Examination of Inpatient, Skilled Nursing Facility and Home Health Claims at Different Levels of Claims Maturity

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INTRODUCTION

Medicare is interested in monitoring cost and utilization of enrollees. Timely feedback allows evaluators to understand benefits and limitations of programs to make modifications. Administrative claims data, which is useful for monitoring hospitalization and physician claims, generally take many months to be considered 'final' – and be mature enough that the data produces stable estimates of service use and payments.

General Dynamics IT obtains Medicare claims data files from CMS each week on a nearly real-time basis as claims are processed by CMS and then loaded to the CMS Chronic Condition Warehouse (CCW). There is a lag between the date of service and when a claim is processed, however. The provider must submit the claims, the Medicare Administrative Contractor (MAC) processes the claims for payment, and the claims are uploaded into the CMS National Claims History File (NCH) before they are available to the CCW. Also, it is common for claims to undergo more than one round of processing to make adjustments, edits and deletions before the claim becomes final. Because of these lags, use of nearly real-time data to make inferences about service cost and utilization would not be accurate.

The objectives are to describe the completeness of Medicare Part A Institutional claims and Part B Institutional claims (which are also known as the Hospital Outpatient claims) at different levels of claims maturity (i.e. after different amounts of time have elapsed from the service date to the claim processing date). We illustrate the length of maturity needed to accurately evaluate cost and utilization metrics derived from different types of administrative claims.

METHODS

Study Design: For all Part A claims, which include inpatient, skilled nursing facility (SNF), hospice, home health, and Part B Institutional (HOP) services rendered in 2011, we examined the number of claims processed at one month intervals for 12 months of run out. We compared the monthly interval data to the final 2011 data by each claim type.

Some key variables often used for data analysis, such as reason for service (diagnosis and the DRG [diagnosis related group; for inpatient claims] and payments, were evaluated to determine changes that occurred through the claim reconciliation process.

Population: We used 100% Medicare Part A claims (inpatient, SNF, hospice, HH, and HOP) for services in 2011.

Table 1: *Cumulative Percent of Claims Identified as Final Action in 2011 by Months after Service.*

		Months After Service												
Type of Claim		0	1	2	3	4	5	6	7	8	9	10	11	12 CCW Final (Mature)	13+
Inpatient	% Claims	36.5	83.3	90.0	93.0	95.0	96.0	96.8	97.4	97.9	98.4	98.7	99.1	**99.4**	100
SNF	% Claims	1.5	68.1	85.3	91.2	93.9	95.4	96.5	97.2	97.9	98.4	98.7	99.1	**99.3**	100
Hospice	% Claims	7.0	77.2	88.2	92.4	94.6	95.9	96.9	97.5	98.1	98.5	99.0	99.3	**99.7**	100
Home Health	% Claims	14.2	57.6	75.1	82.5	86.4	88.6	90.1	91.2	92.0	92.8	93.7	94.9	**96.4**	100
PTB Instit.	% Claims	31.5	83.2	89.9	92.8	95.0	96.5	97.5	98.1	98.5	98.9	99.1	99.4	**99.6**	100

RESULTS

Medicare claims are more complete as the number of months from the service date increases. The percent of claims considered mature at any particular time interval differs by service type on a Part A claim (Table 1). Over 99% of inpatient, SNF, hospice, and HOP claims are completely reconciled and in final form (i.e., final action) at 12 months post service. Home health claims are slightly slower to mature, with 96.4% of claims considered final after 12 months.

Figure 1: *Number of Initial Claims Received and Adjusted by Months of Maturity for Inpatient Services Performed in 2011.*

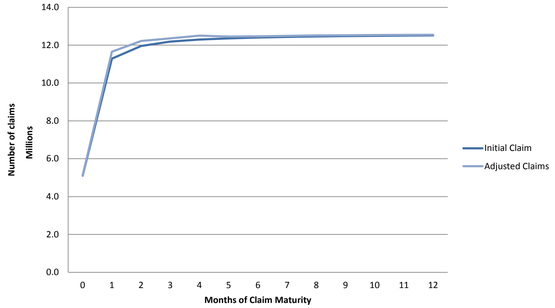
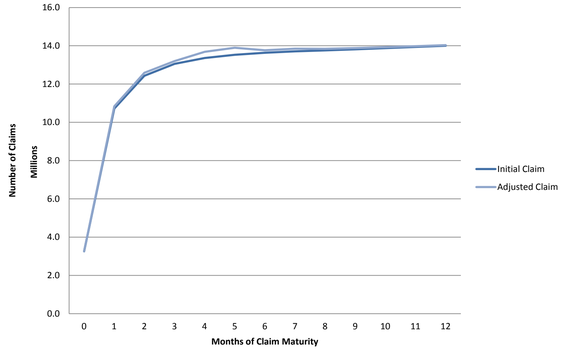


