Nursing Facility Long-Term Strategy: Policy Proposals for Massachusetts Medicaid (Masshealth)

NURSING FACILITY LONG-TERM STRATEGY: POLICY PROPOSALS FOR MASSACHUSETTS MEDICAID (MASSHEALTH)

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ABSTRACT

In the spring of 2018, Massachusetts' Medicaid agency (MassHealth, or MH) leadership was approached by representatives from the nursing home industry due to financial troubles. The Massachusetts nursing facility (NF) industry's concern was that due to consumer demands, bed utilization rates were dropping precipitously throughout the state. Because nursing facilities were reimbursed on a fee-for-service system, reduced bed days meant that revenues would fall from Medicaid. This paper analyzes potential reforms that are available to MH in improving quality and resizing of the NF industry over the next 3-5 years. More specifically, we explore value-based payment schemes and model preliminary costs for such programs to be ~$100M. We also explored the idea of converting NF units to assisted living units, which would require collaboration between housing agencies as well as MH. The preliminary cost estimates for such programs would be ~$150-200M.

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GLOSSARY OF ABBREVIATIONS

ALU – Assisted living unit

CAGR – Compound annual growth rate

CMS – Center for Medicare and Medicaid Services

DHS – Department of Human Services

DPH – Department of Public Health

FFS – Fee-for-service

HRRP – Hospital Readmissions Reduction Program

MH – MassHealth

MMQ – Management Minutes Questionnaire

NF – Nursing facility

OLTSS – Office of Long-Term Services and Supports

P4P – Pay-for-performance

PCRA – Planned closure rate adjustment

PIPP – Performance-based Incentive Payment Program

PMPM – Per-member per-month

QI – Quality improvement

QIIP – Quality Improvement Incentive Program

QuILTSS – Quality Improvement in Long Term Services and Supports

RCAC – Residential care apartment complexes

SNF – Skilled nursing facility

VBP – Value-based payment or value-based purchasing

VBR – Value-based reimbursement

YTD – Year-to-date

INTRODUCTION

Background

In the spring of 2018, Massachusetts' Medicaid agency (MassHealth, or MH) leadership was approached by representatives from the nursing home industry due to financial troubles. Nursing homes, or skilled nursing facilities (SNFs), are responsible for taking care of elderly and disabled residents either on a short-stay (e.g. post-acute care) or long-stay basis (e.g. custodial care). Short-stay residents may be covered by Medicare Part A for up to 100 days of skilled nursing care.(1) Long-stay residents, on the other hand, are more often covered by Medicaid fee-for-service (FFS) reimbursement rates.(2) FFS reimbursement means that a provider gets paid for each admission, procedure, or test performed, rather than health outcomes for patients (otherwise known as value-based payment).

The Massachusetts nursing facility (NF) industry's concern was that due to consumer demands, bed utilization rates were dropping precipitously throughout the state. Because nursing facilities were reimbursed on a fee-for-service system, reduced bed days meant that revenues would fall from Medicaid. This was compounded by the fact that per diem reimbursement had not increased for at least a decade (although higher reimbursements were possible for higher acuity patients). As a result, NF leadership claimed that Medicaid revenues would not be enough to cover the cost of labor and capital of providing care, leading to bankruptcy.(3)

After negotiations with MH leadership and state legislators, the industry was able to a secure a short-term $25 million package for all nursing homes in the Commonwealth. Part of this package included rate increases for all nursing homes, while also providing additional increases for nursing homes showing improvement or high quality on Nursing Home Compare, a publicly available comparison tool for consumers.(4) This package would be implemented over a 1-year period.

However, such rate increases were simply treating a symptom of low volume under FFS reimbursement. There was a sense of urgency that NF reimbursement had to partially convert to value-based payment (VBP) and that incentives might be necessary

to “right-size” or transition some excess capacity nursing homes to alternative forms of senior housing or care. The following aims were specified:

1. What are other state's Medicaid agencies doing as far as pay-for-performance (P4P), VBP, and quality incentives with nursing facilities?
2. How have other states’ Medicaid and housing agencies tackled excess capacity nursing facility beds?
3. Detailed proposal of two to four potential policy options for consideration.
4. Financial analysis of projected impact for each policy option.

Significance and context

Nursing homes are considered part of long term care, which refers to an array of services that are geared towards caring for elderly and disabled patients who are not able to perform activities of daily living, such as eating, bathing, dressing, doing laundry, paying bills, and taking medications. These services may also include continuing care retirement communities, home health agencies, and long term acute care hospitals.

Perhaps most significant, the primary payer for these long term care services in the United States is Medicaid. According to 2015 CMS National Health Expenditure data, Medicaid agencies were responsible for 43% of all long-term care expenditures ($220 billion). If short term Medicare payments are excluded, this share rises to 60% of long-term care expenditures.(5) Many patients are already Medicaid-eligible by the time they require long-term care (due to spend down of savings over a lifetime) or may transfer assets to relatives.

