Evaluation of a High Risk Case Management Pilot Program for Medicare Beneficiaries with Medigap Coverage

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Presenter Disclosures

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(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Medicare Fee for Service

- Among those with Medicare coverage in 2011 (an estimated 49 million Americans), about 75% had original fee-for-service coverage; whereas, the rest had a Medicare Advantage plan. (1)
- Of those, around 9 million people purchased supplement insurance (i.e. Medigap) to defray the out-of-pocket expenses from copayments, coinsurance, etc. not otherwise covered by Medicare. (2)
- Nearly one-third of the supplement insurance market is covered by an AARP® Medicare Supplement Insurance Plan insured by UnitedHealthcare Insurance Company (for New York residents, UnitedHealthcare Insurance Company of New York). (2)
- These numbers are equal to those covered by Medicare Advantage plans, but much more is known about those plans, as data are more readily available for research and publication.

Clinical Programs

- United has developed numerous health improvement initiatives in an effort to better understand the characteristics, needs, and general health of its participants.
- The goal of these initiatives is to improve care coordination and delivery of services while maintaining costs and high quality of care.
  - The initiatives consist of several health improvement pilot programs for those with chronic illnesses living in high disease prevalence areas.
  - These include various pilot Case Management, Disease Management, Depression Management, and Prescription Drug Adherence programs currently being tested in five states (New York, North Carolina, Ohio, Florida, and California).
  - These program began in 2008 and 2009 and are continuing today.
- While such programs are common with Medicare Advantage plans, these programs are unique in the Medicare Supplement Health Insurance Plan industry.

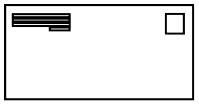
Sample Program Flow Diagram

UnitedHealth Group

Identify	Engage	Intervene	Coordinate	Monitor & Report	Evaluate

Claims, HCC scored, health risk assessment, nurse health line referral

IVR, mail and telephonic engagement to enroll patients



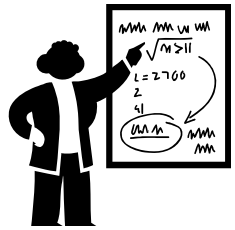
Assessment, plan of care, self management, medication adherence, symptom management (PHQ-9) and referrals to community resources

Home visits for highest risk patients and their caregivers

Community resources, caregiver support, collaboration with physicians and other providers on medication adherence and other issues, educational outreach and web tools

Monitor enrollment, interventions, engagement, utilization and other metrics monthly, quarterly and or annually

Evaluate satisfaction, clinical quality, quality of life, PHQ-9, utilization and cost and determine program ROI



Abbreviations:
HCC, Hierarchical Condition Category score
IVR, Interactive Voice Response
PHQ-9, Patient Health Questionnaire
ROI, Return on Investment

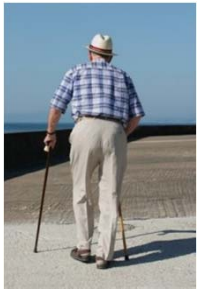
High Risk Case Management

- Today's presentation is on a High Risk Case Management (HRCM) program.

Element	Key Service Components in the High Level Intervention of the Case Management Program
Nurse Management	Face to face community assessment every six months. Outreach either by phone or home visit occurs every 3-4 weeks or as requested by member.
	A follow up visit is conducted 72-hours following discharge from inpatient stay, followed by weekly outreach by telephone or home visits for 4-6 weeks.
	Case managers screen all members for depression using the PHQ-9.
	Written guidelines are in place for end-of-life care planning.
Medical Director Review	Case management team conducts monthly meetings with Medical Director to discuss cases and care strategies.
Collaborative Care	Case managers collaborate with treatment providers to develop/share individualized care plans with short and long term goals, collect lab values, share PHQ score when applicable, relapse prevention plan, and update on advanced directives.
Care Plan	Comprehensive assessments drive individualized care plan and goals. Member is graduated when all gaps in care are closed.
Case Integration	Case managers provide real-time referrals to internal behavioral health specialists, Social Workers and community resources.

Program Evaluation: Study Population

- The program is offered to the sickest of patients (i.e. those with multiple comorbidities and/or life-threatening illnesses).
  - Average age of those who participated in the program is 78 years of age.
  - Mostly female (60%).
  - Many have one or more hospitalizations per year (25%).
  - Average health care expenditures average $7,000 per month.
- Some participants were co-managed by a depression management program.
- The program is open to qualified high risk participants who are relatively diverse in age, gender and comorbidities, but less diverse socioeconomically.



