June 20, 2017

Item Name: Update on Transition Care Program Pilot

Program: Health Benefits

Item Type: Information

Executive Summary
This information item summarizes a 2014-2016 pilot project by the California Public Employees' Retirement System (CalPERS) team members that attempted to reduce the rate of hospital readmissions for elderly people in the greater Sacramento area, who held a CalPERS Long-Term Care (LTC) policy and who had health coverage through a CalPERS self-funded Preferred Provider Organization (PPO) health plan. Although enrollment in the Transition Care Program (TCP) pilot was lower than expected, lessons were learned for future similar programs.

Strategic Plan
This agenda item supports 2012-2017 Strategic Plan Goal A: "Improve long-term pension and health benefit sustainability, specifically "Ensure high quality, accessible and affordable health benefits."

Background
One of the 2012-2017 Strategic Initiatives for Goal A was "Implement new approaches and expand efforts already proven to reduce health care costs and improve health outcomes...." Hospital readmissions[1] are costly to CalPERS and represent poor health outcomes. Eric A. Coleman, MD, MPH, of the University of Colorado, developed a "Care Transitions" intervention, also known as the "Coleman model," that is widely recognized as a method to reduce hospital readmissions among elderly persons.[2] For instance, one 2006 randomized controlled trial by Coleman and colleagues showed that a Care Transitions program substantially reduced readmission rates and hospital costs.[3]

As a result, planning for the TCP began in 2014, and the CalPERS 2015-2017 Business Plan included the TCP. After discussions with LTCG (administrator for the CalPERS LTC program)

[1] A readmission occurs when a participant is admitted to a hospital, then discharged, then admitted again within a specified time interval.
[2] Nelson JM, Pulley AL. Transitional care can reduce hospital readmissions. American Nurse Today 10(4), April 2015. At https://www.americannursetoday.com/transitional-care-can-reduce-hospital-readmissions/.
[3] Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. Arch Intern Med. 2006 Sep 25;166(17):1822-8. At http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/410933.

and Anthem Blue Cross (administrator for the CalPERS self-funded PPO plans), CalPERS team members decided that the TCP would focus on people who met the following criteria:

- Were 65 years or older
- Held a CalPERS long-term care policy
- Had health coverage through a CalPERS self-funded PPO plan (i.e., PERS Select, PERS Choice, or PERSCare)
- Lived in the greater Sacramento area in the community (i.e., not in a nursing home or other long-term care facility)
- Were admitted during the project period to one of eight greater Sacramento acute care hospitals with certain diagnoses that were associated with a high risk of readmission (e.g., cardiovascular disease)
- Were discharged from the hospital with an expectation that they would return to their homes

The pilot was an added benefit at no cost to the participant. Upon enrollment, the participants would receive an in-home assessment from a transition care nurse, as well as, services from transition coaches available by telephone. LTCG contracted with AccentCare, a community-based provider of nursing services and personal care services, to perform these services.

Participation was initially limited to 400 eligible participants who were considered at greatest risk for readmission. The project was scheduled to begin enrolling participants in February 2015 and was to last for one year.

Analysis

By mid-2015, the numbers of participants was lower than expected. As such, it was decided to increase the number of eligible participants to 1,147 by relaxing the eligibility criteria. Other measures implemented included increasing outbound calls to potential participants, outreach to the eight affected hospitals, and outreach to primary care physicians. Despite the changes made, enrollment was still low, with only 257 participants agreeing to join. The project ended in March 2016.

An evaluation of the project, conducted by the CalPERS Health Policy Research Division, compared the intervention group (i.e., those who were contacted and agreed to join in the program) with two comparison groups: 1) participants who were offered the service but either chose not to join or did not respond, 2) participants who met all the criteria to join but were not offered the product because their risk scores were not high enough. The results are summarized in the following table.

Population characteristics and outcomes for the intervention group, comparison group 1 and comparison group 2

	Intervention group	Comparison group 1	Comparison group 2
Sample Size*	257	884	3,468
Female Gender	62.4%	61.5%	58.9%
Average Age**	76.7	77.3	70.8
Admits per 1000			
2014	187.7	250.0	130.0
2015	167.3	198.6	148.5
Difference 2015 to 2014	-20.4	-51.4	18.5
Emergency room visits per 1000			
2014	616.9	692.1	282.6
2015	428.0	561.9	301.0
Difference 2015 to 2014	-188.8	-130.2	18.5
Average length of stay			
2014	12.7	11.7	17.2
2015	12.7	11.9	14.6
Difference 2015 to 2014	0.0	-2.7	-2.6

* Sample size is for 2015

** $p<0.0001$ for the three groups and $p=0.03$ for intervention group and comparison group 1.

Because of the small sample sizes, the calculated measures have large standard errors and do not allow any definitive conclusions concerning the direction of the impact of the intervention or if the effects seen were meaningful. Nevertheless, the TCP did provide anecdotal benefits to participants, which can be grouped into the areas of Education, Safety, Health Coordination, Medication Reconciliation, and Prevention:

- Education: Participants were informed of their long-term care plan benefits, as well as of medical information such as details of their diagnoses.
- Safety: For example, one home safety check resulted in prevention of a potential house fire due to a fireplace that had not been cleaned in many years.
- Health Coordination: Transportation to medical appointments was arranged, Life Alert emergency call systems were ordered, follow-up appointments with primary care physician were scheduled, and resources were provided for participants to hire private caregivers.
- Medication Reconciliation: Review of participants' prescription drugs led to education regarding their medications, identification of quantity discrepancies with dangerous medications, and discovery of medication errors.
- Prevention: Some participants called the TCP pilot nurse for assistance instead of 911 emergency services for items such as depression, loneliness, the common cold, and concerns related to their health conditions.

A qualitative review of the nurses' notes by the CalPERS Nurse Consultant suggested that the program would have served participants better if the interpersonal aspects of the nurse-participant/family interaction, which appeared inconsistent, were more comprehensive and more participant-centered. For example, in one case a participant was evaluated by the transition care nurse in a skilled nursing facility after discharge from the hospital. After the participant returned home, however, he/she was readmitted due to a fall caused by a loose rug. If the nurse had visited the participant's home, the nurse may have noticed the rug.

In summary, although there is a documented need for transitions of care, this pilot project showed that there are a number of barriers to implementing a successful program. The pilot struggled with getting participants to join and identify a large enough population at risk that would allow outcomes to be meaningfully measured. The intervention may need to be implemented facility-wide at discharge among all potentially at-risk patients to obtain adequate sample sizes for outcome measures such as re-hospitalization.

Meanwhile, Medicare is providing financial incentives to hospitals to reduce readmissions[4]; in contrast, a recent study concluded that "diverse interventions can be effective at reducing readmissions, but cost savings do not consistently occur."[5] CalPERS team members will continue to monitor developments in post-acute transitions to home care and readmissions, and will summarize such information in periodic reporting on population health management.

Budget and Fiscal Impacts
Not applicable.

Benefits and Risks
Not applicable.

Attachments
Attachment 1: Transition Care Program (TCP) Pilot Overview

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[4] Centers for Medicare & Medicaid Services. "The Hospital Readmissions Reduction (HRR) Program." At https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HRRP/Hospital-Readmission-Reduction-Program.html.
[5] Nuckols TK, et al. Economic Evaluation of Quality Improvement Interventions Designed to Prevent Hospital Readmission: A Systematic Review and Meta-analysis. JAMA Intern Med. 2017 May 30. At http://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2629495.