
HMA

HEALTH MANAGEMENT ASSOCIATES

Value Assessment of the Senior Care Options (SCO) Program

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EXECUTIVE SUMMARY

The Commonwealth of Massachusetts Executive Office of Health and Human Services (EOHHS) has embarked on a process to explore new payment and care delivery approaches to ensure the sustainability of MassHealth, the state's Medicaid program. Massachusetts is home to many important innovations in health care access and delivery. Among those innovations is the Senior Care Options (SCO) program, launched in 2004 as a first-of-its-kind integrated managed care program on a large scale for those dually eligible for Medicare and Medicaid (dual-eligibles). The SCO program now serves almost 40,000 low-income seniors age 65 and older, most of whom are dual-eligibles.

This paper provides a detailed summary of the SCO program, the benefits of the SCO model to enrollees, providers, and the state, and describes key metrics of SCO performance. Key highlights from this review are:

- **The SCO model covers a comprehensive set of services, including services for acute and chronic needs, prescription drugs, nursing facility care, and community-based long-term services and supports (LTSS).** SCO services are designed to achieve better quality, emphasize community-based services to reduce institutional care (both hospitals and nursing facilities), and improve care delivery and efficiencies through better care management.
- **The SCO model has noted benefits for SCO members, providers, and the state derived from its being a single integrated vehicle for coverage of an individual who would otherwise have multiple payers covering different services.** SCO members have consistently reported high satisfaction with the program. Providers have the benefit of a centralized source for administrative interactions and for coordinated clinical information. The Commonwealth benefits from more predictable budgets and from a program that aligns incentives across all payers and all providers to support high-quality and efficient care delivery.
- **The SCO program saves money.** Integrated care programs have been shown to reduce or avoid hospitalizations, decrease duplicative care, and improve medication adherence. An evaluation limited to potentially avoided nursing home admissions of SCO members who have a nursing home level-of-care need estimates the potential value of costs avoided to MassHealth is approximately \$65.9 million annually. MassHealth could potentially avoid another \$45.1 million of nursing facility admission costs annually if the remaining fee-for-service population who meet the nursing home level-of-care need were enrolled in a SCO.

INTRODUCTION

MassHealth, the Commonwealth of Massachusetts Medicaid program, provides health coverage to over 1.9 million Massachusetts low-income residents. The MassHealth program, administered by the Executive Office of Health and Human Services (EOHHS), offers an array of coverage programs that differ in structure or benefits based on eligibility criteria, such as age, disability, insurance status, and income level. Nearly 100,000 seniors age 65 and over are eligible for MassHealth's Senior Care Options (SCO) Program, which offers the option to enroll with managed care plans that provide integrated care for Medicare and Medicaid services. The SCO program was designed primarily for MassHealth members who qualify for both Medicaid and Medicare coverage, known as "dual-eligible" individuals.

Recent presentations by EOHHS articulate concerns about the sustainability of the MassHealth programs given the consistent growth in net state program costs since fiscal year (FY) 2010, with near double-digit growth for FYs 2014 – 2015.¹ To help address these concerns and continue to improve its programs, EOHHS has embarked on a process to explore new payment and care delivery approaches. Although uncertainty remains about many of the practical details, EOHHS has indicated an interest in building on existing state program models and increasing enrollment with integrated care models for members needing supports to remain independent in the community. They see the SCO program and a newer program designed for dual-eligible individuals under 65, One Care, as programs to consider for expansion.

Managed care for persons needing long-term services and supports (LTSS) is also expanding nationally as a way for Medicaid agencies to help control costs, improve access to care, and improve delivery systems for beneficiaries with complex needs. Fifteen states, including Massachusetts, are now participating in the Centers for Medicare and Medicaid Services' (CMS) Financial Alignment Demonstration Initiative for seniors and people with disabilities. Of the 15 demonstrations in place, 9 are being implemented through managed care arrangements.²

In addition, there has been a significant national trend in state development of managed LTSS programs. Managed LTSS programs, which typically do not include Medicare services, are

¹ EOHHS presentation, *Public Stakeholder Session: Creating a Sustainable MassHealth Program*, April 6, 2015. Available at <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/150406.pptx>

² Health Management Associates, *HMA Weekly Roundup: Trends in State Health Policy*, June 24, 2015. Available at: <http://www.healthmanagement.com/assets/Weekly-Roundup/062415-HMA-Roundup.pdf#nameddest=infocus>

premised on the expectation that managed care plans will be able to increase beneficiary access to community-based LTSS instead of more costly institutional care. A recent report indicates there were 19 capitated Medicaid MLTSS waivers approved at the end of 2014 by CMS, with over half approved since 2012.³ There are also other MLTSS programs planned, notably in Virginia and Pennsylvania. Most (17 of 19) of the approved MLTSS waivers require beneficiaries to enroll in managed care to receive LTSS.⁴

In the context of this evolving policy landscape, a new Administration, and a new EOHHS team in place, the Massachusetts Association of Health Plans (MAHP) engaged Health Management Associates (HMA), on behalf of its four SCO plan members, to develop a white paper presenting a comprehensive assessment of the value of the SCO program. HMA is a national consulting firm specializing in state Medicaid programs, health care system financing, program evaluation and delivery system reform. HMA facilitated a series of conversations with SCO plan leadership to understand elements of the SCO program that are consistent across the member SCO plans and contribute to achieving the triple aim of improving the patient experience of care (including quality and satisfaction), improving the health of populations, and reducing costs of health care. HMA additionally researched published and non-peer review literature to assess the evidence base for the SCO program and its core program elements.

This white paper is organized into three main sections. Section 1 provides an overview of the context for the SCO program and reviews key elements of the program. Section 2 provides a summary of the program's benefits, particularly compared to the fee-for-service Medicare and Medicaid alternative. Section 3 reviews SCO performance on key quality measures and summarizes findings on SCO performance.

SECTION 1: SCO MODEL OVERVIEW

Individuals eligible for the SCO program are primarily those who are eligible for both Medicare and Medicaid⁵ and are at least 65 years old. Dual-eligible beneficiaries account for a

³ MaryBeth Musumeci, *Key Themes in Capitated Medicaid Managed Long-Term Services and Supports Waivers*, (Washington, DC: KMCU, November 2014). Available at <http://kff.org/medicaid/issue-brief/key-themes-in-capitated-medicaid-managed-long-term-services-and-supports-waivers/>

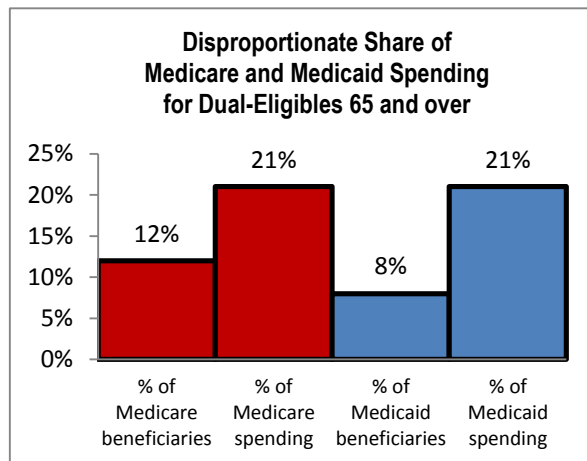
⁴ MaryBeth Musumeci, *Key Themes in Capitated Medicaid Managed Long-Term Services and Supports Waivers*, (Washington, DC: KMCU, November 2014). Available at <http://kff.org/medicaid/issue-brief/key-themes-in-capitated-medicaid-managed-long-term-services-and-supports-waivers/>