Given the amount of public dollars that are being devoted to long term care providers—specifically nursing homes—it is important to hold these providers accountable to outcomes for patients. Indeed, other parts of the healthcare system, such as hospitals and outpatient clinics, are already transitioning to a value-based payment system.(6)

This project aims to diagnose the major issues afflicting the nursing home industry in Massachusetts from a quality and utilization standpoint. We will then offer policy proposals based on these issues. This problem of FFS reimbursement has been discussed at MassHealth in various iterations, but what’s different about this approach is

the engagement with the nursing home industry. Many leaders from the industry want to have input on the quality metrics that will be linked to payment.

Furthermore, another catalyst for industry engagement is that all NFs in Massachusetts are already facing increased accountability on quality from federal authorities, given that NFs also receive reimbursement from Medicare. For example, the Centers for Medicare and Medicaid Services (CMS) have now scaled up the SNF value-based purchasing (VBP) program.(7) Under this program, SNFs will be evaluated on a **hospital** readmissions measure after a patient is discharged from a SNF stay and has a hospital admission within 30 days of the SNF stay. SNFs will receive payment incentives based on this performance measure, effective FY 2019.

STUDENT ROLE

This project was conducted in the setting of a 10-week internship with MassHealth's Strategy Team. This team is responsible for working with all verticals (e.g. pharmacy, long-term services and support) of MassHealth to provide policy and management consulting support to further improve care for beneficiaries. My primary contact on the Strategy Team was Elizabeth Larsen (Deputy Director of Strategy). During this internship, it was my responsibility to interface with staff from MassHealth's Office of Long-Term Services and Supports (OLTSS). This allowed me to further define the problems that were affecting the NF industry, as well as find states that MassHealth leadership wanted to emulate or draw from.

I had primary responsibility for determining cost and reimbursement data for all NFs in Massachusetts. I also went through public documents and conducted unstructured interviews with state Medicaid officials to understand VBP frameworks implemented in other states (e.g. Tennessee, Minnesota). I used these frameworks to model the financial impact of VBP for NFs in Massachusetts. I also used public documents to understand restructuring efforts in other states for excess capacity beds (e.g. Wisconsin).

After data collection and modeling efforts, it was my responsibility to provide my findings to the following MassHealth leadership:

- Dan Tsai, Medicaid Director
- Lauren Peters, Undersecretary for Health Policy

- Alice Bonner, Secretary of Elder Affairs
- Elizabeth Goodman, Chief of Long-Term Services and Supports

METHODS

In our analysis, we used internal MassHealth reimbursement and cost data to characterize the nursing facility industry's utilization and margins. Utilization was stratified as average monthly FFS utilizers (2015-2018) as well as average bed occupancy rates in the Commonwealth (2018 YTD). We also characterized FFS spend and FFS per member per month (PMPM) to determine how much MassHealth was providing to nursing facilities and whether there were increases in higher acuity patients. Patient acuity was determined by MassHealth's Management Minutes Questionnaire (MMQ), which documents each MH member's co-morbidities and frailty.

The NF reforms laid out for this project were organized by currently occupied beds and excess capacity beds. For occupied beds, our goal was to understand VBP frameworks that would incentivize quality and ensure facilities are appropriately compensated for complex populations. For excess capacity beds, our goals were to help incentivize bed closure if appropriate (as NFs must pay licensing fees for each bed) and convert capacity to other forms of lower intensity care if possible (e.g. assisted-living units).

Through discussions with staff from OLTSS, both Tennessee and Minnesota were identified as states that had implemented large-scale value-based payment demonstrations for nursing facilities. Tennessee's program, Quality Improvement in Long Term Services and Supports (QuILTSS) was queried for quality measures and the points assigned to each quality measure. We also determined how reimbursement was set based on quality points assigned. Likewise, Minnesota's program, Value-Based Reimbursement (VBR), was also queried for quality components and score calculation. Separate from VBR, Minnesota also utilized quality improvement programs that provided financial incentives for NFs to meet self-prescribed quality targets.

Using the QuILTSS framework, we used available quality metrics data in Massachusetts to create simulated quality scores for each nursing facility. We then used the same formula to determine what reimbursement would be for each nursing facility

under a value-based payment system. The Massachusetts model was dependent on the quality metrics that were available to us at the time of writing.

In addition to finding VBP frameworks, we also explored programs that used payment incentives and conversion programs for excess capacity NF beds. These programs were categorized into bed license buybacks (North Dakota and Oregon), voluntary planned closure rate adjustments (Minnesota), and conversion to assisted living units (ALUs) (Wisconsin). As with VBP demonstrations, these states were identified by OLTSS staff as potential programs Massachusetts may emulate in the future.

We summarized each of these programs in other states to MH leadership at the end of 10 weeks, with recommendations on cost estimates as well as administrative complexity.

