Utility of Linking Medicaid and Medicare Claims Data to Death Certificate Only Records
Theresa M. Hinman, Francis P. Boscoe, and Maria J. Schymura, New York State Cancer Registry

INTRODUCTION

Death Certificate Only (DCO) cases represent approximately 2.7% of all annual cancer cases for New York State before followback is conducted. Subsequent routine follow-back procedures result in approximately 0.8% of cases still lacking diagnosis and treatment information. Since the New York State Cancer Registry data were already linked to Medicaid and Medicare claims data for another study, we had the unique opportunity to assess whether these claims data could provide additional information to support and enhance the quality and completeness of the Cancer Registry in other ways. This study evaluates the efficacy of matching Medicare and Medicaid claims data to DCO cases.

PURPOSE

To determine whether linking New York State DCO records with Medicaid and Medicare claims to DCO cases.

METHODS

DCO cases for 2002-2006 (n=4,781) were matched to Medicaid and Medicare claims data that had service dates from 2001 through 2006. Medicaid data were obtained from in-house sources. Medicaid data were obtained through the Research Data Assistance Center, University of Minnesota. Medicare claims were matched on first and last name, social security number, date of birth, and gender. Medicare claims were matched on social security number only with gender and birthdate used to resolve those rare instances where the social security number was not unique.

Data were restricted to only those records identified in either Medicaid or Medicare. Only claims with a cancer diagnosis (ICD-9 codes 140-208, 230-239) were analyzed to filter out any noncancer-related claims and ensure with high confidence the analysis of only cancer-related information.

Medicare procedure codes were identified using the Current Procedural Terminology, Fourth Edition (CPT-4). Medicare data were obtained through the Research Data Assistance Center, University of Minnesota. Medicaid claims were matched on social security number only with gender and birthdate used to resolve those rare instances where the social security number was not unique.

RESULTS

Medicaid

163,488 total claims matched to 665 DCO cases.

The 6,749 claims with a cancer diagnosis are from 357 patients.

The 2,727 claims with a cancer diagnosis are from 564 patients.

Medicare

10,112 total claims matched to 1,043 DCO cases.

The 2,727 claims with a cancer diagnosis are from 564 patients.

CONCLUSIONS

Linking to Medicaid and Medicare has the potential to provide additional information regarding diagnosis and treatment of DCO cases. Facility name and address are available for follow-up. The next step would be to verify claim information through contact with listed providers. If a high level of concordance is observed between information obtained from providers and claims data, then in the future, claims data might be sufficient for follow-up to DCOs. If information was obtained on the total of 350 cases (20 cases found in both Medicaid and Medicare), then the DCO rate would be reduced from 0.8% to 0.7%.

Limitations to this analysis include timely access to both Medicaid and Medicare claims as well as the cost to obtain the data from the Centers for Medicare and Medicaid Services (CMS).

Additional information regarding treatment is also potentially available from matching to Medicare and Medicaid claims. Dates of service for surgery, chemotherapy, hormone therapy, and radiation can be extracted. Medicaid and Medicare claims data can also assist to verify and validate other types of case finding and quality of care measures.

As more individual providers report to the Cancer Registry, capacity to match to DCOs should improve. Obtaining information from out-of-state facilities should also reduce the DCO rate.

For additional information, contact: Theresa Hinman
NYS Cancer Registry
tmh01@health.state.ny.us

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tmh01@health.state.ny.us