Damage Awards in Health Litigation: Trends and Predictions

A Brief Look at Mandated Discount Rates and Historical Inflation Rates

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When considering trends in damage awards in 2023, thoughts turn quickly to the current high-inflation environment. Do inflation rates have an impact on damage assessments? How do mandated net discount rates across the country compare to current real rates of return? And, what is a net discount rate anyways??

Since most Canadian jurisdictions prescribe the discount rate(s) to use in respect of an award for future pecuniary damages, the answer to the first question is "usually not". The purpose of this paper is to briefly answer the second question, and to compare the impact of mandated discount rates in different jurisdictions on the awards that might be granted in those jurisdictions. And yes, there's a section on terminology.

Introduction

The discount rate is a critical determinant of the lump-sum present value of future pecuniary damages. In the absence of a mandated[1] discount rate, the real rate of return would usually be the most important assumption that an actuary would make in the context of an economic loss valuation.

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[1] To actuaries, the word "prescribed" has two possible meanings. Discount rates are *prescribed* by legislation. Other actuarial assumptions may be *prescribed* by the Standards of Practice of the Canadian Institute of Actuaries. To avoid confusion, actuaries generally refer to assumptions being *mandated* when prescribed by legislation and *prescribed* when prescribed by their professional Standards of Practice. I have adopted that convention in this paper, and therefore refer to mandated discount rates.

This paper provides an overview of the discount rates in use for personal injury and wrongful death litigation across Canada and a brief discussion of inflation rate trends. Appendices B and C contain tables that illustrate the financial impact of different mandated discount rates on the value of pecuniary damages across Canada.

Some Useful Terminology

"Nominal" rates refer to the rates of return on investments (usually called "investment rate of interest" or "estimated investment rates" in the various Rules of Court). Actuaries sometimes refer to "nominal" rates as "gross" rates.

"Real" rates refer to the difference between the investment rate of interest and the rate of increase in earnings and/or price inflation. A real rate of interest measures the extent to which the nominal rate of interest exceeds inflation. For example, the discount rate of 2.5% that reflects "the difference between estimated investment and price inflation rates" in Section 70.06(1) of the Nova Scotia Rules of Court is a real rate of return. Actuaries sometimes refer to "real" rates as "net" rates.

If one assumes a real rate of return of 2.5% per year (the mandated rate in several Canadian jurisdictions) and inflation of 2% per year, then one is implicitly assuming a nominal rate of approximately 4.5% per year[2]. Assuming that same real rate of return and 6% annual inflation, the implicit nominal rate is approximately 8.5% per year.

Mandated Discount Rates across Canada

Eight provinces and two territories have legislation to mandate the discount rate that is be used for the assessment of future pecuniary damages in civil litigation. Only Alberta, Newfoundland & Labrador, and the Yukon do not have a mandated discount rate.

As Appendix A shows, most Canadian jurisdictions established their mandated discount rates 30 or more years ago. After many years of stability, three provinces (British Columbia, New Brunswick, and Saskatchewan) have changed their mandated discount rate rules since 2013. While not as significant a change as in those three provinces, Ontario tweaked its rule in 2014.

The current mandated rates range from a low of 0.5% per year for 15 years (and 2.5% per year thereafter) in Ontario and Saskatchewan to a high of 3.0% per year in Manitoba. For a given fact situation, these different discount rates result in significant variations in the lump-sum present value of pecuniary damages that are based solely on where the injury or death occurred – all other things being equal (see Appendices B and C).

[2] This is an approximation. The technically correct equivalent nominal rate is 4.55% (1.025 x 1.02 = 1.0455).

Evidence to Challenge a Mandated Rate – Ontario Examples

The preamble to Rule 53.09(1) of the *Ontario Rules of Civil Procedure* reads as follows:

> "The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is …"

Although the Ontario rule is generally treated as requiring the mandated rates to be used, there have been a few decisions in which the courts have accepted evidence in support of an adjusted or modified discount rate. These decisions offer some insights to some of the evidence that might be introduced in support of an alternate discount rate in other provinces with mandated discount rates.

a. Gordon v. Greig and Morrison v. Greig (Ontario Superior Court of Justice, 2007)

Cory Greig was the driver and Derek Gordon and Ryan Morrison were passengers in a truck that was involved in a motor vehicle accident. In the accident, Mr. Gordon sustained a severe brain injury and Mr. Morrison sustained a spinal injury that left him a paraplegic.