⁵ EOHHS's 2014 Request for Applications for Senior Care Organizations (the 2014 SCO RFA) indicates that as of January 1, 2014, 31,072 MassHealth seniors were enrolled in the SCO Program, of which 2,397 (8%) were seniors with only MassHealth Standard coverage and the remainder also had Medicare Parts A and B coverage.

disproportionately large share of Medicare and Medicaid spending and are some of the poorest and sickest people covered by both programs. Data released by the Medicare Payment Advisory Commission (MedPAC) and the Medicaid and CHIP Payment Advisory Commission (MACPAC) in 2010 provide a detailed picture of the dual-eligible population:⁶

- Dual-eligibles comprise 12% of **Medicare** beneficiaries but account for 21% of **Medicare** spending.
- Dual-eligibles also comprise 8% of **Medicaid** beneficiaries but account for 21% of **Medicaid** spending.

Dual-eligible beneficiaries age 65 and older tend to report less positive health status, need more assistance with Activities of Daily Living (ADLs), live more often in institutions, and are more non-White or Hispanic than their non-dual Medicare beneficiary counterparts:⁷



- 38% have three to six ADL limitations compared to 9% of non-dual Medicare beneficiaries;
- 50% have no high school diploma compared to 17% of non-dual Medicare beneficiaries;
- 29% live in institutions compared to 9% of non-dual Medicare beneficiaries; and
- 55% are White or non-Hispanic compared to 85% for non-dual Medicare beneficiaries.

For dual-eligible individuals who receive care in the fee-for-service (FFS) Medicare and Medicaid programs, care is more likely to be fragmented, uncoordinated and inefficient. Medicare generally covers hospital care and professional services, while Medicaid covers other health services including behavioral health and both community-based and institutional LTSS. Individuals receive care through separate and independent programs and from providers who have no method to coordinate services. Often, any care coordination does not consider the full spectrum of needs commonly experienced by dual-eligible beneficiaries. When multiple payers are involved, providers have to navigate billing and authorization policies for two different publicly financed programs. Furthermore, lack of an integrated program fosters cost-shifting

⁶ MedPAC and MACPAC, *Data book: Beneficiaries dually eligible for Medicare and Medicaid*, January 2015. Available at <http://www.medpac.gov/documents/data-book/january-2015-medpac-and-macpac-data-book-beneficiaries-dually-eligible-for-medicare-and-medicaid.pdf>

⁷ Ibid.

between the two programs. For example, there is an incentive for underinvestment in cost-saving efforts by Medicaid, since savings accrue exclusively to Medicare from investment in FFS Medicaid services that could decrease hospital utilization.

In the early 2000s, MassHealth policy makers recognized the limitations in the delivery system due to the lack of integration for dual-eligible beneficiaries in the Commonwealth and began to develop program options with CMS, the federal agency responsible for oversight and federal support for both programs. After years of negotiations, MassHealth established the SCO program in 2004. At the time, the SCO program was a pioneering approach to the issues faced by dual eligibles. Today, 15 states (including Massachusetts for its One Care program) are participating in CMS' Financial Alignment demonstrations based in large part on the SCO model, under which participating health plans became responsible for an integrated program that finances and coordinates coverage for both Medicare and Medicaid services.

The original program design was implemented through an innovative three-way contract between EOHHS, CMS and the SCOs. Beginning on January 1, 2009, EOHHS and CMS developed independent contracts with the SCOs. CMS contracts with the SCOs as Medicare Advantage plans that specialize in dual-eligible individuals, known as Dual Eligible Special Needs Plans (D-SNPs).⁸ EOHHS has contracted with SCO plans since 2009 by soliciting applications for all qualified applicants, rather than through a competitive procurement process. EOHHS recently conducted a procurement to solicit qualified SCO applications for five years beginning on January 1, 2016. The current SCOs have been notified about their selection to continue to participate, and one new entrant, BMC HealthNet Plan, is expected in 2016.

SCO ELIGIBILITY

MassHealth members may be eligible to enroll with a SCO if they:

- are eligible for MassHealth Standard coverage;⁹
- are age 65 or older; and

⁸ The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 authorized Special Needs Plans to limit enrollment to a sub-population of Medicare beneficiaries. CMS summaries of SNP models of care include a description of the SNP type and subtype. All SCOs are identified in the CMS summaries as Medicare Advantage Duals Eligible Subset – Medicare Zero Cost-Sharing Special Needs Plans. Available at: <https://www.cms.gov/Medicare/Health-Plans/SpecialNeedsPlans/SNP-Model-Of-Care-Summaries.html>

⁹ The 2014 SCO RFA, Attachment A Model Contract indicates that for MassHealth members to be eligible to enroll in the SCO Program, they must be on MassHealth Standard and meet the eligibility requirements under 130 CMR 508.008 (A).

- live in the service area of a SCO plan.

Although this eligibility definition allows individuals without Medicare to enroll in the program, the program was designed for dual-eligibles, and approximately 92% of SCO members are dual-eligibles.¹⁰ Certain individuals are excluded from the SCO program, including individuals with end-stage renal disease, residents of Intermediate Care Facilities for the Mentally Retarded (ICF/MR), or inpatients in a chronic or rehabilitation hospital. In addition, for practical reasons, some delivery systems are not available to SCO members. If a senior chooses to enroll with a SCO, they cannot also be enrolled in a Medicaid 1915(c) Home- and Community-Based Services (HCBS) Waiver program other than the Frail Elder Waiver,¹¹ and they cannot enroll in the Program of All-Inclusive Care for the Elderly (PACE). EOHHS reports that, as of February 2015, there were 92,343 seniors eligible for the SCO Program across the Commonwealth.

SCO PARTICIPATION AND ENROLLMENT

Currently there are five SCOs operating in Massachusetts.¹² They are:

- Commonwealth Care Alliance;
- Fallon Community Health Plan;
- Senior Whole Health;
- Tufts Health Plan; and
- UnitedHealthcare.