RESULTS

Nursing facility utilization and margins

In 2015-2018, average monthly MassHealth FFS patients in Massachusetts were dropping at a compound annual growth rate (CAGR) of -5.3% (**Figure 1a**). This was likely driven by market trends driving long-term care from institutional settings to community settings. As a result of the FFS reimbursement system, MassHealth spending for nursing facilities was dropping at a CAGR of -1.7% (**Figure 1b**). At the same time though, there was also a rise in MMQ scores, indicating higher acuity of patients and thus a 2.6% CAGR in PMPM (**Figure 1c**). It's difficult to determine the veracity of patient acuity as MMQ is a questionnaire filled out by nursing staff and could also reflect upcoding. With NF utilization falling, average bed occupancy rates hovered around 85% in Massachusetts. The average MassHealth occupancy rate was 62%, demonstrating NFs did have a significant number of patients covered by MassHealth (**Figure 2**).

After determining annual reimbursements for each NF, we also queried annual NF cost reports to understand profits and losses (**Figure 3**). In 2009, average margins were approximately 2.4% for all NFs in Massachusetts and 1.1% for NFs with at least 70% MassHealth occupancy. By 2016, these margins had dropped to -1.9% and -4.2%, respectively.

Value-based payment

As mentioned above, reforms laid out for the NF industry were organized by occupied beds as well as excess capacity beds in the Commonwealth (**Figure 4**). Each of the reforms were supplied with initial cost estimates and administrative complexity. Below, we have summarized the various value-based payment programs we explored in both Minnesota and Tennessee.

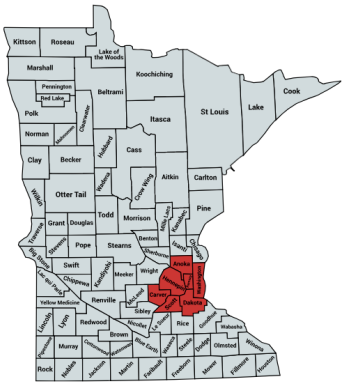
Minnesota: Value Based Reimbursement program

Minnesota's VBR program was a 4-year $427M package to incentivize quality attainment by NFs. Each NF in the state was given a 100-point quality score based on the following components: (1) Resident quality of life (0-50 points), (2) clinical quality indicators (0-40 points), and (3) state inspection findings (0-10 points). Quality of life metrics were determined by independent contractors who interviewed randomly selected long-stay residents and families about meaningful activities, food quality, environment, dignity, autonomy and relationships. Clinical quality indicators were queried by the CMS Minimum Data Set, a federally mandated process for clinical assessment of all residents in Medicare/Medicaid certified nursing homes. State inspection findings were based on MN Department of Health surveys on resident safety every 15 months.

Reimbursement to MN NFs was calculated by adding several costs: direct care (e.g. labor), other care, operating expenses, external fixed costs, and property costs. By statute, a facility's *direct care reimbursement* was calculated based on the quality formula.

$$\text{Direct care rate} = \left(\frac{89.375 + [0.5625 * (\text{Facility's Quality Score})]}{100}\right) *$$

$$(\text{7 county metro area median care related cost})$$



The 7 county metro median benchmark was chosen because NFs in this region had care-related costs approximately at the median for the state. As an illustrative example, if a NF had a quality score of 10, this would result in a care-related reimbursement limit that is 95% of the seven-county metro median care-related cost. If the quality score was 90, this would result in a care-related reimbursement limit that is 140% of the seven-county metro median care-related cost.

Two provisions in Minnesota's VBR protect NFs. First, no facility could receive a lower rate than it did prior to implementation of the program (hold harmless feature). Second, if a facility's limit was reduced due to a change in quality, the state could not reduce the care-related limit by more than 5% from the prior year. A VBR simulation model was not performed for Massachusetts given that we didn't have access to documents that would show how component quality scores were calculated.

Minnesota: Quality Improvement Programs

In addition to incentivizing quality attainment, Minnesota has also implemented programs that encourage quality *improvement*. Two of these programs include the Nursing Home Performance-based Incentive Payment Program (PIPP) and the Nursing Home Quality Improvement Incentive Program (QIIP).

PIPP was first implemented in 2006 and is managed by Minnesota's Nursing Facility Rates and Policy Division within the Department of Human Services (DHS). DHS sponsors a NF mentorship program with workshops to develop quality improvement (QI) proposals. In PIPP, NFs propose a QI metric that they will improve on in exchange for a 5% increase in their operating payment rate. Metrics include clinical quality, care transitions, staff training/retention, technology, patient well-being, culture change, and arts therapy. If the goal is not met, 20% of the payment is at risk. According to conversations with MinnesotaCare officials, the annual cost of this program was $18M, which was assumed to be the cost if implemented in Massachusetts.

QIIP, on the other hand was first implemented in 2015 and while similar to PIPP, it doesn't have the same hands-on programmatic support. A NF selects a measure for improvement in quality of care and the maximum financial bonus is $3.50/resident day if performance is in line with 75% of providers or there is 1 standard deviation in

improvement. The annual cost of this program was 0.8% of all operating payments, which translates to $5.2M if implemented in Massachusetts.