In the decision related to Mr. Gordon, the mandated discount rates were accepted in respect of the lump-sum present value of lost earnings and future care costs (paragraph 71). In the decision related to Mr. Morrison, a discount rate of 1% less than the mandated rate was accepted in respect of the lump-sum present value of future attendant care (paragraphs 170 to 177).

b. Ligate v. Abick (Ontario Court of Appeal, 1996)

Mr. Ligate suffered a severe brain injury in a motor vehicle accident. This resulted in cognitive deficits and a changed personality. The trial judge accepted the expert actuarial testimony that Mr. Ligate's future earnings, if not for the accident, were expected to have increased at a rate higher than the rate of general inflation. The mandated discount rate of the day was reduced to take this into account. The Court of Appeal upheld the trial judge's decision.

c. Walker v. Ritchie (Ontario Court of Appeal, 2005)

Stephanie Walker was catastrophically injured in a collision between the car she was driving and a tractor-trailer truck. The trial judge accepted expert testimony that the cost of professional services were expected to increase at rate higher than the rate of general inflation. The mandated discount rate was reduced to take this into account. The Court of Appeal upheld the trial judge's decision (paragraphs 88 to 91).

It should be noted that, in each of the above decisions, the accepted discount rate differed from the mandated discount rate because the annual losses or costs were expected to increase at a rate higher than the inflation rate implicit in the mandated discount rate.

Changes to Mandated Discount Rates Since 2013

a. British Columbia

The province of British Columbia initiated a review of its mandated rates early in 2013. British Columbia, like all Canadian jurisdictions except Ontario and Saskatchewan, has fixed discount rates. It differs from most other jurisdictions in that it has two different mandated discount rates:

- One for losses related to earnings (the plaintiff's lost earning capacity or lost dependency, and also the "services" component of future care costs)

- One for the "goods" component of future care costs

The review included two rounds of submissions from interested parties, as well as a hearing in front of the Chief Justice of British Columbia in April of 2014. The review resulted in a significant decrease in the level of both mandated discount rates. The changes were effective April 30, 2014.

b. New Brunswick

Prior to October 1, 2014, the mandated net discount rate in New Brunswick was 2.5% per year. As of October 1, 2014, this became the default rate rather than the required rate. Parties to litigation are now permitted to lead evidence to establish a discount rate that is different from the default rate.

The practical outcome of this change is that most economic loss experts now perform their pecuniary damage valuations using "evidence-based" net discount rates, sometimes (but not always) also illustrating losses based on the default rate. In an early 2018 decision (*Chiasson v. Thériault*), the New Brunswick Court of Queen's Bench accepted evidence in support of the Ontario net discount rates applicable to 2017 trial dates.

c. Ontario

The province of Ontario adopted a formula-based approach to its mandated discount rate in 1999. The discount rate used during the first 15 years after the valuation date is based on the current economic environment. An eventual reversion to "historical norms" is assumed, and so the mandated discount rate for the period after 15 years from the valuation date is fixed at 2.5% per year. The variable component of the discount rate is updated once per year, based on then-current real return yield rates.

The mandated discount rates apply for trial dates (valuation dates) in a given calendar year, and are determinable about 4 months in advance. For example, one will be able to calculate the mandated discount rates for 2024 at the end of August, 2023.

The first discount rate review since 1999 was completed in 2013. It resulted in changes which became effective for 2014 trial dates. In addition to relatively minor changes to the mandated formula, the revised rule introduced a minimum discount rate of 0% for the first 15 years after the valuation date. The discount rate for 2013 trials had been -0.5% for the first 15 years, a result that likely was not envisaged as possible when the initial formula was established in 1999!