The SCOs offer full or partial coverage in 11 out of 14 counties in the state; they cover geographic areas where 97% of total eligible individuals across the Commonwealth reside and provide several plan options for eligible seniors (see **Table 1** for details). Among counties where SCOs operate, there are at least three SCO options for individuals to choose from, with

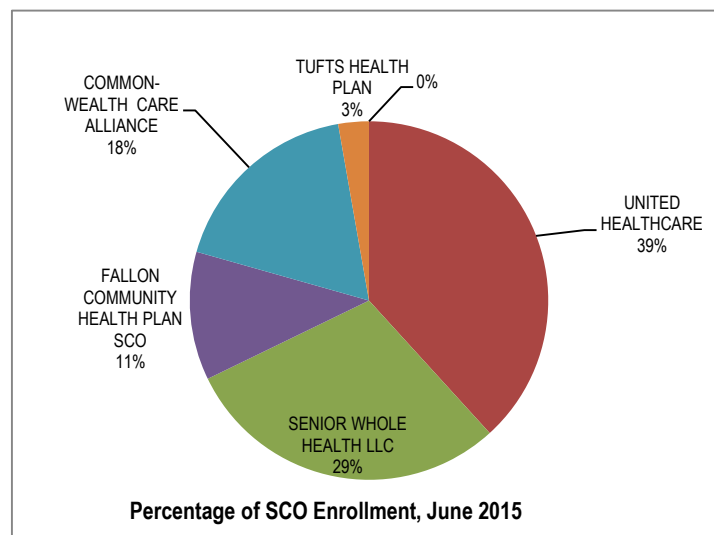
¹⁰ The 2014 SCO RFA indicates that as of January 1, 2014, 31,072 MassHealth seniors were enrolled in the SCO Program, of which 2,397 (8%) were seniors with only MassHealth Standard coverage and the remainder also had Medicare Parts A and B coverage.

¹¹ Individuals eligible for the Frail Elder Waiver program who are otherwise eligible for the SCO program are able to enroll with SCOs, and the SCOs are responsible for administering the waiver benefits.

¹² The 2014 SCO RFA was issued on November 13, 2014. The state's procurement website, Comm-Buys indicates a bid status of "Award in Process" as of June 15, 2015.

most counties (92%) offering four or five SCO options.^{13,14} The only exceptions are in Barnstable and Franklin counties, where there are only two SCO options.^{15,16}

As of June 2015, 38,672 MassHealth members have enrolled with SCO plans across the Commonwealth.¹⁷ The three original SCO plans operated by UnitedHealthcare (originally called Evercare), Senior Whole Health, and Commonwealth Care Alliance account for the largest share of current enrollment—39%, 29%, and 18% respectively. Fallon Community Health Plan joined the program in January 2010 and now accounts for 11% of total SCO enrollment. Tufts Health Plan, at 3% of total SCO enrollment, began enrolling in Barnstable County in January 2013 and expanded to 9 additional counties in January 2014.



The SCO program is a voluntary enrollment program. To enroll, the MassHealth member (or responsible party) must select a SCO that will assist the member with completing a SCO enrollment form and selecting a primary care provider (PCP) from the SCO’s available network.

¹³ EOHHS’ 2014 Request for Applications for Senior Care Organizations, *SCO_Enrollments_County_Feb_15_EOHHS*. Available at: <https://www.commbuys.com/bs0/external/bidDetail.sdo?docId=BD-15-1039-EHS01-EHS01-00000002276&external=true&parentUrl=bid>

¹⁴ Most SCOs provide full coverage for each of the counties in their service area. See Table 1 for details.

¹⁵ 2014 SCO RFA, *SCO_Enrollments_County_Feb_15_EOHHS*. Available at: <https://www.commbuys.com/bs0/external/bidDetail.sdo?docId=BD-15-1039-EHS01-EHS01-00000002276&external=true&parentUrl=bid>

¹⁶ Most SCOs provide full coverage for each of the counties in their service area. See Table 1 for details.

¹⁷ 2014 SCO RFA, *SCO_Enrollments_County_Feb_15_EOHHS*. Available at: <https://www.commbuys.com/bs0/external/bidDetail.sdo?docId=BD-15-1039-EHS01-EHS01-00000002276&external=true&parentUrl=bid>

The SCO then processes the enrollment with MassHealth and, if applicable, with Medicare. MassHealth members over 65 who elect not to enroll continue to receive services through fee-for-service Medicaid and Medicare, if applicable.

This voluntary enrollment policy stands in contrast to enrollment in other MassHealth managed care programs. For many MassHealth members under 65, enrollment in managed care (either a managed care organization or the Primary Care Clinician Plan) is mandatory. For MassHealth’s OneCare demonstration, designed for dual-eligible adults 21 to 64 years of age, eligible individuals were given time to make a choice proactively but thereafter were automatically assigned to a health plan using a specific state-defined algorithm. All managed care members are allowed to change their plans throughout the year by contacting MassHealth. One Care program members may also choose to opt out of the program altogether and revert back to FFS Medicare and Medicaid coverage.

Table 1. SCO Availability, Program Enrollment and Percent Eligible Enrolled by County as of June, 2015

County	SCOs available in 2015					Total Enrolled	Total Eligible	Percentage Enrolled
	Commonwealth Care Alliance	Fallon Community Health Plan	Senior Whole Health	Tufts Health Plan	United-Healthcare			
Barnstable		X		X		275	2,674	9%
Berkshire						2	2,309	0%
Bristol		X	X	X	X	4,145	8,222	34%
Dukes						0	191	0%
Essex	X	X	X	X		4,927	11,600	30%
Franklin	*	*				65	1,052	6%
Hampden	X	X		X	X	3,945	8,094	33%
Hampshire	X	X		X		51	1,634	3%
Middlesex	*	X	X	X	X	5,930	17,739	25%
Nantucket						0	67	0%
Norfolk	*	X	X	X	X	2,851	8,078	26%
Plymouth	*	X	X	X	X	1,866	5,569	25%
Suffolk	X	X	X	X	X	9,212	16,100	36%
Worcester		X	X	X	X	5,403	8,547	39%
Statewide						38,672	91,876	30%

* SCOs are allowed to provide full or partial county coverage for a county. Counties with * indicate the SCO offers partial coverage for a subset of zip codes in the county.

Enrollment in the SCO program has been slowly increasing since its inception, with the current enrollment accounting for 30% of the total eligible population. See Table 1 (above) for details on current enrollment. The moderate penetration rate may be attributable to a number of factors, including limited resources for outreach and marketing by the state to promote awareness of the program providers or eligible seniors.¹⁸ Although regular notifications are mailed to 4,000 eligible seniors per month, these notifications are provided only in English, provide very high level information, and represent other programs such as PACE at the same time, which may make these communications less effective in reaching new beneficiaries. CMS marketing requirements may also constrain SCOs' efforts to promote enrollment, including requiring potential enrollees to receive information about the Medicare program that may be misleading or inaccurate for integrated programs. There are also challenges in implementing required enrollment confirmation processes (designed to protect against marketing abuses), which become a barrier to enrollment if the potential enrollee is difficult to reach or is confused by the outreach.¹⁹ For example, one SCO reports that a new member may have up to four contacts reconfirming his/her desire to enroll: one for the actual SCO-assisted enrollment, one for the CMS-required outbound confirmation call, and one or two for clarification calls to respond to member inquiries regarding why they received the confirmation call.

SCO PAYMENT MODEL

Payments by MassHealth and CMS are made separately to the SCOs and together comprise full payment for the SCO program model. EOHHS makes capitated monthly payments for six distinct rating categories based on eligibility, region of residence (Boston or non-Boston), and clinical status and settings of care (community or institutional). There are three community rating categories and three institutional rating categories, intended to reflect the relative risk of a SCO's population.

