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Innovative Oncology Care Models Improve End-of-Life Quality, Reduce Utilization And Spending

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Disclaimer

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Background

- There were approximately 901,000 Medicare beneficiaries with cancer in the last year of life in 2010 and this will rise to 1.2 million in 2020.[1]
- Total costs of cancer care in the last year of life amounted to $37 billion in 2010 and will approach $50 billion in 2020.[2]
- Much end-of-life spending results from high rates of hospitalizations, emergency department (ED) visits, and stays in the intensive care unit in patients' last months.[3,4]
- A substantial proportion of hospitalizations and ED visits at the end of life are avoidable and thus represent an area for improved quality of care and patient satisfaction and for reduced utilization.[5-8]
- Patients prefer less intensive treatments at the end-of-life and more palliative care and spiritual resources.[9,10]

The Health Care Innovation Awards

The Centers for Medicare and Medicaid Innovation (CMMI) launched the Health Care Innovation Awards (HCIA) during July 2012-June 2015

- 107 awardees dedicated to improving health and healthcare and reducing costs among Medicare, Medicaid, and CHIP enrollees
- 3 awardees in the disease-specific profile that focused on improving care for patients with cancer
    - Community Oncology Medical Home (COME HOME)
    - Patient Care Connect Program (PCCP)
    - CARE Track

Community Oncology Medical Home (COME HOME)

Innovative Oncology Business Solutions (IOBS) created oncology medical homes at 7 sites across the US

- Triage pathways to help first responders and nurses identify and manage patient symptoms
- Enhanced access to care through a round-the-clock triage phone line, same-day appointments, extended night and weekend hours, and on-call providers
- Diagnosis and treatment pathways based on nationally recognized, evidence-based standards

The Patient Care Connect Program (PCCP)

University of Alabama at Birmingham (UAB)'s patient navigation intervention implemented at 12 sites in 5 southern states

- Non-clinical navigators to educate and empower cancer patients and survivors, connect patients and caregivers with resources, and improve adherence to care plans
- Respecting Choices™: program focused on advance care planning and goal setting with the patient and family at the end of life

CARE Track

Rector and Visitors of the University of Virginia (UVA) promoted palliative care for patients with advanced stage cancer

- Nurse coordinator conducted a patient-reported outcomes survey to identify patients in most need of pain and symptom management. These patients were then referred for more intensive palliative care services.

Research Methods

- **Study Design**: Retrospective cohort study of participants and comparators in the year before death
- **Data Source**: Fee-for-service Medicare claims files in the CMS Chronic Conditions Data Warehouse linked to program registries
- **Measures**:
  - Medicare spending in last 30, 90, and 180 days of life
  - Hospitalizations (visits per 1,000 patients in last 30 days)
  - ED visits (visits per 1,000 patients in last 30 days)
  - Use of chemotherapy in the last 14 days of life (yes/no) per 1,000 patients
  - Enrollment in hospice (yes/no) in the last 14 days of life per 1,000 patients

Research Methods: Study Population

- **Participants**: Patients in each of the three models who were enrolled in the period June 2012–December 2015 and subsequently died before December 31, 2015 and who had the most prevalent cancers
  - COME HOME: n=1,244 with breast, lung, colorectal, lymphoma, pancreatic, or melanoma
  - PCCP: n=2,198 with breast, lung, colorectal, lymphoma, male genitourinary, female genitourinary, head and neck
  - CARE Track: n=60 with any cancer
- **Comparison Group**: Propensity-score matched Medicare FFS beneficiaries served by practices similar to the intervention practices
  - COME HOME: outpatient oncology practices in the same geographic region as each intervention site
  - PCCP: outpatient comprehensive cancer centers in the same geographic region
  - CARE Track: cancer centers in the same state with similar volume of oncology care

