AMERICAN ACADEMY of ACTUARIES

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MEMORANDUM

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Health Actuarial Task Force (HATF)
National Association of Insurance Commissioners

FROM: Bob Beal, MAAA, FSA, Co-chairperson
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Individual Disability Tables Work Group (IDTWG)

DATE: July 22, 2015

Purpose

The purpose of this memo is to provide responses from the American Academy of Actuaries'[1] Individual Disability Tables Work Group (IDTWG) to recent comments received on the "The Individual Disability Valuation Standard Report of the Joint American Academy of Actuaries/Society of Actuaries Individual Disability Tables Work Group" (the "Report"). This memo summarizes the comments and responses.

Background

The report was initially exposed to the industry from January to June 2014. The IDTWG made proposed changes to the Report. HATF exposed the revised report to the industry for 30 days, starting in April 2015. Three comment letters were provided.

In our responses below, IDI is an abbreviation for individual disability income. When we refer to the 2013 IDI Valuation table, we are referring to both the incidence and termination rates and the recommended modifiers. The 2013 IDI Valuation Base table refers to the 2013 IDI Valuation table without the recommended margins.

Tables Report Implications

Following our review of the submitted comment letters, we are proposing only two changes to the Report (not attached, but the Report can be updated quickly):

1. Reflect a new factor for Disability Buy Out (DBO) and Key Person business.
2. Reflect ICD-10 diagnosis code mapping.

[1] The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

Comments/Responses

Comment:
There was concern about the complexity of the tables. They identified several "unintended consequences" resulting from certain combinations of factors.

IDTWG response:
In constructing tables, the IDTWG had to balance the following considerations:

- Recognition of key experience differentiators that have emerged since the CIDA table was implemented – there are a lot more factors than CIDA, but we believe they are justified by experience;
- Smoothing of factors to minimize discontinuities in reserve patterns;
- Deriving tables that provide a good minimum standard for this business in aggregate.

We recognize that unintended consequences will occur. This is in large part due to balancing the need to recognize key experience differentiators while limiting the overall complexity of the tables. The additional complexity that would be needed to eliminate all such unintended consequences from the tables could make the tables too unwieldy to implement.

Overall, the tables provide a good minimum standard in the aggregate. We note that the examples provided in the ACLI letter (pertaining to pregnancy claims) would have no material impact on the aggregate level of reserves held by companies, due to the preponderance of individual disability policies that do not cover normal pregnancy and the short-term nature of pregnancy claims.

Comment:
There was concern that the Report did not address ICD-10 diagnosis codes.

IDTWG response:
We recognize this issue is important, and it is being addressed by both the IDTWG and the Group Long-Term Disability Work Group. We will include ICD-10 mapping in the next version of the Report, including within the draft actuarial guideline.

Comment:
There was concern that the tables are weighted too heavily with experience from the 1990s and that there has been a convergence of medical and non-medical experience in the 2000s.

IDTWG response:
As stated in the report, the IDTWG felt it was best to base the table on a cycle of morbidity experience – the best of times and the worst of times. The study period (1990-2007) encompasses a full cycle of morbidity experience. Table 1 shows the distribution of the overall exposure into three sub-study periods, 1990-94, 1995-99 and 2000 and after. In particular, Table 1 shows that the study was not over-weighted by experience from the 1990s: 22 percent of exposure in the 1990-94 time period, 24 percent in 1995-99, 54 percent in the 2000s.

Table 1

Distribution of Industry Exposure (by Amount)
By Study Period and IDTWG Occupation Class

Study Period	Occ Cl M	Occ Cl 1	Occ Cl 2	Occ Cl 3-4	Total
1990-94	24%	20%	24%	26%	22%
1995-99	28%	22%	25%	23%	24%
2000+	48%	58%	51%	51%	54%
Full Study Period	100%	100%	100%	100%	100%

Source: IDTWG 1990-2007 Database with Expected = 2013 IDI Valuation Base Table.