Payments to SCOs are carefully structured to give an incentive to the SCOs to safely provide members with lower-cost community-based alternatives rather than nursing facility care. For example, institutional-level rates are paid to SCOs only after a member has received care in the nursing facility for at least 90 days. The program also creates incentives for SCOs to support

¹⁸ Mathematica Policy Research, *Managing the Care of Dual-eligible Beneficiaries: A Review of Selected State Programs and Special Needs Plans*, June 2011. Available at: <http://www.mathematica-mpr.com/~media/publications/pdfs/health/managingdualeligibles.pdf>

¹⁹ Mathematica Policy Research, 2011. Mathematic Policy Research, *Managing the Care of Dual-eligible Beneficiaries: A Review of Selected State Programs and Special Needs Plans*, June 2011. Available at: <http://www.mathematica-mpr.com/~media/publications/pdfs/health/managingdualeligibles.pdf>

investments required to return individuals to their communities after a nursing facility stay. Institutional rates are paid to SCOs for the first 90 days after a member moves into the community from a nursing facility.

Payments from CMS to SCOs include separate capitated risk-adjusted per member payments for Medicare Part A and B covered services and for Medicare Part D prescription drug coverage. Payment procedures for D-SNPs mirror the procedures that CMS uses to make payments to non-SNP Medicare Advantage plans. Some SCOs may qualify for an annual frailty payment if its members have demonstrably higher needs than average.²⁰

The effect of this model is that the SCO is paid on a capitated basis for all Medicare and Medicaid services and is able to use those funds to support a member's needs irrespective of the ultimate payer of the services.

SCO CARE MODEL

There is an increasing body of literature identifying elements of effective care models for dual-eligible populations, which align closely with the key features of the SCO Program. These features are designed to improve quality of care, reduce or avoid hospitalizations and institutional care, and decrease care duplication and poor medication management. Key features include:^{21,22}

- A high-touch care management model that includes initial and on-going patient risk assessment and development and monitoring of an individualized care plan.
- Strong coordination of care across the full spectrum of Medicare and Medicaid services.
- A person-centered approach supported by a Primary Care Team to prevent disease, coordinate acute and behavioral health services, and address social needs such as housing and nutrition tailored to the needs of beneficiaries living in the community and in institutions.

²⁰ SCOs as D-SNPs are eligible to apply for an annual frailty payment based on a methodology that determines if the SCO's members have a "similar average level of frailty" compared to members enrolled in the Program for All-Inclusive Elderly (PACE) program, which is a federal program offering integrated Medicare and Medicaid services from PACE organizations to individuals 55 and older who meet nursing home certified levels of care requirements.

²¹ Medpac, *Report to the Congress: Aligning Incentives in Medicare*, Chapter 5, June 2010. Available at: http://www.nhpg.org/media/10709/medpac_dual%20coordination.pdf

²² Kenneth E. Thorpe, *Estimated Federal Savings Associated with Care Coordination Models for Medicare-Medicaid Dual-eligibles*, September, 2011. Available at <http://www.ahipcoverage.com/wp-content/uploads/2011/09/Dual-Eligible-Study-September-2011.pdf>

- Medical advice from a care coordinator available 24/7.
- Medication management, adherence, and reconciliation.
- Transitional care.
- Regular contact with enrollees.
- Centralized electronic health records.
- Close integration of the care coordination function and primary care and specialist providers.

Central to the SCO Program model is a strong care coordination model. The EOHHS SCO contract requires that the SCOs complete an initial comprehensive assessment within 30 calendar days of patients' enrollment and selection of a PCP (or within 5 days for a member with pending institutional placement), including evaluation of:

- Clinical and nutritional status and physical well-being.
- Medical history, including family history.
- Behavioral health and tobacco screenings.
- The need for long-term services and supports.

A required output of the assessment is the determination of complex care needs, requiring "expert coordination" of multiple services by a trained case manager to "manage essential unskilled services and care" such as complex medical or behavioral health conditions or cognitive impairment. Ongoing assessments are also contractually required, with the expectation that they will be implemented at least once every six months or, for members who require complex care, at least quarterly or when major, non-temporary changes occur.

Since its inception, MassHealth requires that SCOs contract with at least one Aging Services Access Points (ASAP) in their service area to provide a Geriatric Support Services Coordinator (GSSC) to participate in the assessment process. The GSSCs are responsible for assessing the health and functional status of members to determine the correct package of LTSS in the community to improve or maintain each assessed member's health and functional status, as needed. This integration with local community resources with expertise in coordinating services for elders has been an important element of the SCO model.

Informed by the assessment, multi-disciplinary Primary Care Teams (PCTs)—including the member and PCP collaborating with other team members such as family members, caregivers, a GSSC, a nurse practitioner, registered nurse, or physician's assistant with required experience in geriatric practice—are engaged to create an Individualized Plan of Care (IPC) that includes treatment goals (medical, functional, and social) and measures progress and success in meeting

those goals. The IPC must be signed by the member and involve the PCP. The IPC process is designed to create a person-centered service plan driven by the SCO members' personal goals and preferences. The IPC process will achieve the goals through ensuring the delivery of the appropriate services selected from the full set of integrated Medicare and Medicaid benefits, including the full spectrum of services – physical and behavioral health, LTSS, acute, ambulatory, and institutional care.

To support care coordination activities, SCOs must keep a Centralized Enrollee Record that is available to each member and all members of the PCT and which is a single, centralized, comprehensive record documenting the Enrollee's medical, functional, and social status.

Additional required program components that align with the key features of effective integrated programs include:

- SCOs must provide a single, toll-free telephone line, available 24/7 with access to an on-call skilled health-care professional.
- SCOs must implement wellness programs and initiatives that include health promotion and outreach about wellness to members, their family members and caregivers, such as seminars on preventing falls, tobacco cessation, or coping with chronic illnesses.
- As part of Medicare Part D requirements, SNPs must establish a comprehensive medication therapy management (MTM) program that is submitted to CMS for review and approval annually.

SECTION 2: BENEFITS OF SCO MODEL

The SCO program model described above has proven benefits when compared to the alternative, which is separate and uncoordinated coverage under Medicare and Medicaid's FFS programs. This section identifies the specific ways the program benefits MassHealth members, SCO network providers, and the MassHealth agency itself.

BENEFITS OF THE SCO PROGRAM TO MASSHEALTH MEMBERS

Perhaps the most basic element of the SCO program is that it provides a single vehicle for coverage for the member, despite the member's entitlement to services under two separate programs (Medicare and Medicaid). Members have one health insurance card and one plan. In contrast, a dual-eligible member not enrolled in a SCO program may well have three different health plans – Medicare for hospital and physician services, a Medicare Part D plan for prescription drugs, and Medicaid/MassHealth for most other services, including LTSS and behavioral health services. The coordination and integration of Medicare and Medicaid services

provided by the SCO program is invaluable to the dual-eligible population. Individuals who are over 65 are likely to have medications for chronic conditions, occasional episodes that require acute or physician care, and growing needs for community-based services. The ability to contact one plan that coordinates all services – and each SCO member has access 24 hours a day, 7 days a week, to a call center that can answer any questions – is a core value of the SCO program.