Subsequent to a second review that commenced in 2018, the Rule 53.09/53.10 subcommittee of the Civil Rules Committee recommended (in an April 2020 draft report) that Ontario revert to a “single-tier” discount rate. The subcommittee recommended that the single-tier rate be formula-based, essentially assuming that then-current real return yield rates in a given trial year would continue indefinitely. In its final April 2021 report, the subcommittee confirmed its recommendation for a single-tier discount rate (at paragraph 25) and also proposed an alternate approach that would maintain the current two-tier rate structure but reduce the second rate from 2.5% to 1.0% (at paragraph 26). To date, no changes have been implemented or announced.

d. Saskatchewan

The province of Saskatchewan adopted the two-tiered “Ontario” discount rate formula with effect from September 1, 2017.

Inflation Rate Trends

In the 1980s when many provincial and territorial mandated net discount rates were first established, both nominal rates of return and inflation rates were much higher than those to which we had become accustomed until recently.

For most of the last 20 years, inflation rates have been relatively low and relatively stable. In 1991, Canada became the second country in the world (after New Zealand) to adopt an inflation-targeting framework for its central bank monetary policy. The framework has been reviewed and renewed on a regular basis since then, most recently in 2021. The next review will occur in 2026. Since 1995, the Bank of Canada’s goal has been to keep the Consumer Price Index close to 2% and within the control range of 1% to 3%.

For the most part and as shown in the table below, that goal has been achieved on a consistent basis. However, the economic fallout from the COVID-19 pandemic caused inflation rates to increase significantly in 2022. In response, the Bank of Canada increased its target overnight rate seven times in 2022 and once so far in 2023 (from 0.25% to 4.50%) with the aim of returning inflation to the control range within a reasonable timeframe.

As also shown in the table below, nominal rates of return have decreased significantly since the early 1980s. For example, the Government of Canada benchmark long-term nominal bond yield (series V122544) was only 2.97% in April of 2023. Nominal yields were even lower during the decade prior to the pandemic, from 2010 to 2020.

In recent years, there has been a general narrowing of the spread between nominal rates of return and inflation rates, and thus a decline in the real rate of return (which is typically defined as the difference between, or a ratio involving, the nominal rate of return and the inflation rate). Recent high rates of inflation have exacerbated this trend:

Year	Long-Term Government of Canada Bond Yield[3]	Total CPI[4]	Difference
1977	9.2%	8.0%	1.2%
1978	10.0%	8.9%	1.1%
1979	11.6%	9.3%	2.3%
1980	13.0%	10.0%	3.0%
1981	15.5%	12.5%	3.0%
1982	11.9%	10.8%	1.1%
1983	12.3%	5.9%	6.4%
1984	12.0%	4.3%	7.7%
1985	10.0%	4.0%	6.0%
1986	8.9%	4.2%	4.7%
…	…	…	…
1991	9.0%	5.6%	3.4%
…	…	…	…
1996	5.7%	1.5%	4.2%
…	…	…	…
2001	4.1%	2.5%	1.6%
…	…	…	…
2006	4.1%	2.0%	2.1%
2007	4.2%	2.1%	2.1%
2008	3.5%	2.4%	1.1%
2009	4.1%	0.3%	3.8%
2010	3.5%	1.8%	1.7%
2011	2.5%	2.9%	-0.4%
2012	2.4%	1.5%	0.9%
2013	3.2%	0.9%	2.3%
2014	2.3%	2.0%	0.3%
2015	2.2%	1.1%	1.1%
2016	2.3%	1.4%	0.9%
2017	2.2%	1.6%	0.6%
2018	2.2%	2.3%	-0.1%
2019	1.7%	1.9%	-0.2%
2020	1.2%	0.7%	0.5%
2021	1.8%	3.4%	-1.6%
2022	3.3%	6.8%	-3.5%

[3] Bank of Canada benchmark yield for long-term nominal Government of Canada bonds (series V122544) as of December of each year shown.
[4] Average total CPI for each calendar year.

Although there has been a general trend to lower real rates of return in recent years (the right-hand column of the previous table), significant year-over-year fluctuations continue to occur.