Chart 1 illustrates the relationship between Occ Class M and Occ Class 1 incidence rates for a 90-day elimination period. For most ages, the Occ Class M incidence rates range from 150 percent to 200 percent of Occ Class 1 incidence rates. Table 2 shows the A/E incidence rates by occupation class for these three study periods where the expected basis is the 2013 IDI Valuation Base table. The A/E for Occ Class M during the 1990-94 study period was 109 percent while the comparable A/E ratio for Occ Class 1, which includes most professional and white collar occupations, was 124 percent. The incidence during the 1990-94 period was relatively worse for the non-medical occupations comprising Occ Class 1 than for Occ Class M.

Chart 1

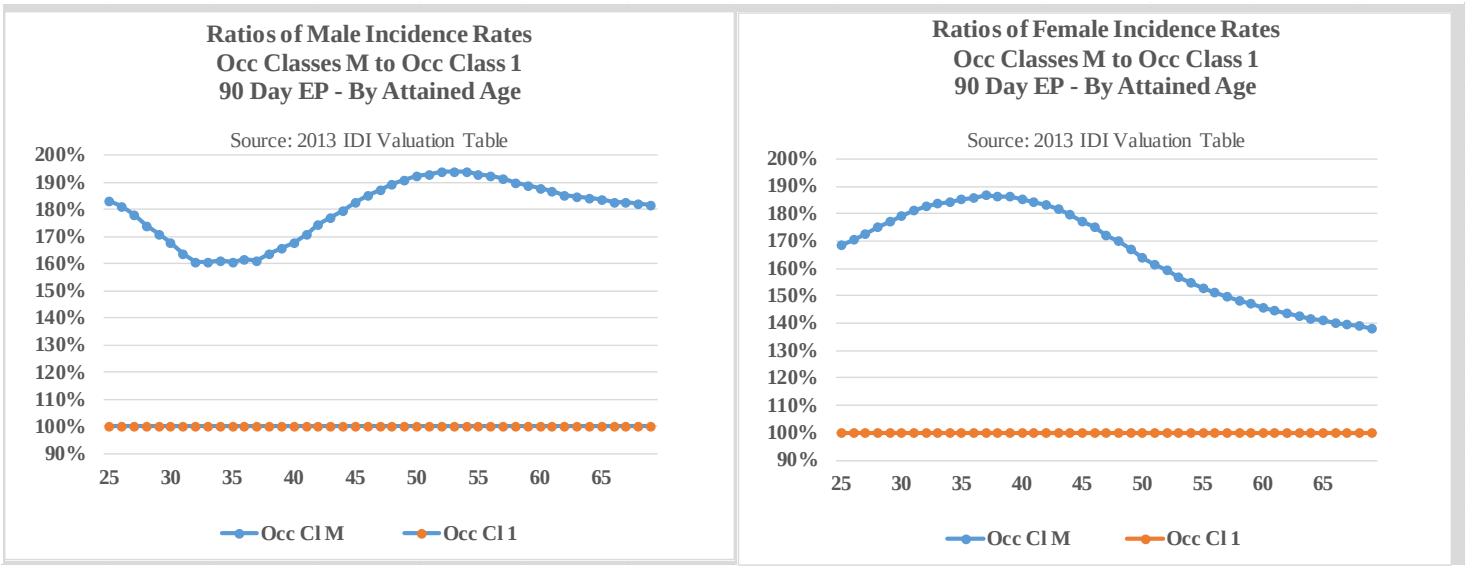


Table 2

Industry Experience by Occupation Class
A/E Claim Incidence Ratios
By Study Period and IDTWG Occupation Class
[Expected = 2013 IDI Valuation Base Table]

Study Period	Occ Cl M	Occ Cl 1	Occ Cl 2	Occ Cl 3-4	Total
1990-94	109%	124%	124%	113%	116%
1995-99	107%	101%	99%	97%	104%
2000+	92%	90%	89%	84%	90%
Full Study Period	100%	100%	101%	96%	100%

Source: IDTWG 1990-2007 Database with Expected = 2013 IDI Valuation Base Table.

Table 3 below shows A/E incidence ratios by issue year period and study period, which allows us to assess whether Occ Class M incidence for the industry has been converging toward Occ Class 1 incidence in recent years. The incidence rates for medical occupations are 150 percent to 200 percent of Occ Class 1 incidence in the valuation table. Therefore, the A/E for Occ Class M would need to be two-thirds to one-half of the A/E for Occ Class 1 to demonstrate convergence, but that is not observed in the data.

