Stop-Loss Insurance or Reinsurance for Multiyear Contracts. In previous Research Briefs, we have discussed challenges faced by payers when contemplating using multiyear performance-based contracts. In this brief, we extend the discussion to include additional difficulties that may arise when the primary payer shares risk with a secondary payer.

A woman is hit by a car and has serious injuries. She has multiple surgeries and physical therapy over the next three years; the driver’s automobile insurance pays for all care.

Another woman falls from a roof while cleaning gutters and has similar injuries. She also requires multiple surgeries and physical therapy over three years, but her health insurer at the time of the accident only pays for treatments during the year of the fall.

Insurance comes in different types (Figure 1). Auto liability insurance covers all costs resulting from incidents that occur during the covered period (occurrence coverage), while health insurance policies only cover costs for claims incurred during the covered period (claims-made coverage), generally leaving future claims to future policies. One could design health insurance that is occurrence-based, but the premiums would be very high for activities like births that carry risks of expensive lifelong disabilities.

The difference between occurrence-based and claims-based insurance is important when considering contracts for rare disease treatments that may include payments across multiple years, such as agreements with

KEY TAKEAWAYS
Standard (single-year) secondary insurance may be inadequate when underlying primary coverage includes potential payments across multiple years, such as performance-based annuities

Secondary insurance covering multiyear agreements can be structured as a modification of existing secondary coverage to include specified costs beyond the plan year or as a new contract that carves out multiple rare diseases

New forms of secondary insurance will only be developed where economically sensible for secondary payers, which requires sufficient volume of business and no adverse selection due to predictable costs

outcome-based payments to align uncertain benefits with treatment cost. Who is responsible for payments beyond the first year? It’s a bit murky: Under a traditional insurance plan, claims that occur in subsequent years would be the responsibility of the payer at the time, but if there is no new treatment downstream, it could be argued that the subsequent payments derive from the initial claim and are a choice of the original contracting party and thus potentially their

---

*This brief discusses transfer of risk from a primary payer (self-insured employer or insurance plan) to a secondary payer. This is insurance for the employer but reinsurance for the insurance plan. For simplicity, we will use the terms secondary insurance or secondary coverage to include both.*
responsible. Plans vary with regard to what will be covered beyond the plan year, which could be further complicated if incident-year and downstream plans have different treatment networks or treatment coverage.

The situation becomes even more complex when considering secondary insurance (stop-loss insurance or reinsurance policies) that may reimburse some of the costs for the treatment. The payer at the time of treatment might have a contract with a secondary payer intended to cover unexpected costs over a certain amount per patient in the covered period (excess reinsurance or specific stop-loss), but that contract would not typically cover costs beyond the covered period, even though an alternative for the primary payer might have been to pay for the treatment completely during the initial period, which would clearly be eligible for reimbursement. Spreading payments over several years might require hitting multiple annual deductibles and the patient could potentially be removed from coverage (“lasered”) in subsequent years (Table 1). This might encourage the primary payer to pay for the full treatment upfront and receive greater reimbursement, but that would make it difficult to align payments with the uncertain benefits received by the patient.

Existing secondary insurance contracts sometimes have features that recognize that not all claims fit neatly into an annual contract, but these provisions were not designed to work with performance-based agreements. How can appropriate incentives be set for the primary payer in order to facilitate the use of multiyear contracts, which might be in the best interest of both the primary and secondary payers? Simply changing secondary coverage to last for multiple years would not suffice as long as contracts end at a specific time, because patients treated late in the period would still have costs outside of the contract window. Fundamentally, there are two approaches: Extension of annual secondary insurance contracts to include specified downstream costs beyond the contract year or carving out of relevant payments into separate coverage. In either case, it is critical to specify exactly what treatments and treatment costs are covered in the extended or new insurance coverage.

Extension of annual contracts would have the benefit of preserving the typical structure for secondary insurance, namely that costs above a certain total level for a patient are borne by the secondary payer. Costs that occur in subsequent years that relate to specified treatments that were provided during the covered year would be included with other costs from the year of treatment to determine cost-sharing between the primary and secondary payers. The primary payer should maintain a share of the costs in order to incent appropriate decisions regarding downstream costs.

Alternatively, a treatment could be carved out from standard contracts and placed into a specialty secondary insurance contract. This coverage would not depend on other unrelated costs in the treatment year and might not have a deductible, though it would again be best to have the primary payer maintain a share of costs to ensure appropriate incentives. Such a contract could be in addition to traditional coverage or in isolation. It could also be customized to the needs of the primary payer, both with regard to what treatments are covered and potentially as excess insurance coverage wherein only the patients over some expected number of patients are covered.

From the perspective of a secondary payer, it is only sensible to introduce a new form of coverage of this type if it is structured to manage risk relating to a sufficient amount of costs to make it worth developing, if the costs can be accurately projected, and if there are not factors that permit adverse selection wherein only the primary payers likely to have high costs choose to purchase the coverage (such as those with significant prevalent populations). Treatments for incident patients with the potential for expensive durable or curative therapies that generate significant costs over

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Year 1 Policy</th>
<th>Year 2 Policy</th>
<th>Year 3 Policy</th>
<th>Year 4 Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>X $</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

Claims-based

<table>
<thead>
<tr>
<th>Year 1 Policy</th>
<th>Year 2 Policy</th>
<th>Year 3 Policy</th>
<th>Year 4 Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>X $</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

Figure 1. Responsibility for claims ($) resulting from an incident (X in year 1) by insurance type.

Table 1. Comparison of a single upfront payment for a treatment ($1000K) vs spreading the payment over five years with traditional and multiyear secondary insurance.
time might be appropriate, but enough diseases with sufficient frequency/severity would need to be included to generate an appropriate market size for this new form of insurance coverage.

ABOUT FOCUS
The MIT NEWDIGS consortium FoCUS Project (Financing and Reimbursement of Cures in the US) seeks to collaboratively address the need for new, innovative financing and reimbursement models for durable therapies that ensure patient access and sustainability for all stakeholders. Our mission is to deliver an understanding of financial challenges created by durable therapies leading to system-wide, implementable precision financing models. This multi-stakeholder effort gathers developers, providers, regulators, patient advocacy groups, payers from all segments of the US healthcare system, and academics working in healthcare policy, financing, and reimbursement.

Please cite using
MIT NEWDIGS Research Brief 2018F207-v024-Reinsurance