Tennessee: Quality Improvement in Long Term Services and Supports (QuILTSS)

Like Minnesota's VBR system, Tennessee implemented QuILTSS to allow a NF earn a higher percentage of costs in the direct care component based on a quality score. This ability to earn a higher percentage of costs is determined by a multiplier. This multiplier is dependent on a quality tier. The components of this quality score included the following: (1) Satisfaction of member/resident, family, staff (35 points); (2) culture change and quality of life (30 points); (3) staffing hours and competency (25 points); (4) clinical performance indicators (10 points); and (5) bonus points for quality awards (10 points). The quality tiers were determined by Tennessee's Medicaid program, as described below, with the highest quality tier facilities earning up to 105% of their direct care costs.

Quality Tier	Cut Point Range
Quality Tier 1	75-110
Quality Tier 2	50-74.99
Quality Tier 3	0-49.99

The QuILTSS model was adapted to Massachusetts by assigning points based on available data for staffing and clinical performance indicators. Pay-for-reporting was assumed for quality measures in QuILTSS that are not readily available in pre-existing resources (e.g. satisfaction, culture change). Points were awarded based on CMS staffing measures and clinical quality measures if NFs were above the state average. 2016 nursing costs were assumed to be direct care costs. Simulated QuILTSS scores would indicate the percentage of direct care costs that could be reimbursed. Based on this model it was determined that a program similar to QuILTSS with a hold harmless feature would require an additional $99M by the state (**Figure 5**).

Structural reforms to the NF industry

The second component of NF reforms included either closure of unused beds in the Commonwealth or incentivizing conversion to ALUs. Based on bed utilization data, we determined there were 44,240 licensed beds available (2018 YTD), with 6,046 excess beds that were not being used (86% occupancy). Achieving 90% occupancy (in line with other states) would mean repurposing or closing approximately 2,000 beds in the state. The key strategic vision of this restructuring would include four aims. First, it would need to target NFs that have consistently low occupancy. Second, it would need to allow facilities to meet consumer demand for community-based settings. Third, it would need to ensure access to nursing facilities that serve a high proportion of MH members. Last and most important, it would need to ensure reasonable geographic proximity to nursing facilities for long-stay care and short-stay hospital discharges.

In our due diligence, we identified three levers for purposing or incentivizing removal of unused NF beds in the Commonwealth: bed license buybacks, voluntary planned closure rate adjustments, and conversion to ALUs.

Bed License Buybacks

Bed licenses allow nursing facilities to operate a bed under state law. Bed buybacks entail the state Medicaid agency buying up bed licenses from nursing facilities. In 2001, North Dakota spent approximately $11,000 per bed license to buy back 286 beds for a total of $3.4M. In 2013, Oregon provided funds to the NF industry to reduce bed capacity by 1,500 beds within three years, with a significant portion being through buyback.

To simulate a similar program for Massachusetts, our model was structured to target NFs in the state with the largest excess capacity of beds. The model also assumed that targeted NFs would achieve 90% occupancy and that there would be full uptake of the bed buyback offer. The licensing fee was assumed to be approximately $10,000 per bed and 2,022 beds were targeted for bed buyback. This led to a preliminary cost estimate of $20.2M for a bed buyback program.

Voluntary Planned Closure Rate Adjustments

Voluntary planned closure rate adjustment (PCRA) is **not** a bed license buyback program, but instead provides a rate increase for NFs that permanently close beds or place them in temporary "layaway" status. In 2005, Minnesota began providing rate adjustments at $12 per resident day for a goal closure of 5,100 beds. 95% of displaced NF residents were able to be transferred to other NFs in the area. The following formula was used to calculate the per diem rate adjustment for a nursing facility:

$$\frac{\text{Beds closed} * \$10{,}000}{\text{Beds remaining open} * 365}$$

To simulate a similar program for Massachusetts, our model again was structured to target NFs with the largest excess capacity of beds. The model also assumed that NFs would achieve 90% occupancy and there would be full uptake of the PCRA offer. Using the formula above, the average rate adjustment was calculated to be $11 per resident day for 73 NFs. Assuming that the number of MH days were constant relative to 2016, the total cost of such a rate adjustment program would be $10.9M.

Conversion to ALUs

Intergovernmental agency partnerships can help convert NF units into assisted living units on campus sites, which has been done in states like Wisconsin and Nebraska. Between 1997-2005, residential care apartment complexes (RCACs) in Wisconsin grew from 21 to 174. Only 7% of those RCAC assisted living residents were publicly funded through Medicaid Waiver and Family Care programs, compared to 64% of Wisconsin's nursing home residents.