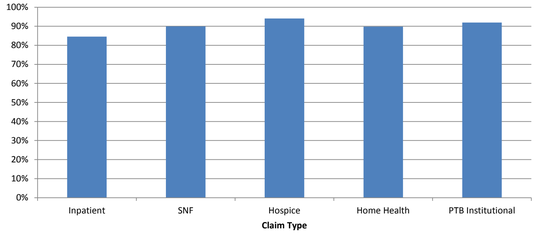
Figure 2: *Number of Initial Claims Received and Adjusted by Months of Maturity for Home Health Services Performed in 2011*



In the first few months after the service date, many adjustments to the claims occur (Figures 1 and 2). For Inpatient claims, after around six months of maturity, the edits and adjustments to the claims level off.

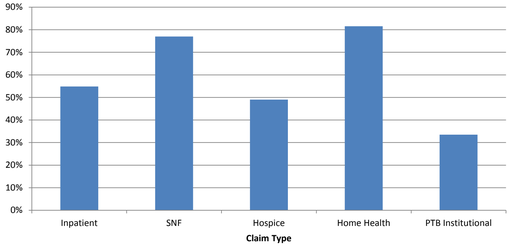
For home health services, it takes several months before the majority of claims are available, and adjustments are common for at least the first eight months after the service date (Figure 2). Home health providers may submit requests for anticipated payment (RAP), which CMS uses to make interim payments. These RAP claims are never the final version of the claim; there is always an updated/reconciled version which may explain the adjustments seen later in maturity than other services.

Figure 3: *Percent of Part A Claims Where No Adjustments are Found, by Setting*



For 84.6% of inpatient claims, the initial version of the claim is the final, adjudicated version – there are no adjustments or updates (Figure 3). For Hospice and HOP claims, over 90% of the initial claims are final.

Figure 4: *Percent of Adjusted Part A Claims with No Change in Diagnosis, DRG or Payment, by Setting*



The presence of an adjusted claim does not necessarily mean that any of the key fields researchers might use have changed. For example, 55% of the total adjusted claims in the inpatient setting had no change in diagnosis, DRG, or the payments (Figure 4). The proportion of adjustments that did not change any of these fields was even higher for SNF (77%) and for home health (81.5%).

Table 2: *Percent of Adjusted Claims Where Primary Diagnosis Code, DRG or Payment was Changed by Setting.*

	Number of Adjusted Claims*	Change in Primary Diagnosis	Change in DRG	Change in Payment
Inpatient	1,444,958	2.7%	14.6%	42.2%
SNF	617,088	0.5%	n/a	22.7%
Hospice	266,333	0.7%	n/a	50.5%
Home Health	1,659,848	1.3%	n/a	17.8%
PTB Institutional	12,377,033	13.8%	n/a	65.4%

When adjustments are made to claims, it is rarely to change the primary diagnosis (Table 2). Changes to the Medicare payment amount are common – and appear for 42% of adjusted claims for the inpatient setting, 50% of adjusted claims for home health, and 65% for the HOP setting.

CONCLUSIONS

Over 99% of inpatient, hospice, SNF and HOP claims are identified within 12 months of a service. Among the inpatient claims, 95% are identified within 2 months after the service is complete compared to home health claims, where 95% of claims are identified within 4 months of the service. Adjustments to the claims are not a common occurrence however they typically occur quickly after the initial claim is submitted. Among inpatient claims, nearly 85% of the initial claims were not adjusted. Cost and primary diagnosis codes, which are incorporated to evaluate costs and utilization are modified at differing rates in the Part A claim types. The largest percent of adjusted claims affecting payment were seen in HOP and hospice claims, where over 50% of the adjusted claims identified a change in payment.

IMPLICATIONS

CCW typically delivers final action claims to researchers once claims have reached 12 months post-service maturity. Claims that are this mature are very stable and undergo very few modifications, and therefore are ideal for a variety of research, policy and programmatic purposes.

Some investigators may have a need for relatively more timely data, and are willing to make the tradeoff for somewhat less stable data and therefore more error. Depending on how mature the data are for the setting of interest, different types of error are more common – and in particular the payment amounts take longer to stabilize than the information regarding the diagnosis or DRG.

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