Table 3

Industry Experience by Occupation Class
A/E Claim Incidence Ratios by Issue Year and Study Period
Expected = 2013 IDI Experience Table

Issue Year	Occ Cl M	Occ Cl 1	Occ Cl 2	Occ Cl 3-4
Study Period: 1990-94				
Pre-1990	114%	127%	126%	114%
1990-94	91%	110%	114%	109%
Study Period: 1995-99				
Pre-1990	110%	104%	101%	95%
1990-94	109%	104%	103%	102%
1995-99	72%	75%	77%	102%
Study Period: 2000-06				
Pre-1990	93%	92%	88%	77%
1990-94	98%	97%	92%	91%
1995-99	86%	89%	88%	86%
2000+	73%	80%	88%	86%

Source: IDTWG IDI Database 1990-2007 with Expected = 2013 IDI Valuation Base Table.

The above analysis discusses differences between medical and non-medical incidence ratios. In general, claim termination rates for the Occ Class 1 are lower than those for all other occupation classes. Chart 2 below illustrates the relationship between Occ Class M claim termination rates and Occ Class 1 terminations for male and female age 45. The lower claim termination rates for Occ Class M increases the claim cost differential between Occ Class M and Occ Class 1 beyond the differential attributable solely to incidence rates.

Chart 2

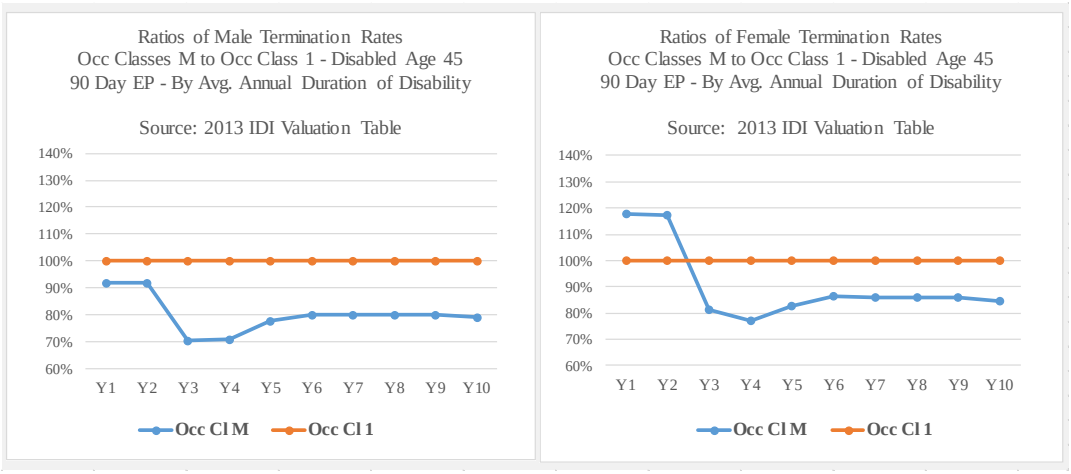


Table 4 shows the A/E claim termination ratios over the first 10 years of disablement from the IDTWG IDI Database 1990-2007, where the expected termination rates are equal to claim termination rates from the 2013 IDI Valuation Base. Claim termination rates generally have decreased during the more recent study periods. The relative reduction in the claim termination rates is greater for Occ Class M than for Occ Class 1, which causes a widening in the claim cost differential between the two occ classes.

Table 4

A/E Claim Termination Rates for Occ Class M & 1
Expected = 2013 IDI Valuation Base Table

Study Period	Occ Cl M	Occ Cl 1
1990-94	117%	110%
1995-99	95%	111%
2000-07	89%	98%

Source: IDTWG IDI Database 1990-2007

It is clear that the industry data does not show a significant convergence of medical and non-medical occupation experience in terms of claim incidence and claim terminations in recent years. While some may see a convergence of medical and non-medical experience within its own company experience, the industry data certainly does not support such a conclusion.