As a result, Wisconsin's Medicaid and Housing Finance Agencies bundled resources to provide service and housing subsidies through a single application and coordinated competitive process. Waiver slots would guarantee access to services for Medicaid-eligible low-income tenants and financing subsidies came from the Housing Agency to reduce rent costs. County human or social departments would assess prospective residents' needs to determine if they could become an ALU resident. Demonstration proposals were accepted to close a facility or convert a wing to assisted living. The replacement could be a RCAC, community-based residential facility, or adult

family home. Financing resources were utilized based on the type of environment (e.g. low income housing tax credits or tax exempt multifamily housing bonds). Medicaid Waiver funds were earmarked for medical services in the identified facility.

If a similar program was implemented in Massachusetts, it would require a significant joint collaboration among NFs, local housing authorities, the Department of Public Health (DPH), and MassHealth. Conversion of NF units to ALUs would be ideal in regions where affordable elder housing shortages are most severe. The following stakeholders and roles are spelled out below:

- **Nursing facilities:** Screen residents for those who may be able to benefit from less intensive resource settings.
- **Housing authorities:** Offer below market rate loans or grants to NFs for conversion of nursing homes to ALUs.
- **Executive Office of Elder Affairs:** Allow for licensing of ALUs on NF campuses.
- **DPH:** Allow for de-licensing of NF beds in the Commonwealth.
- **MassHealth:** Provide payment for medical services received by MH residents in ALU, contingent on a percentage of units going to MH members.

Estimating the potential cost of such a conversion demonstration is hard to model without appropriate data or assumptions on interest rates, Waiver funds for MH recipients, and number of units converted. Our preliminary cost estimate for an ALU conversion was based on Nebraska's effort to convert NF units to ~1,000 ALUs, with inflation to 2018 dollars. Total cost estimates for the Commonwealth would be at least $135.5M for restructuring to 2,000 ALUs over 2-5 years.

DISCUSSION

In this analysis, we reviewed potential reforms for MH that would either engage the NF industry in value-based payment and/or help restructure NFs in light of consumer demands for community care settings (**Figure 4**). We found that instituting a VBP program with metrics across various dimensions would require $100-150M investment along with substantial input on metrics from the NF industry. On the other hand, helping convert units to ALUs would require a $100-200M investment with significant collaboration among multiple government agencies in the Commonwealth. With MassHealth's budget under

scrutiny by lawmakers, each option must be carefully weighed in terms of benefits and drawbacks.

VBP: Benefits and Drawbacks

Proponents of VBP in long-term care may argue that it is the ideal program to clearly define what metrics a provider will be paid on, and to increase reimbursements for targets that matter to patients, policymakers and providers. This undoubtedly fits the viewpoint that providers should not be paid more for increasing number of services to patients, but based on the outcomes they are achieving for patients. However, one caveat that makes VBP imperfect is attaining true risk adjustment. In other words, despite risk adjustment, providers may not be paid enough to take care of medically complex and poorer patients, who may be at risk for worse outcomes (e.g. increased infection rates or worse patient satisfaction). In fact, there is now increasing controversy that VBP schemes for other care providers are not cost saving, and are penalizing doctors and hospitals who take care of vulnerable patients.(8,9)

Perhaps even worse, some incentive programs have also been associated with worse patient outcomes when implemented for other providers. For example, Gupta et al. demonstrated that the Hospital Readmissions Reduction Program (HRRP)—a program that penalizes hospitals for readmission of patients within 30 days—was associated with increased mortality. This was thought to be attributed to hospitals delaying heart failure readmissions to greater than 30 days to avoid financial penalties, thereby compromising medical attention for such patients.

Lastly, another implementation issue with VBP in other care settings has been identifying metrics that all stakeholders agree with. In conversations with other state Medicaid agencies (e.g. Minnesota), it was often mentioned that NFs objected to metrics that were difficult to control, such as patient satisfaction. Furthermore, the weighting of VBP components often seemed arbitrary, leading to implementation of a “hold harmless” feature.

In summary, the recommendations on VBP to MH leadership was that if adopted, great care would need to be taken on ensuring stakeholder engagement. Most importantly, NFs that served a higher proportion of MH members would need support to compete on quality metrics.

NF Restructuring and ALU Conversion

While VBP does change the payment structure of existing NFs, it wouldn't necessarily solve the problem of reduced demand of institutional settings by patients and families for long-term care. Instead, MH could use incentives that help convert NF units to less intensive care settings that may be more attractive to consumers. Proponents of this approach would argue that this program would serve a dual purpose by rightsizing the industry, but also prioritizing expansion of affordable senior housing. Of course, one of the primary concerns of a program like this is coordinating multiple governmental agencies to achieve conversion to ALU.

Perhaps the biggest barrier to this program is if a NF owner does not want to cooperate with ALU conversion and would rather close the facility and sell off the property. This would lead to relocation of displaced residents. One potential statute that could prevent this would be the 40T statute, which allows the Commonwealth to have first access to land and buildings that are being terminated but were previously publicly subsidized housing. A key question is whether the state could take advantage of this law for nursing homes that close and then repurposing them for alternative residential settings, especially those who were in debt to the state. If this were possible, this could trigger a backlash from NF owners who may want to sell their building and land to the highest bidder.