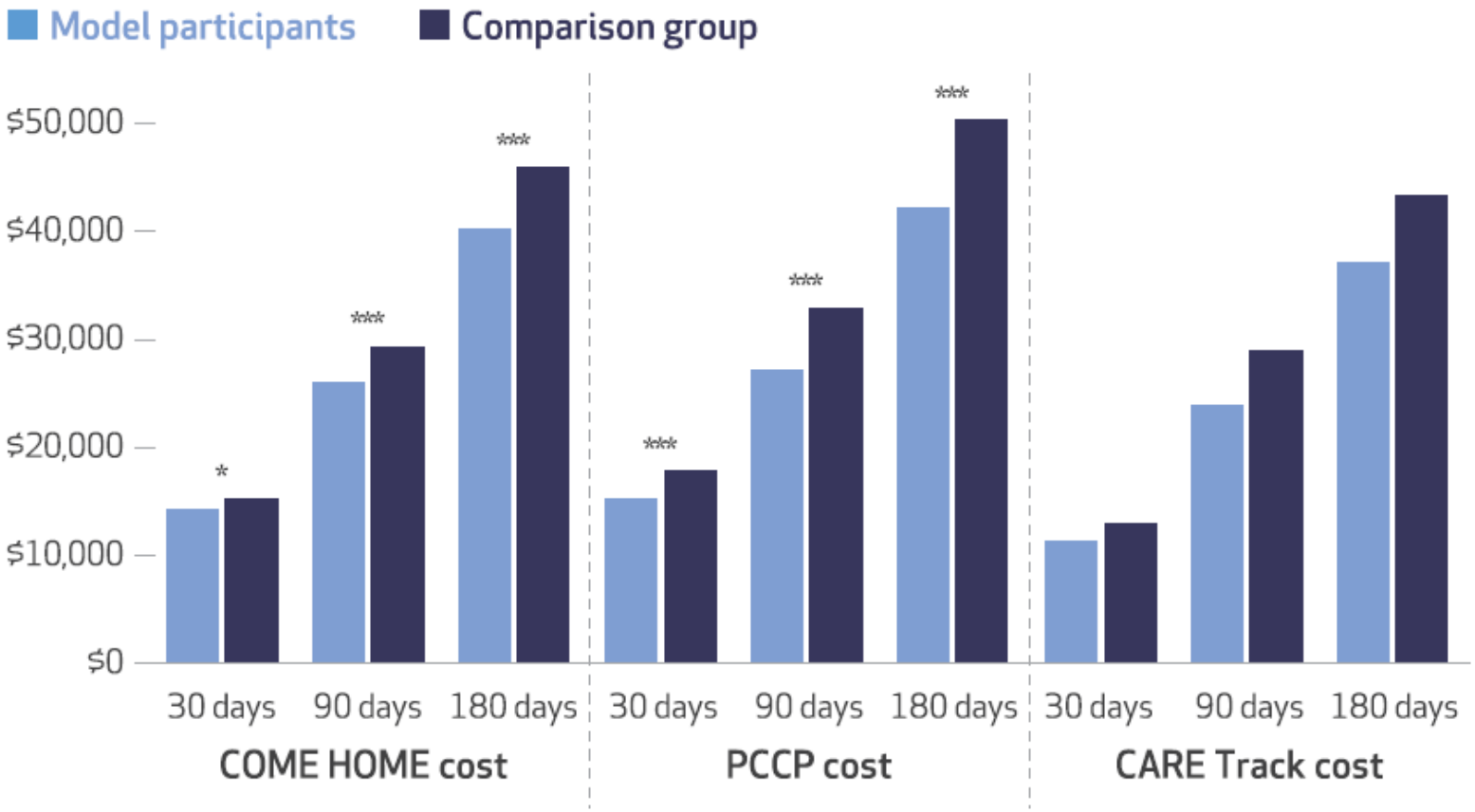
Limitations

- Three programs are not directly comparable
- Some variables not available in claims data
- Analysis limited to Medicare FFS beneficiaries – no Medicare Advantage or other insurers
- Analysis limited to most prevalent cancers
- Analysis limited to patients with breast, lung, colorectal, male or female genitourinary, head or neck cancers and lymphoma
- CARE Track had small sample size (n=60)
- Chemotherapy use based on only Medicare Part B claims (didn't capture oral chemotherapy in Part D)
- Motivated awardees