Comment:
There was concern that there is just one medical occupation class for all medical occupations. The commenter recommended there be more than one medical occupation class.

IDTWG response:
Table 5 below shows that the collected industry data did not support more than one medical occupation class mainly because 64.6 percent of the medical occupation exposure is in the "physicians and surgeons" occupation. Companies did not consistently code physicians into various specialties that would allow a more refined categorization of medical occupations. Most of the rest of this occupation class had incidence experience similar to physicians and surgeons. Outliers (e.g. chiropractors and podiatrists) were too small of a block to break out. The next time there are industry experience studies done, we will request more refined breakouts of physicians and surgeons to see if there is merit in multiple medical occupation classes.

Table 5

Distribution of Occupations by Exposure (by Amount) Within Occupation Class M

Medical Occupation	Distribution	Incidence A/E (A&S contracts)
Physicians & Surgeons	64.6%	108%
Podiatrists	0.9%	146%
Dentists	14.5%	105%
Chiropractors	1.5%	209%
Nurses	5.4%	107%
Pharmacists	2.4%	90%
Psychologists and Psychiatrists	3.4%	80%
Veterinarians	1.5%	95%
Other Medical Occupations	5.8%	89%
Total – Medical Occupations	**100.0%**	**107%**

Source: IDTWG IDI Database 1990-2007

It is worth noting that companies are not consistent in the number of medical occupation classes that they employ in their current individual disability income (IDI) rate books or how they map medical occupations to their various occupation classes. We reviewed the rate books of nine active IDI carriers. One has two medical occupation classes, three have three medical occupation classes, four use four medical occupation classes, and one has six medical occupation classes. Even if the industry data supported the creation of more than one medical occupation class, it is likely that our medical occupation class structure would not align with the occupation class structure of most companies.

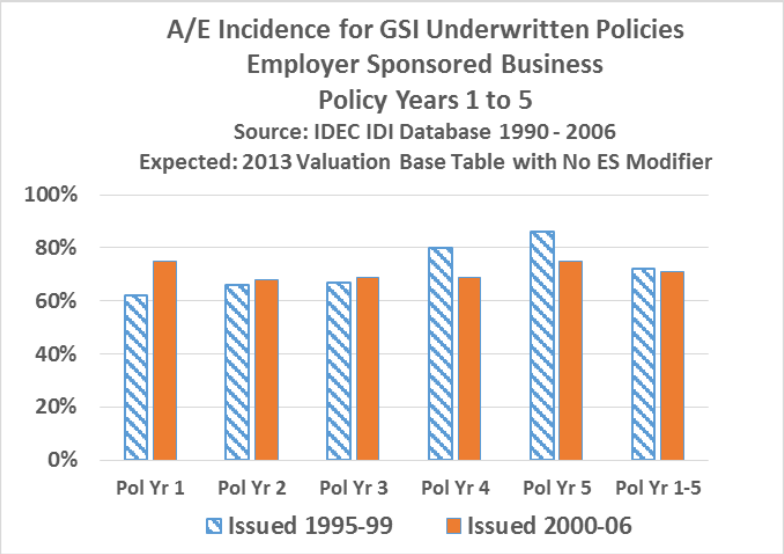
The new IDI valuation table is intended to replace the CIDA and CIDC tables as the basis for statutory minimum reserves. In doing so, we have separated out medical occupations into their own occupation class in order to capture a critical risk dynamic that emerged after CIDA was developed in the mid-1980s. The new table reflects the average experience of the industry, which makes it an appropriate basis for statutory minimum reserves.

Comment:
There was a recommendation that suggests that active life reserves for voluntary guaranteed standard issue (GSI) business should not receive the employer-sponsored incidence modifier of 79.9 percent.

IDTWG response:
The industry data was not split out between mandatory and voluntary GSI, so it was not possible to isolate the experience on voluntary GSI. In addition, many companies do not capture the type of underwriting in their valuation data, and adding an additional required field without complete data led us to treat all of employer-sponsored business as one segment in determining incidence modifiers.