In summary, the recommendations on NF restructuring was that it was the most ambitious change to the industry, but also one that would not be trivial in terms of administrative complexity and cost. Next steps for a program like this would be to connect with the Department of Housing and Community Development as well as Administration and Finance to understand how capital and rent would be financed. MassHealth would also need to ensure that there's a waiver to allow for payment for medical services in these new units. Lastly, DPH and the Executive Office of Elder Affairs would need to be in the loop about further plans on licensing regulations.

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Figures

Figure 1: The long-term care market continues to trend towards community care settings from nursing facilities, but weighted MMQ scores (indicating patient acuity) have also increased.

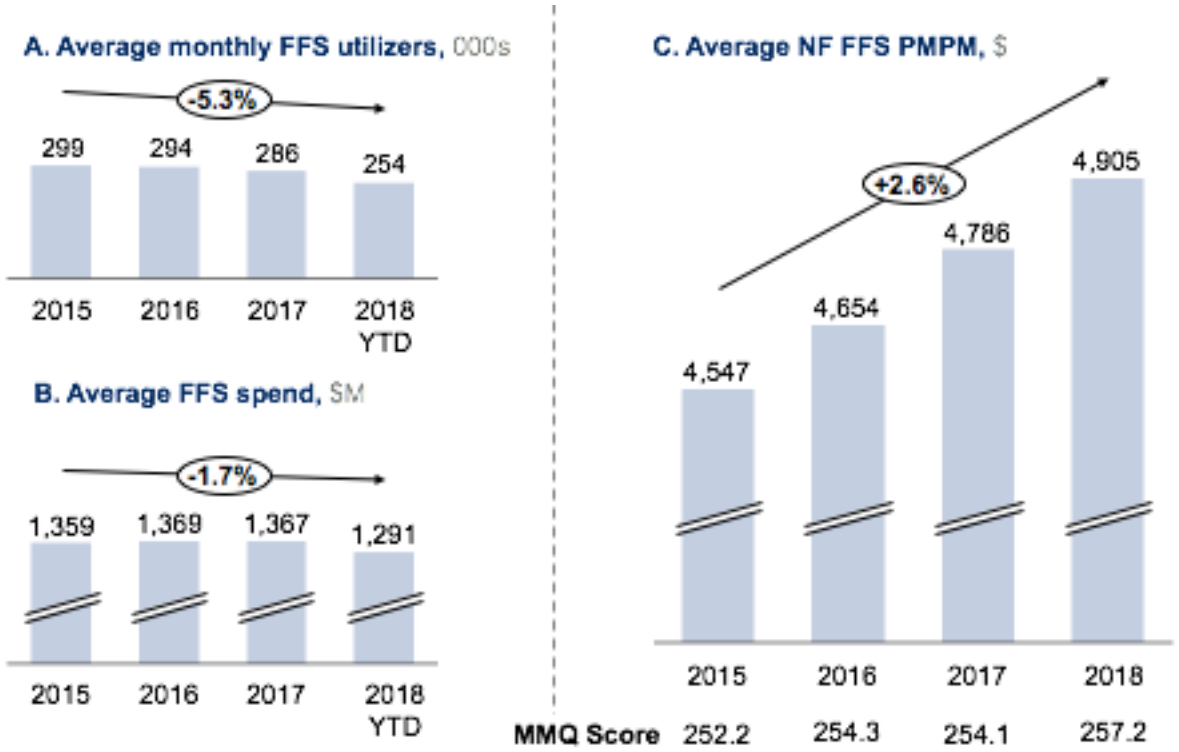


Figure 2: Market trends toward community care settings have resulted in excess capacity of beds for Massachusetts NFs