Members also benefit from the clinical coordination inherent in the SCO model. A member receiving benefits through the FFS programs may have a PCP with marginal responsibility for directing a member’s care through referrals. But only a member enrolled in SCO will have access to an identified care coordinator who is embedded within the primary care team (PCT). Together, the plan-based care coordinator and the PCT work with the member to coordinate their care. Members of the PCT must have experience with geriatric practice, and PCPs in the SCO program must have at least two years of experience working with elderly patients.

Finally, there are concrete benefits that SCO members receive that are simply not provided through the FFS program. Most importantly, the SCO program eliminates cost-sharing for SCO members for Medicaid and Medicare services (including Part D) to \$0 for covered services provided by a network provider. Other additional benefits are authorized under SCO and approved by MassHealth. For example, over the years, the FFS dental program has been challenged to provide a comprehensive dental benefit, including preventive care, due to budget constraints. SCOs have filled this gap in access by providing dental services for adults when they are not covered by MassHealth—including cleanings, fillings and dentures. In addition, SCO plans coordinate and pay for transportation services for members to get to medical appointments without the need for a member to use the prescription for transportation process managed through a MassHealth FFS vendor. Instead, SCO care coordinators directly coordinate member access to transportation—and this benefit is commonly cited as highly valued in member surveys and testimonials.

The value of these benefits to SCO enrollees is reflected in a range of data that demonstrates that SCO members appreciate the program:

- As discussed more fully in Section 3 of this report, the SCO program has proven clinical benefits in terms of lower nursing home utilization and strong quality ratings.
- Available data on SCO retention indicates that members infrequently choose to leave the SCO program once they are enrolled. Based on data reported by the MAHP-member SCOs, total disenrollment in SCO is very low, with all plans reporting retention rates higher than 97%. In 2014 each plan’s average voluntary disenrollment – that is, the

measure of individuals who actively decide to leave the SCO plan – was less than 1 percent.²³

- Member satisfaction surveys have consistently shown positive results for the SCO program. As discussed more fully in section 3, the most ambitious EOHHS-commissioned review of member experience showed members are happy with the program and the benefits received from SCO. Moreover, the 2015 Medicare Advantage Star Ratings that are specific to member experience are excellent and outpace national averages. On the *Rating of Health Plan* measure used to assess the overall view a member has of his or her health plan, SCOs have averaged 4.4 stars (out of 5). The average national rating for the same measure in 2015 was 3.4. On the *Rating of Health Care Quality* measure used to assess the members' view of the quality of care provided by the plan, SCOs have averaged 4.4 stars, compared to a national average of 3.7.^{24,25}

BENEFITS OF SCO TO THE PROVIDER COMMUNITY

SCO network providers gain substantial advantages from the integrated nature of the SCO program as well. Providers are able to interact with only one payer, rather than two or three separate entities serving and providing reimbursement for a given patient. Confusion about the terms of billing is reduced, claims submission and claims resolution issues are dealt with by a single entity, and authorization protocols and post-claim auditing is consolidated in one place, without any question about which program should be billed or which program's rules apply.

Primary care providers (PCPs) in particular benefit from SCO's integrated clinical model. Care coordinators work closely with PCPs to help members access needed care. PCPs also have access to a centralized enrollee record and an individualized plan of care, developed by the member and the care team.

BENEFITS OF SCO TO THE STATE

Certainly, the state benefits from SCO because the program is, as described above, demonstrably simpler, more convenient, and more effective for both members and providers. There are other benefits that accrue to the state from the SCO program as well.

²³ HMA analysis of data provided by MAHP member SCOs.

²⁴ Centers for Medicare and Medicaid Services (2015). Part C and D Performance Data. Available at: <http://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html>

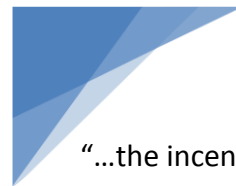
²⁵ Centers for Medicare and Medicaid Services (2015). Star Ratings Fact Sheet. Available at: <http://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html>

First, the SCO program provides a vehicle for the collection and analysis of quality data that is not available in the FFS program. Because of data that SCOs collect and report based on the standard Healthcare Effectiveness Data and Information Set (HEDIS[®]),²⁶ Consumer Assessment of Health Plans Surveys (CAHPS) member experience survey, and the Health Outcomes Survey (HOS),²⁷ program managers are able to monitor quality performance in the SCO program. These surveys provide a way to discern trends across the program and to identify specific areas for improvement or specific instances of best practices on the part of individual plans.

SCO also provides a vehicle for the state to institute quality improvement projects based upon identified performance trends or state priorities. As D-SNPs, the SCOs are also required by CMS to conduct specified Quality Improvement Projects. Each year SCOs conduct these performance improvement projects, which are documented with findings and recommendations reported to the state and CMS. SCOs also conduct surveys of all enrollees and engage by survey or focus group with special populations – including non-English speaking enrollees, enrollees from minority groups, persons with physical disabilities, and family caregivers – to assess how well their special needs are being met by the program. All of these efforts to report on and improve quality of care for SCO enrollees are uniquely available to the state under SCO and are generally not possible or practical in the FFS program.

Second, the financing of the program provides the state with budget predictability for an otherwise volatile and high-cost population. This is, of course, a benefit the state derives from any capitated managed care program. Rates are set in advance and once they are set for a given fiscal year, the state does not have to monitor weekly and monthly spending to determine whether it is tracking to the approved state budget.

Third, the incentives inherent in the SCO program are aligned in ways that overcome the dysfunctional relationship between Medicare and



“...the incentives inherent in the SCO program are aligned in ways that overcome the dysfunctional relationship between Medicare and Medicaid in the FFS program.”

²⁶ HEDIS is a commonly used set of health plan performance measures used by both Medicaid and Medicare to promote accountability and assess the quality of care provided by health plans.

²⁷ Medicare uses the HOS to measure outcomes in the Medicare program. It is a longitudinal, self-administered survey that uses a health status measure, the VR-12, to assess both physical and mental functioning. A sample of members from each Medicare Advantage health plan is surveyed. Two years later these same members are surveyed again and health status changes are evaluated.

Medicaid in the FFS program. In the FFS program, MassHealth services – for example, robust community-based LTSS services – may align with a member’s preferences and tend to reduce hospitalizations or eliminate re-admissions. However, because Medicare covers most hospitalization costs for dual-eligibles, any savings from reduced hospital costs are savings to the Medicare program, even though the reason for the savings is, in fact, the Medicaid-funded services. This fundamental disconnect in the administration of the Medicare and Medicaid programs is restructured in an integrated care program like SCO. Moreover, the SCO payment model specifically provides incentives for investments in care that will either avoid a nursing facility stay or will support a transition from a nursing facility back to a member’s home.

SECTION 3. KEY FINDINGS ON SCO PERFORMANCE

The importance of performance measurement in managed care cannot be overstated. As the primary funder of medical services and LTSS for vulnerable populations in Massachusetts, MassHealth has made important investments to ensure the populations it serves are receiving consistently high-quality care. But MassHealth must also be concerned with the efficiency in the system as well. In this section, we describe key measures and study findings that paint a picture of SCO performance, including both quality and efficiency.