Results: Medicare spending

EXHIBIT 2

Total costs in the last 30, 90, and 180 days of life per person for participants in three end-of-life cancer models and members of comparison groups

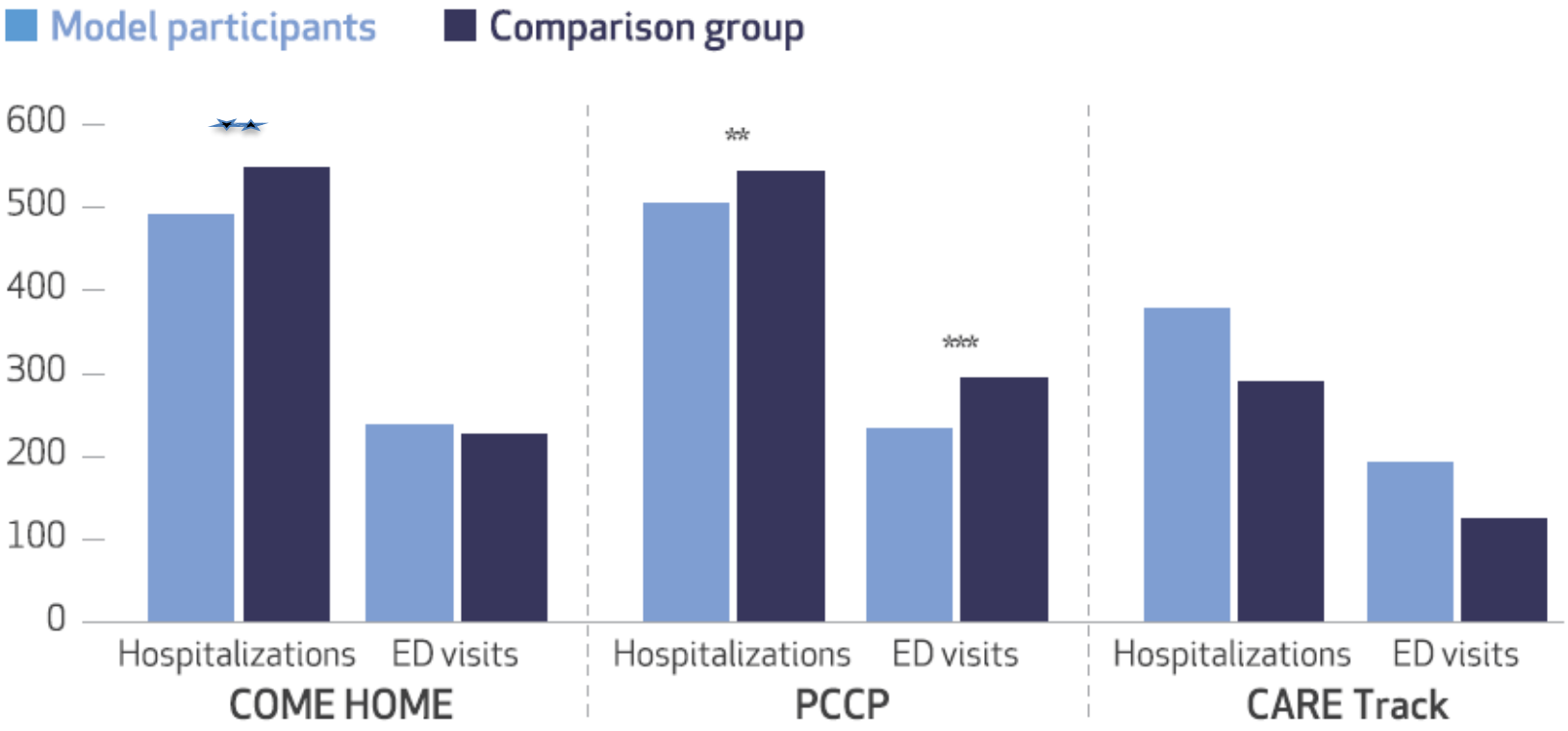


*p<0.01 **p<0.05 ***p<.01

Results: Hospitalizations and ED visits

EXHIBIT 3

Hospitalizations and emergency department (ED) visits (per 1,000 people) in the last 30 days of life for participants in three end-of-life cancer models and members of comparison groups

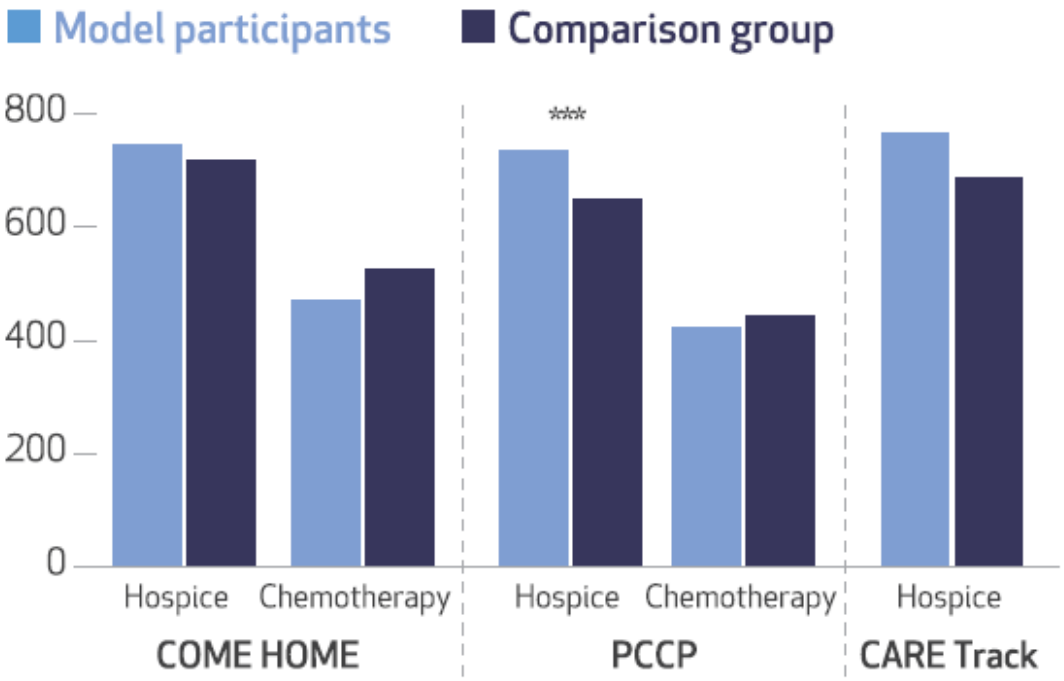


*p<0.01 **p<0.05 ***p<.01

Results: Hospice Use and Chemotherapy

EXHIBIT 4

Numbers of participants in three end-of-life cancer models and members of comparison groups (per 1,000 people) receiving hospice care and chemotherapy in the last two weeks of life



*p<0.01 **p<0.05 ***p<.01

Discussion

- Access to providers and navigators after hours in COME HOME and PCCP likely helped cancer patients address symptoms at home or in less intensive settings
- Results are particularly relevant to CMS' Oncology Care Model (OCM), which incorporates elements of the oncology medical home and patient navigation
  - OCM provides a potential payment mechanism to support enhanced services, but traditionally Medicare does not pay for non-clinical workers like those employed by PCCP

References

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