy evaluation

Possible Extensions

- Projections beyond 2030
- Policy options
 - Other LTC insurance options
 - Increases in disposable income (e.g., tax credits or reverse mortgage)
 - Social determinants of health (e.g., implementing programs that reduce food-insecurity)
- Outcomes
 - Out-of-pocket expenditures
 - Medicare spending
- Context scenarios
 - Medical advancements (e.g., finding a cure for Alzheimer)
 - Saving patterns (i.e., allow for a different savings pattern for baby boomers)
 - Provider supply

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