MEDICARE STAR RATINGS

SCOs perform well on a broad range of quality metrics. A key metric, which summarizes performance across multiple domains, comes from the Medicare Star Rating program. The Medicare Star Rating program is designed to summarize Medicare Advantage and Prescription Drug Plan (PDP) performance to inform beneficiary selection of plans, motivate plan sponsors to improve quality and plan performance, and provide a mechanism through which CMS can reward plans that achieve high quality ratings through bonus payments, marketing advantages, and prominent display on the Medicare Plan Finder. The Star Ratings rely primarily on HEDIS and CAHPS measures reflecting plan performance in clinical domains, care management, access to care, customer service, and consumer satisfaction.

SCOs, operating as Dual-SNPs, are subject to the same performance measures as other Medicare Advantage plans. The average overall Star Rating for SCOs in 2015 was 4.1 across the five plans currently in operation.²⁸ Nationally, the average Medicare Advantage Star Rating for



“...SCO performance is better than the average Medicare Advantage plan, even when considering the differences in the complexity of the population needs being served.”

2015 is 3.92. The difference is notable because the majority of Medicare Advantage plans serve a much less complex population than that served by SCOs.²⁹ Put another way, SCO performance is better than the average Medicare Advantage plan, despite the greater complexity of the needs of the SCO population.

To provide another comparison, we examined the Star Ratings for the health plans participating in the Minnesota Senior Health

Options (MSHO) program. MSHO is a health care program that integrates Medicare and Medicaid for the dually eligible population and shares many of the same features of the SCO program. For 2015, the average Star Ratings among MSHO plans was 3.93 (compared to 4.1 for Massachusetts SCOs).³⁰ Massachusetts SCO performance exceeds that of other similar health plans serving similar populations.

SCO-SPECIFIC EVALUATION RESULTS

Over the last decade, MassHealth has funded several studies to evaluate the SCO program. We highlight the results of some key studies here. Early in the history of the SCO program, the Center for Health Policy and Research at the University of Massachusetts Medical School conducted qualitative interviews to better understand the health care experience of nursing home-certifiable SCO members.³¹ As part of this evaluation, project staff interviewed a representative sample of SCO members. Among the key findings from this study were these:

²⁸ Centers for Medicare and Medicaid Services (2015). Part C and D Performance Data. Available at: <http://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html>

²⁹ Centers for Medicare and Medicaid Services (2015). Star Ratings Fact Sheet. Available at: <http://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html>

³⁰ Centers for Medicare and Medicaid Services (2015). Part C and D Performance Data.

³¹ Center for Health Policy and Research, UMass Medical School (2007). Evaluation Phase 2: Member Experience Report of Individual Interviews. Available at: <http://www.mass.gov/eohhs/docs/masshealth/sco/evaluation-phase-2-member-experience-report-of-individual-interviews.pdf>

- Almost all respondents (93.9%) said they trusted the SCO to help them get the help they needed.
- Most respondents (84%) said they felt they were getting all the services they needed.
- No respondents reported feeling uncomfortable talking to SCO staff about problems/complaints with services.
- Only 9 of 82 respondents (10.9%) reported barriers to services, including language differences and challenges in reaching their provider or SCO staff.

Overall, satisfaction with the SCO program was high. SCO members were “quite happy with the program, the services they received, and the personnel who provided them” (p. 24).

In another assessment, JEN Associates conducted three separate evaluations of the SCO program, focusing on nursing home utilization.^{32,33,34} The first two studies were initiated early in the program’s history and included only one to two years of data to understand service utilization. Even as the program has matured, outcomes evaluation has found similar positive findings regarding the impact of the SCO program on service utilization.

The JEN Associates 2013 study population consisted of community-dwelling Massachusetts residents who enrolled in a SCO plan in CY 2004 and a matched control cohort of beneficiaries covered under the traditional fee-for-service Medicaid and Medicare programs. This study followed the enrolled population for a longer time period than the earlier studies, including those enrolled between 2004 and 2009. Proportional hazards modeling³⁵ revealed that SCO enrollment is associated with a 16%



SCO enrollment is associated with a 16% reduction in the risk of long-stay nursing facility admission.

- JEN Associates, 2013

³² JEN Associates (2008). MassHealth SCO Program Evaluation Pre-SCO Enrollment Period CY2004 and Post-SCO Enrollment Period CY2005 Nursing Home Entry Rate and Frailty Level Comparisons. Available at: <http://www.mass.gov/eohhs/docs/masshealth/sco/evaluation-pre-sco-enrollment-cy2004-post-enrollment-cy2005-nursing-home-entry-rate-and-frailty-level-comparisons.pdf>

³³ JEN Associates (2009). MassHealth SCO Program Evaluation Nursing Facility Entry Rate in CY 2004-2005 Enrollment Cohorts. Available at: <http://www.mass.gov/eohhs/docs/masshealth/sco/evaluation-nursing-facility-entry-rate-cy2004-2005-enrollment-cohorts.pdf>

³⁴ JEN Associates (2013). Massachusetts Senior Care Option 2005-2010 Impact on Enrollees: Nursing Home Entry Utilization. Available at: <http://www.mass.gov/eohhs/docs/masshealth/sco/sco-evaluation-nf-entry-rate-2004-through-2010-enrollment-cohorts.pdf>

³⁵ Proportional hazards models are a class of survival models that evaluate the relationship between selected characteristics (e.g., SCO enrollment) with time to an event (in this context, time to a long-stay nursing facility

overall reduction in the risk of a long-stay nursing facility entry. Other key findings from this study were:

- Nursing facility long-stay entry was lower among SCO members than in the control group (6.9% vs. 8.2%).
- SCO enrollment was associated with a 23% overall reduction in end-of-life care nursing facility entry risk.
- There was no discernable difference between SCO members and the matched cohort in the risk of short-stay nursing facility entry.

POTENTIAL SCO SAVINGS

To further illustrate the performance of the SCO, we modeled the potential savings to MassHealth attributable to SCO interventions to reduce the risk of nursing facility entry. Although SCOs serve a broad population ranging from the “community well” to those residing in nursing facilities, the population that is community-residing “nursing home certifiable” is a key population to focus on because of their complex needs and the potential to reduce their risk of poor outcomes and high cost service utilization through better coordination of medical and supportive services in the community. Further, this population currently reflects approximately 51% of total enrollment across all five SCO plans, which is a substantial proportion of the whole SCO membership.³⁶

We present analyses that detail the estimated financial savings to MassHealth resulting from SCOs successfully maintaining members in the community who are at high risk of entering such a facility. Through comprehensive assessment, targeted care coordination, and the engagement of community-based LTSS, SCOs have already demonstrated a reduction in nursing facility admissions relative to similar fee-for-service populations, as observed in the studies by JEN Associates described earlier. The analyses briefly described here are the result of efforts to build a model to value the savings that accrue to the state as a result of:

- the SCOs successfully keeping at-risk populations in the community; and
- assumptions of savings if the SCO model were expanded to serve similar community-resident dual-eligibles receiving services from the FFS system.

admission). This model estimates the “hazard”, or risk, of nursing facility admission and relates timing of admission to SCO enrollment.

³⁶ MassHealth (2015). SCO Enrollment by County, June 2015.

A more detailed description of the data sources, our assumptions, and the estimates produced can be found in the **Appendix**.