In order to respond to the commenter's recommendation, we did additional analysis using the industry claim incidence study of policies in the employer sponsored market to measure the potential impact of not separating the business by underwriting type. In this market, there is a wide range of underwriting practices from normal (i.e., medical) underwriting to mandatory and voluntary GSI underwriting. Based on our knowledge of the IDI markets, cases with voluntary GSI, which have a greater potential for anti-selection, have been a more prominent portion of employer-sponsored business issued since 2000 versus business issued in the 1995-99 period. Chart 3 compares the A/E incidence in the first five policy years from business issued in the 1995-99 period to that in the 2000-06 period. The expected incidence is from the 2013 Valuation Base table before the application of the 79.9 percent employer-sponsored incidence modifier.

Chart 3



The A/E incidence ratios for the GSI business issued in 2000-06 show a jump in policy Year 1. This jump is most likely attributable to the anti-selection associated with the higher percentage of voluntary GSI business contained in the 2000-06 issued business. However, the A/E ratio drops down in policy Year 2 and remains level through policy Year 5, suggesting that the anti-selection from voluntary GSI cases generally may be isolated to the first policy year. When the first five policy years are combined, the A/E ratio for GSI business issued in years 2000-06 is very close to the A/E ratio for GSI business issued in 1995-99 (i.e., approximately 70 percent of expected), which is less than the 79.9 percent employer-sponsored incidence modifier.

The employer-sponsored incidence adjustment of 79.9 percent is intended to cover a wide range of underwriting practices within the employer-sponsored market and is appropriate to use in a table designed to calculate statutory minimum reserves. A company that determines its GSI experience is worse than the industry average and/or that they issue significantly more voluntary GSI business, may consider holding higher reserves than the statutory minimum reserve basis.

Comment:
There was concern with the lack of a disability buy-out contracts (DBO) modifier, with the recommendation that these contracts also should receive the same incidence modifier (66.9 percent) as overhead expense contracts.

IDTWG response:
We did not originally create separate factors for the DBO or key person contracts because they represented less than 300 of the nearly 300,000 claims in our study. However, we agree with the commenter's rationale and are recommending making that change in our tables (and the Report), not just for DBO, but key person as well, since these contract types, along with overhead expense policies, cover specific business related risks rather than personal risks and all had lower A/E incidence relative to personal risks.

Comment:
There was a suggestion that tables be updated more frequently than has been done in the past.

IDTWG response:
This is outside the scope of the Report, but we agree that the tables should be reviewed more frequently. The Society of Actuaries' Individual Disability Experience Committee has indicated it intends to update the data on a more frequent schedule.

Comment:
There was concern about the proposed Model Regulation changes in the Report. In particular, the commenter noted that actuarial tables are inappropriate for usage with claim reserves when an appointed actuary concludes that company experience is appropriate for experience-based claim reserve determination.

IDTWG response:
We are recommending a new valuation table and revisions to the model regulations (including a different methodology to reflect company experience) to be used solely for the purpose of deriving statutory minimum reserve bases for IDI policies. We believe the changes to the Health Insurance Model Reserve Regulation (HIMRR) are needed to provide a prescribed method for determining credibility and incorporating company experience in all claim durations for which there is credible experience. This is in contrast to the current regulation, which only applies to the first two claim years and does not identify how companies would determine credibility or how to incorporate company experience.

When an appointed actuary assesses the adequacy of a company's statutory reserves, he or she typically develops best-estimate actuarial assumptions for the purpose of calculating gross premium reserves and performs cash flow testing. The model regulations, whether current or recommended by the IDTWG, do not require that the appointed actuary use the new IDI valuation tables as the best-estimate assumptions.

The credibility formula methodology for reflecting company experience in the claim reserves in our recommendations is similar to that adopted by the NAIC for group long term disability (LTD) claim reserves. We believe it is appropriate for the NAIC to adopt a similar approach for IDI.

Comment:
There was a question as to why "worksite disability insurance" is treated differently than other insurance.

IDTWG response:
Worksite disability insurance generally is characterized by simplified underwriting, limited monthly benefits, low elimination periods, benefit periods that seldom exceed 24 months, and coverage for normal pregnancy.

No worksite disability insurance was included in the industry database used to develop the 2013 IDI Valuation table.