Program Evaluation: Outcomes

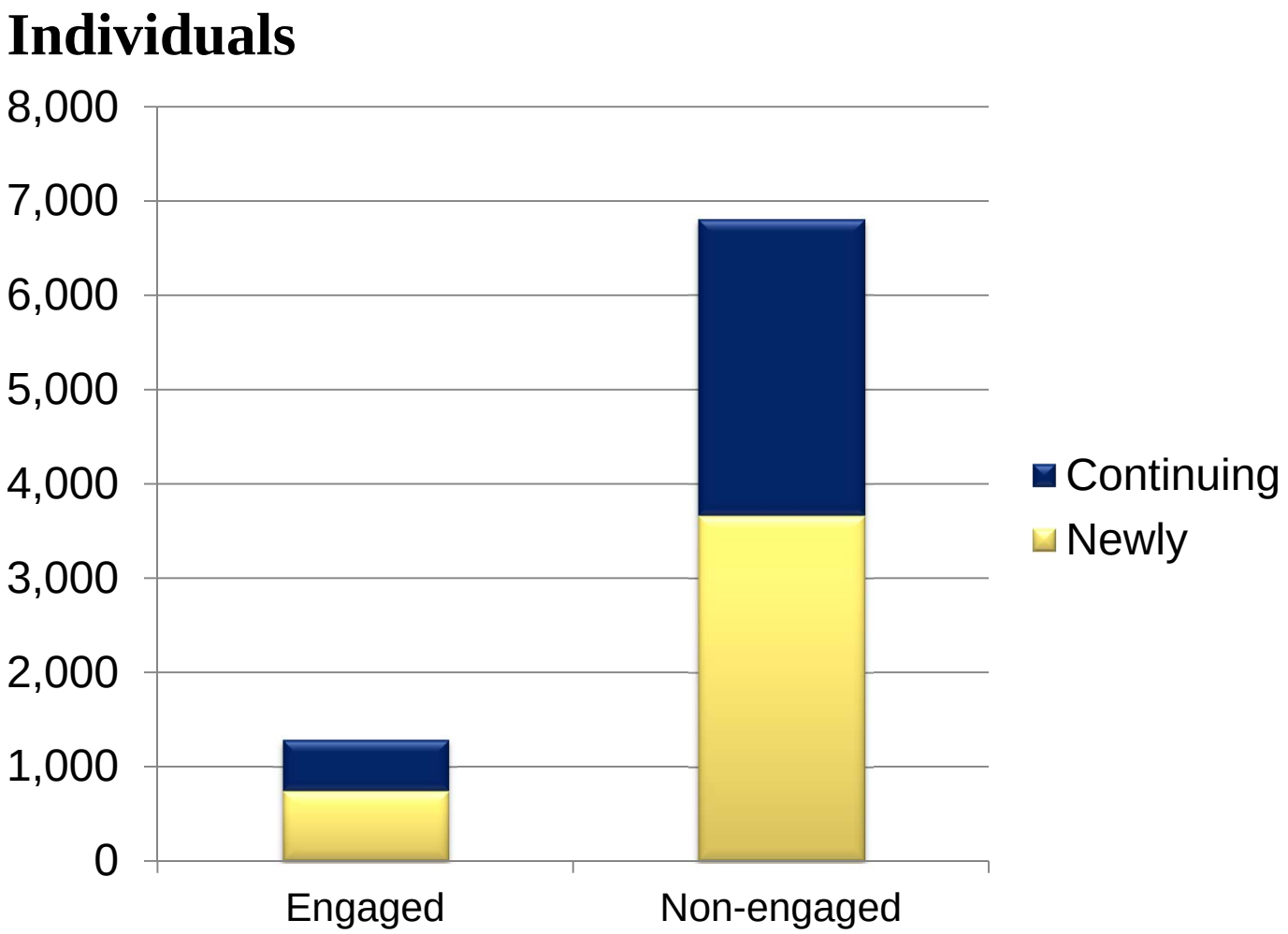
- This evaluation covers the second year of the program (i.e. 2010).
- This evaluation compares actively engaged participants with similar eligible, non-engaged comparison individuals.