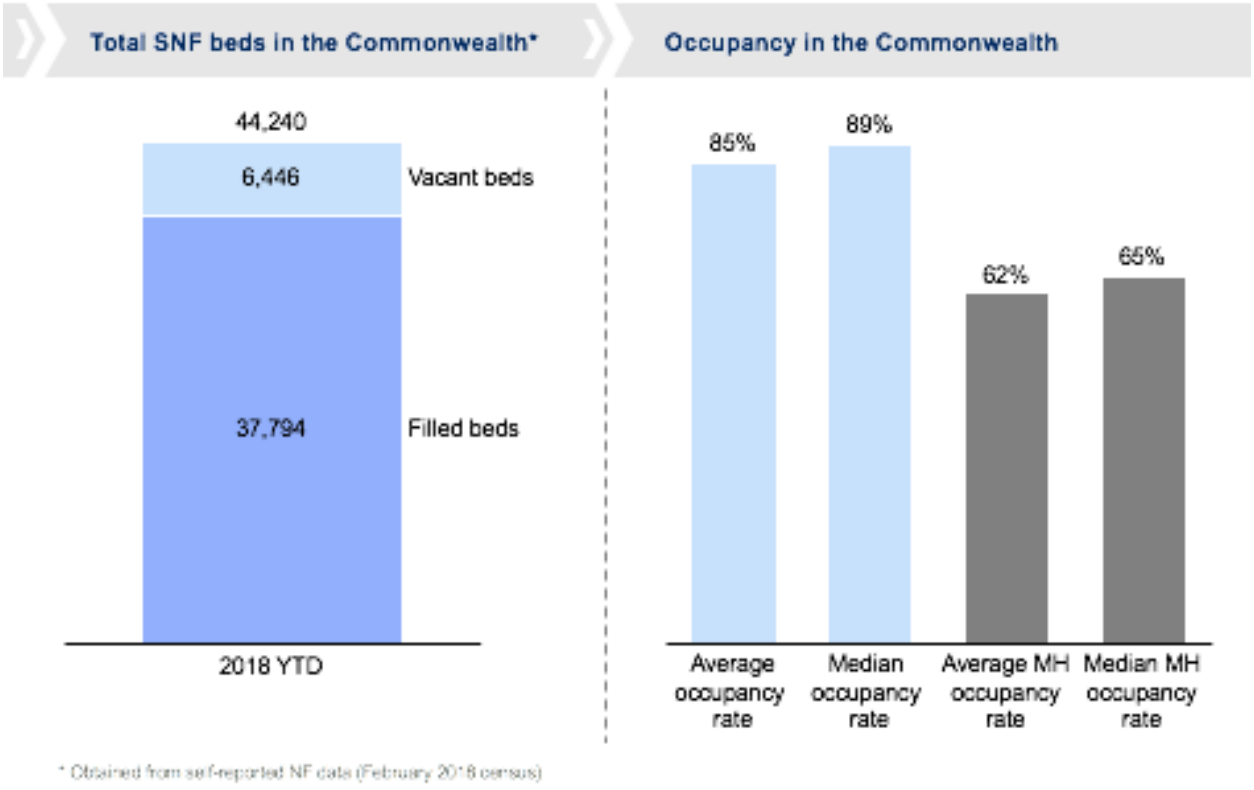


Figure 3: The nursing facility industry in Massachusetts has continued to face margin pressure over time, with margins being lower in high MH occupancy facilities