SCO SAVINGS METHODOLOGY

Avoided nursing facility costs from SCO enrollment are a function of:

- the total SCO nursing facility certifiable population assumed to be at risk of a long-stay (4 or more months) nursing facility admission in a year,
- their estimated lengths of stay, and
- the average Medicaid daily rate for a nursing facility in Massachusetts.

Data for these analyses come from several sources described in Table 2.

Table 2. Data Sources Used to Evaluate SCO Savings to MassHealth

Data Elements	Information Source
Current SCO enrollment by rate category	MassHealth (2015) ³⁷
Published estimates of nursing home avoidance for comparable population	JEN Associates (2014) ³⁸
Nursing home certifiable-equivalent FFS dual-eligible population	MassHealth ²⁹
Published estimates of lengths of stay for long-stay nursing facility residents in Massachusetts	UMass Medical School ³⁹
Published Medicaid nursing facility rates for Massachusetts nursing facilities	Commonwealth of Massachusetts, EOHS ⁴⁰

³⁷ MassHealth (2015). SCO Enrollment by County, June 2015.

³⁸ Jen Associates, Inc (2014). Massachusetts PACE Evaluation: Nursing Home Residency Summary Report. Available at: http://www.npaonline.org/website/download.asp?id=6253&title=Massachusetts_PACE_Evaluation_Summary_Report_7.31.14

³⁹ UMass Medical School (2009). Long Term Services Profile. Available at: <http://www.mass.gov/eohhs/docs/eohhs/ltc/ltss-profile-report.pdf>

⁴⁰ Commonwealth of Massachusetts, Executive Office of Health and Human Services (2015). NF Rates: Effective 1/1/15 – 6/30/15. Available at: http://www.mass.gov/eohhs/gov/laws-regs/hhs/hospitals-nursing-homes-and-rest-homes.html#114_2_6

The following equation summarizes our methodology:

Total nursing facility costs avoided by SCO	=	Total NHC population enrolled in a SCO	X	Risk of a long-stay nursing facility admission	X	Estimated length of stay	X	Average Medicaid daily rate
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The methodology applied to estimate the potential nursing facility savings to MassHealth attributed to the enrollment of the FFS dual-eligible population into a SCO is calculated in a similar fashion:

Total nursing facility costs potentially avoided from FFS dual population	=	Total NHC-equivalent population in FFS	X	Risk of a long-stay nursing facility admission	X	Estimated length of stay	X	Average Medicaid daily rate
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SCO SAVINGS FINDINGS

Based on our analyses, we estimate the potential value of costs avoided to MassHealth resulting specifically from the avoidance of nursing facility (NF) admissions in the “nursing home certifiable” population is \$65.9 million annually. Further, MassHealth could potentially avoid another \$45.1 million annually if the nursing home certifiable population currently receiving services through the FFS system were enrolled in a SCO.

We believe that the nursing facility costs avoided as a result of the SCO program presented here are a conservative estimate of the true value, in part because in these analyses we assumed length of stay to be 12 months; but some portion of the population who would have entered a nursing facility in the absence of SCO would have had a length of stay longer than 12 months. Therefore, probably not all the cost savings associated with avoided nursing facility stays were estimated; thus the savings calculation is a conservative one. Furthermore, the estimates presented here are for avoided nursing home admissions only and do not reflect other ways in which SCOs may demonstrate effective and efficient use of resources. In particular, SCO has the elements of integrated care programs that have been shown to reduce or avoid hospitalizations, decrease duplicative care, and improve medication adherence.⁴¹

⁴¹ See Kenneth E. Thorpe, *Estimated Federal Savings Associated with Care Coordination Models for Medicare-Medicaid Dual-eligibles*, September, 2011. Available at <http://www.ahipcoverage.com/wp-content/uploads/2011/09/Dual-Eligible-Study-September-2011.pdf>

These estimates capture nursing facility costs avoided as a result of the SCO integrated program, but they do not reflect net savings to the state. The net savings would require taking the estimated cost savings attributed to nursing facility stays avoided and subtracting the premiums paid to the SCOs for the impacted population. It is our perspective that estimating net savings would be inappropriate because the analysis presented here relates only to a subset of the SCO-enrolled or the SCO-eligible FFS population and only to evaluation of nursing facility services avoided. Other potential savings from the SCO model – for example, from reductions in hospital re-admissions due to the integrated care coordination model – are not captured in the analysis. Although reducing estimated cost avoidance figures by SCO premiums would provide a true “net savings” estimate, we believe that such an estimate would obscure the other ways an integrated model should reduce overall health spending.

CONCLUSION

The SCO program is an early example of an innovative program originating in the Commonwealth that has provided lessons for policymakers across the country and an innovation that has been adopted as a best practice by CMS and by states. The SCO Program offers a well-designed program with many features of high-performing integrated health plans supported in the literature as having promise in providing high-quality, cost-effective care. These features include SCO accountability for a high intensity care management model; person-centered plans of care that integrate the full spectrum of Medicare and Medicaid services; strong medical and medication management programs to ensure appropriate and safe use of services; and use of a secure, centralized electronic health record to share relevant information with care team members.

SCOs consistently perform well on nationally collected ratings. In 2014 they achieved ratings higher than Medicare Advantage plans serving less complex populations and comparable programs serving dual-eligible seniors in Minnesota. In addition, state-commissioned studies, including a series of rigorous case-controlled studies conducted by JEN Associates, show positive results, in the sense of fewer and shorter nursing facility stays, compared to a dual-eligible control group

Enrollment growth in SCO has been slow and steady, but still captures only less than a third of total eligible individuals. Additional strategies to increase awareness and take advantage of untapped outreach opportunities are worthy of consideration. More broadly, as EOHHS considers its options to expand models of care delivery that provide accountable and appropriately aligned care, the SCO model stands out as one that has demonstrated success in

terms of member satisfaction and cost savings. The SCO model works because it is designed to create the right incentives for providers and health plans alike.

The SCOs have expressed an interest in being part of the MassHealth solution as EOHHS develops its redesign. They look forward to continued engagement and collaboration with EOHHS in the future as design options are being considered.

APPENDIX

This Appendix details the methods used to estimate the potential value of costs avoided to MassHealth resulting from SCO enrollment, specifically for the SCO population identified as “nursing home certifiable.” In addition, we analyze the potential value of costs avoided to MassHealth from prevented nursing facility admissions for a nursing home certifiable-equivalent aged (65+) dual-eligible population currently enrolled in the FFS delivery system. Data for this analysis come from several sources described in detail below.

For this analysis, we focused specifically on the population that is residing in the community with a nursing home-certifiable level of care need (Community-NHC rating cell category). This population currently reflects approximately 51% of total SCO enrollment across all five SCO plans.⁴² The data sources required for this analysis include current SCO enrollment in the Community-NHC rate cell, current Community-NHC-equivalent aged dual-eligible FFS enrollment, estimates of nursing home avoidance, and the distribution of lengths of stay among a sample of long-stay nursing home residents. In addition, we developed an estimate of the daily rate for nursing facilities to calculate the spending saved by avoiding a nursing facility stay—that is, nursing facility costs that would have been incurred if the SCO population had been in the fee-for-service system.