- Actively engaged participants include those who are:
  - Newly engaged (in their first year)
  - Continuing engaged (in their second year)
- The evaluation focuses on estimating the following sets of outcomes:
  - Health care savings attributable to the program
  - Quality-related metrics
    - *Evidence Based Medicine (EBM): office visits, pharmacotherapy, lab tests*
    - *Hospital readmissions (within 30 days) and office visits (within 15 days post discharge)*

Program Evaluation

- Descriptive tables were produced to compare the case mix differences between engaged and non-engaged participants.
  - We controlled for patient demographics, socioeconomics, health status and supply side measures.
- Multivariate analysis were used to measure the change in outcomes of interest using a standard Difference-in-Difference design.
  - We measured the change in outcomes of interest (health care expenditures and quality of care) before and after starting in the program for those who engaged in the program, relative to those who did not.
    - *Health care expenditures: Included the amounts paid by Medicare, the Supplement Insurance plan and the participant.*
    - *Quality of care metrics: Consisted of readmission and Evidence Based Medicine (EBM) metrics.*
      - The readmission metrics included readmission rates within 30 days of a previous discharge and office visits occurring soon after hospital discharge.
      - The EBM metrics included recommended laboratory procedures, office visits, and appropriate pharmacotherapy.

Demographic Characteristics: Study Cohorts



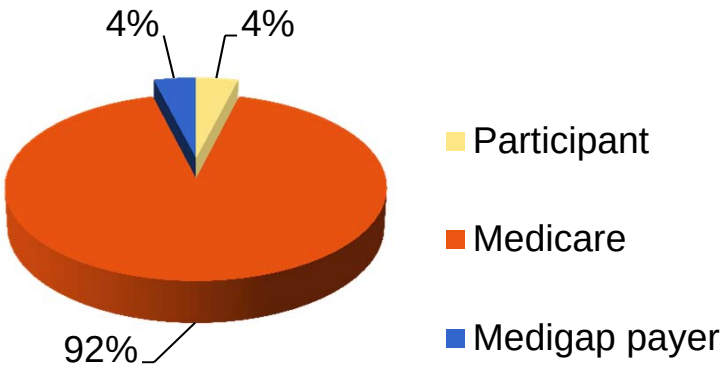
Program Savings

- The second year evaluation was associated with savings, however, they did not reach statistical significance.
  - New Engaged participants had savings estimates ranging from $866 PPPM (including outliers) to $261 PPPM (excluding outliers).
  - Continuing Engaged participants had savings estimates ranging from $281 PPPM (including outliers) to $-103 PPPM (excluding outliers).
  - The savings estimates were sensitive to the inclusion or exclusion of a few participants with very high or very low expenditures.

Savings

The overall savings for the second year of the program was:

- $9.2 million including outliers
- $1.5 million excluding outliers

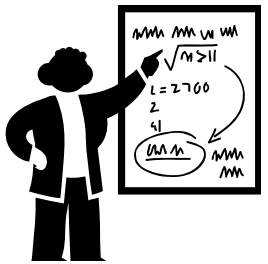


Quality of Care Metrics

- The program was associated with increased quality of care (readmissions and EBM metrics), however, most models did not reach significance.
- Of the eight readmission models tested, five (63%) favored engagement.
  - This means engaged participants were either less likely to be readmitted or more likely to have an office visit soon after discharge.
  - Of those five, four models pertained to continuing participants, implying that duration in the program was associated with improved quality of care.
- Of the 14 EBM metrics, eleven (79%) favored engagement.
  - This means engaged participants were more likely to maintain or increase compliance from the pre- to post-periods.
  - One of the 14 models (annual office visit for diabetes) was statistically significant, and favored engagement among new participants.

Conclusions

- This may be the first discussion of results from an evaluation of a HRCM program for Medicare participants with Medigap coverage.
- In just its second year of existence, the program increased quality of care.
  - Increasing quality of care is a necessary step in generating program savings, which generally take several years to materialize.
- Although the overall program did not generate statistically significant savings, it did produced savings none the less.
  - Health care inflation continues to grow at an annual rate of 8%-10%.
    - *Any program that maintains, let alone reduces expenditures, is favorable.*
  - As this fee for service program matures and is refined, these savings may become significant.



Program Enhancements

- Pilot programs are more likely to continue and to expand if successful.
  - Success is often measured by program engagement, satisfaction, quality of care and ability to bend the cost curve.
- Targeting individuals with characteristics associated with increased likelihood of success is a relatively new idea in disease and case management programs.
  - To achieve this, future plans include utilizing ***Propensity to Succeed*** modeling to identify demographic, socioeconomic and health status characteristics associated with engagement, quality of care and ability to bend the cost curve.
  - The ***Propensity to Succeed*** modeling will be used to identify and outreach to those most likely to succeed in the program.

References

1. Kaiser_Family_Foundation. (2011). "Kaiser Family Foundation. Medicare At A Glance." Retrieved April 12, 2012, from http://www.kff.org/medicare/upload/2052-15.pdf.

2. Medpac. (2011). "Medpac Report." Report to the Congress, Medicare and the Health Care Delivery System June. Retrieved June 14, 2011, from http://www.medpac.gov/documents/Jun11_EntireReport.pdf.