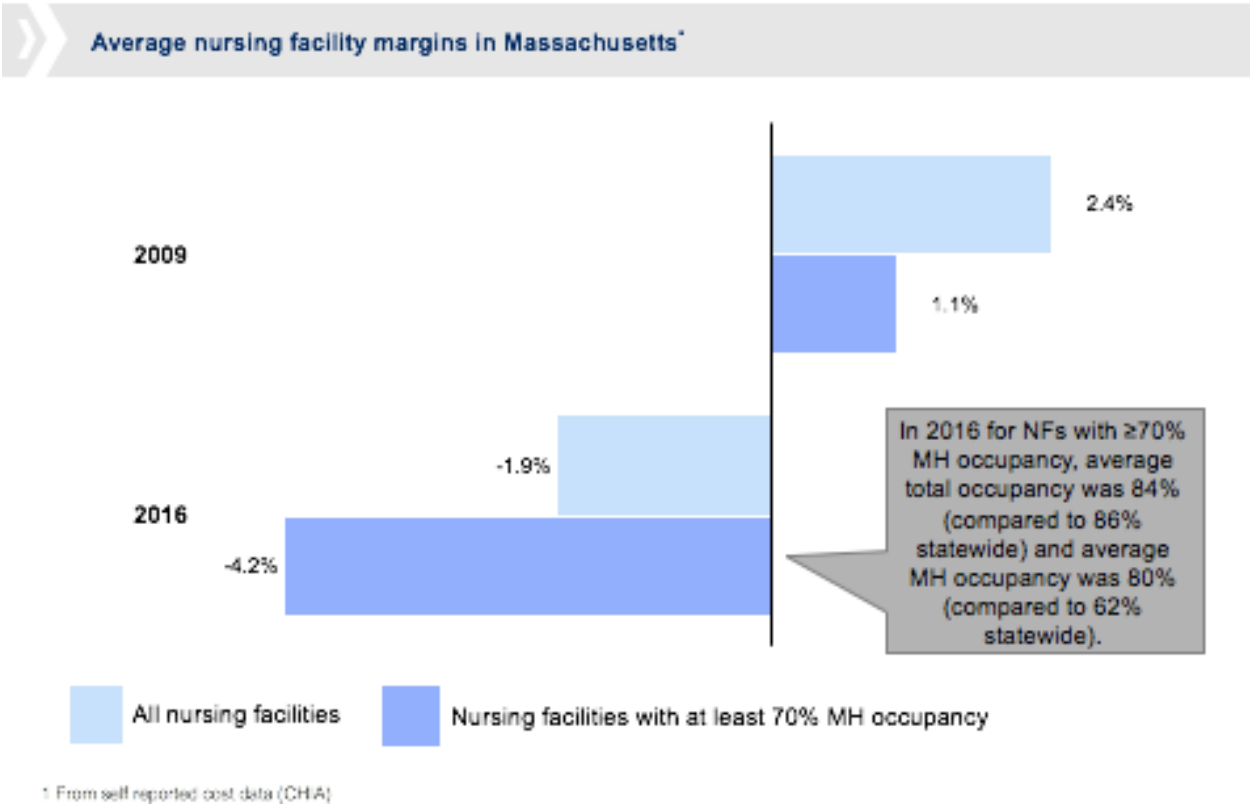
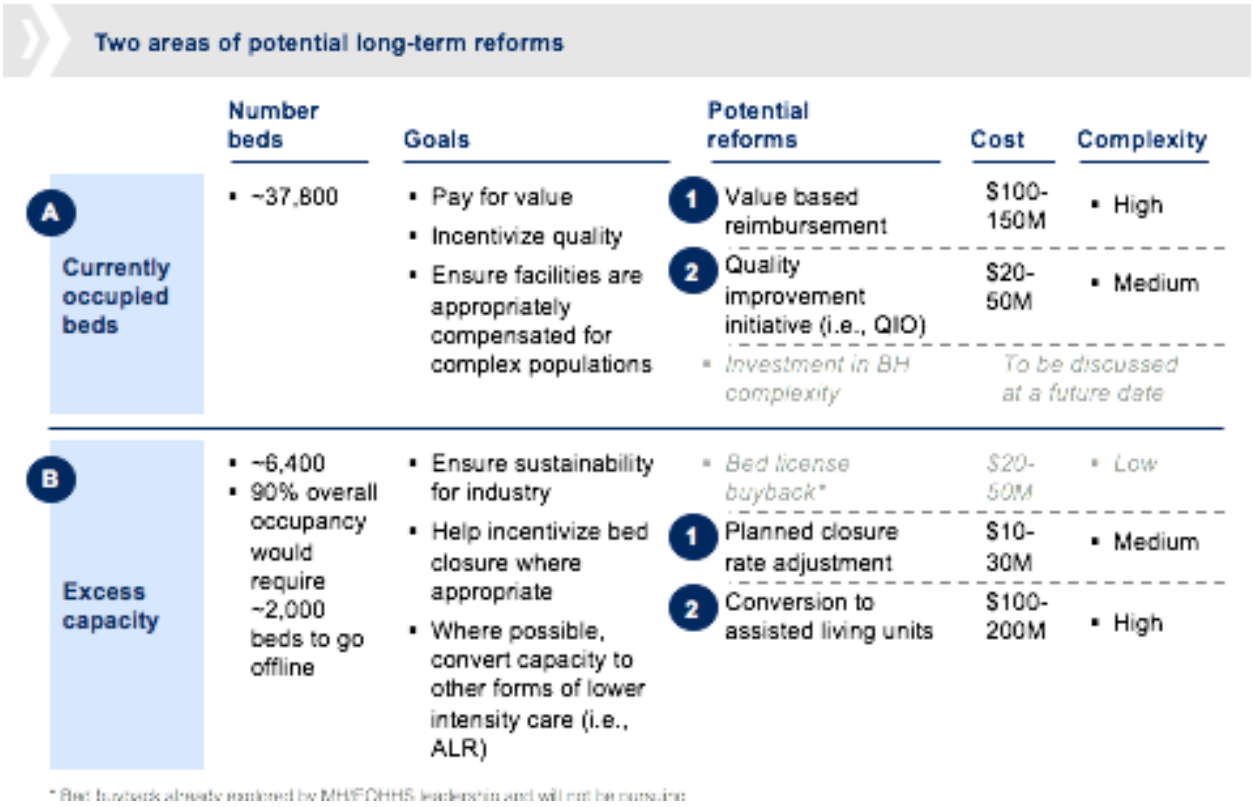


Figure 4: Alongside the recent short term NF stabilization package, MassHealth is aiming for longer-term structural reforms



Two areas of potential long-term reforms

	Number beds	Goals	Potential reforms	Cost	Complexity
A Currently occupied beds	▪ ~37,800	▪ Pay for value ▪ Incentivize quality ▪ Ensure facilities are appropriately compensated for complex populations	1 Value based reimbursement	$100-150M	▪ High
			2 Quality improvement initiative (i.e., QIO)	$20-50M	▪ Medium
			▪ *Investment in BH complexity*	*To be discussed at a future date*	
B Excess capacity	▪ ~6,400 ▪ 90% overall occupancy would require ~2,000 beds to go offline	▪ Ensure sustainability for industry ▪ Help incentivize bed closure where appropriate ▪ Where possible, convert capacity to other forms of lower intensity care (i.e., ALR)	▪ *Bed license buyback**	*$20-50M*	▪ *Low*
			1 Planned closure rate adjustment	$10-30M	▪ Medium
			2 Conversion to assisted living units	$100-200M	▪ High

* Bed buybacks already explored by MH/EOHHS leadership and will not be pursued

Figure 5: Establishing VBP with a hold harmless feature would result in ~$100M investment for direct nursing and staffing, using 2016 nursing costs as benchmark