We began by identifying estimates in the scientific literature that reflect the potential for an integrated model of care, with an emphasis on the impact that care coordination might have on reducing institutionalization. We identified a recent study by JEN Associates in which the authors apply a case-controlled methodology to evaluate the impact of key characteristics on nursing facility (NF) admission. JEN Associates compared PACE enrollees with a matched sample of dual-eligibles accessing care through the fee-for-service (FFS) system.⁴³ Although the PACE program enrollment is not identical to SCO enrollment (most notably, the minimum age of eligibility is 55 instead of 65), the models of care are quite similar: both SCOs and PACE emphasize care coordination for a frail population that meets standards for nursing home eligibility. Further, other similar analyses performed by JEN Associates of the SCO program focused on a broader community-based population than those who were in need of a NF level

⁴² MassHealth (2015). SCO Enrollment by County, June 2015. Participating SCOs include Commonwealth Care Alliance, Navicare, Senior Whole Health, Tufts Health Plan and UnitedHealthcare.

⁴³ Jen Associates, Inc (2014). Massachusetts PACE Evaluation: Nursing Home Residency Summary Report. Available at: http://www.npaonline.org/website/download.asp?id=6253&title=Massachusetts_PACE_Evaluation_Summary_Report_7.31.14

of care and thus would not be appropriate to the goals of this project.⁴⁴ The study of the PACE program completed by JEN Associates reported that 11.8% of PACE enrollees entered a NF for a long stay, compared to 18.1% of matched FFS cases—a risk differential of 6.3%.

To calculate the cost savings associated with potentially avoided nursing facility (NF) admissions for SCO members, we produced the following model:

Table A.1. Computation of Nursing Facility (NF) Costs Avoided for the Community-NHC SCO Membership								
Total Avoided NF Costs (SCO Members)	=	Total Community-NHC SCO enrollment	X	Rate of Avoided NF Admissions	X	NF Daily Rate	X	Estimated NF Length of Stay

In this section, we describe each of the elements of this model:

- Total Community-NHC Enrollment: SCO enrollment in the Community-NHC rate cell was 19,584 as of June 2015.
- Rate of Avoided Institutionalization based on the JEN Associates study of PACE enrollees: 6.3%.
- NF Daily Rate: We used 2015 effective NF daily rates available from the EOHHS.⁴⁵ The state provides facility-specific and class-specific daily rates (based on the assessed number of skilled nursing minutes required). For this analysis, we produced a single daily rate of \$187.92, reflecting an average across all facilities and across all classes of residents.
- Estimated Length of Stay (LOS): We draw detail on the distribution of length of stay from a 2009 report produced by the University of Massachusetts Medical School.⁴⁶ We assume that all Community-NHC SCO members admitted to a NF are long-stay NF residents (4+ months). The data in this report show the distribution of individuals residing in a NF for 4-6 months, 7-12 months, 1-3 years, 3-5 years, and 5+ years. In this study, 30% of the long-stay residents were there for 4-6 months, 20% for 7-12 months,

⁴⁴ Jen Associates, Inc (2013). Massachusetts Senior Care Option 2005-2010 Impact of Enrollees: Nursing Home Entry Utilization. Available at: <http://www.mass.gov/eohhs/docs/masshealth/sco/sco-evaluation-nf-entry-rate-2004-through-2010-enrollment-cohorts.pdf>

⁴⁵ Commonwealth of Massachusetts, Executive Office of Health and Human Services (2015). NF Rates: Effective 1/1/15 – 6/30/15. Available at: http://www.mass.gov/eohhs/gov/laws-regs/hhs/hospitals-nursing-homes-and-rest-homes.html#114_2_6

⁴⁶ UMass Medical School (2009). Long Term Services Profile. Available at: <http://www.mass.gov/eohhs/docs/eohhs/ltc/ltss-profile-report.pdf>

and 50% for 1 year or more. In the calculation of NF costs, we converted these time ranges into days using the mid-point of the range for stays less than one year (i.e., for the 4-6 month range, we assume a 5 month stay or 150 days, for the 7-12 month range, we assume a 9.5 month stay or 285 days). Those who were in a facility for more than one year were assumed to stay 12 months (or 365 days). Estimated LOS was determined by three sets of calculations in which we multiplied the number of enrollees that avoided a NF admission by the proportion in each of the LOS categories (30%, 20%, or 50%) and then further multiplying this number by the number of days associated with each proportion (150, 285, or 365, respectively). These three numbers are summed together to reflect the total number of NF days, which is then multiplied by the daily rate to get total avoided NF spending.⁴⁷ This approach conservatively estimates cost savings in part because we do not account for the proportion of the population that avoided a NF stay who would have had a stay longer than 12 months.

Based on the model described above and with the data sources available, we calculated the cost savings to MassHealth from NF avoidance among SCO members to be \$65,961,569.

For the analysis of estimated savings to MassHealth if current Community-NHC-equivalent FFS dual-eligibles were enrolled in SCO, we apply a similar methodology as described above. In the calculation depicted below, we substituted the FFS enrollment for SCO enrollment. All other data elements are the same as described above.

Table A.2. Computation of NF Costs Avoided for the Community-NHC-Equivalent FFS Population if Enrolled in a SCO

Total Avoided NF Costs (FFS Enrolled in SCO)	=	Total Community-NHC-Equivalent FFS enrollment	X	Rate of Avoided NF Admissions	X	NF Daily Rate	X	Estimated NF Length of Stay
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Based on the model described above and with the data sources available, we calculated the potential additional savings to MassHealth if Community-NHC-equivalent FFS dual-eligibles were enrolled in the SCO program as \$45,080,244.

⁴⁷ This example illustrates the calculation described. If we assume 1000 SCO members in the Community-NHC rate cell and a rate of NF admissions avoided at 6.3%, the following calculation will produce the total days of NF institutionalization avoided = (1000*0.063*0.30*150 days)+(1000*0.063*0.20*285 days)+(1000*0.063*0.50*365), which equals 2,835 days +3,591 days +11,497 days = 17,923 NF days potentially avoided by SCO enrollment. Multiplying this by the average daily rate (\$187.92) equals \$3,368,090.16. This dollar amount is equivalent to amount of FFS payments the state would make to NFs for the population in this example estimated to have been admitted to a NF if not enrolled in the SCO.

ASSUMPTIONS

We made the following assumptions, which could have a material impact on the estimates in either direction:

- The estimate of NF admission avoidance could be greater or lesser than those estimates derived from the scientific literature. The PACE study by JEN Associates was based on a carefully designed methodology but does not directly reflect the Community-NHC population. Still, we believe the PACE study is a close approximation of the level of need and other characteristics found in the Community-NHC SCO population.
- The state average daily NF rate could be higher or lower, depending on the distribution of need in the population estimated to have avoided a NF admission.
- The estimated savings to MassHealth if current Community-NHC-equivalent FFS dual-eligibles were enrolled in SCO could be lower, depending on the level of enrollment penetration that might be achievable for this population.
- Our estimate of NF length of stay is based on reports that group length of stay by ranges, rather than reporting lengths of stay by day. We further take the mid-point of these ranges to do our estimates. These data simplifications could produce some inaccuracies.