Conclusion

This paper has provided a brief overview of a complex topic.

Today's high inflation rates and relatively low nominal rates of return may not have an immediate impact on damage awards in the jurisdictions with mandated net discount rates. However, the individuals and entities who are responsible for monitoring and potentially updating those mandated rates from time to time may be watching the trends.

In some situations, as has occurred in the Ontario examples cited earlier, there may be arguments in support of an alternate discount rate in certain fact situations.

Acknowledgement

An earlier version of the attached appendices was prepared in support of submissions made to various government entities by the Canadian Institute of Actuaries and its Committee on Actuarial Evidence in 2013 (during my tenure as Chair of that committee). I thank my fellow actuaries on that committee for their contributions to the earlier analysis.

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Appendix A

Summary of Provincial and Territorial Legislation Pertaining to Discount Rates for Civil Litigation

Province	Mandated Rates as of 2023	Date of Most Recent Change	Reference / Background
Alberta	No mandated rate	n.a.	n.a.
British Columbia	Loss of earnings: 1.5% Future Care/Other Damages: 2.0%	2014 Note: Prior to April 30, 2014, the mandated rates were: Loss of earnings: 2.5% Future Care/Other Damages: 3.5%	Law and Equity Act, R.S.B.C. 1996, c. 253, s. 56 Law and Equity Regulation, BC Reg. 352/81
Manitoba	3.0%	1993	Court of Queen's Bench Act, S.M. 1988-89, c. 4 (C.C.S.M. c. C280), s. 83(2) S.M. 1993, c. 19, s. 5.
New Brunswick	2.5% is the default rate, but evidence can be led that another rate is more appropriate.	2014 Note: Prior to October 1, 2014, 2.5% had been the required rate since at least 1986.	New Brunswick Rules of Court, N.B. Reg. 82-73, Rule 54.10(2) *Chiasson v. Thériault* (Court of Queen's Bench, 2018): based on evidence, accepted the discount rates prescribed in Ontario for trials commencing in 2017
Newfoundland and Labrador	No mandated rate	n.a.	n.a.
Nova Scotia	2.50%	1980	Civil Procedure Rules r. 70.06(1) Insurance Act s.113C

Province	Mandated Rates as of 2023	Date of Most Recent Change	Reference / Background
Northwest Territories	2.50%	Could not confirm	Judicature Act, R.S.N.W.T. 1988, c. J-1, s. 57(1)
Nunavut	2.50%	1998	Judicature Act, SNWT (Nu) 1998, c 34 s 1, s. 56(1)
Ontario	For Trials Commencing After January 1 of: **Year** **Select (1)** **Ultimate (2)** 2014 0.3% 2.5% 2015 0.3% 2.5% 2016 0% 2.5% 2017 0% 2.5% 2018 0.1% 2.5% 2019 0.1% 2.5% 2020 0% 2.5% 2021 0% 2.5% 2022 0% 2.5% 2023 0.5% 2.5% (1) Select Rate applies for the 15-year period from the start of the trial (2) Ultimate Rate applies thereafter	Annual review. Current rule was introduced beginning with 2014 trials. From 2000 to 2013, a different rule for automatic annual reset was in place. Between 1980 and 1999, the mandated rate was 2.5% for all periods.	Rules of Civil Procedure, R.R.O. 1990, Reg. 194 r. 53.09(1)(b) Ontario also mandates inflation rates for income tax gross-up calculations as follows: For Trials Commencing After January 1 of: **Year** **Select (1)** **Ultimate (2)** 2014 2.3% 0.1% 2015 2.4% 0.2% 2016 2.1% -0.4% 2017 1.7% -0.7% 2018 2.0% -0.4% 2019 2.2% -0.2% 2020 1.7% -0.8% 2021 1.0% -1.5% 2022 1.8% -0.7% 2023 2.3% 0.4% (1) Select Rate applies for the 15-year period from the start of the trial (2) Ultimate Rate applies thereafter

Province	Mandated Rates as of 2023	Date of Most Recent Change	Reference / Background
Prince Edward Island	2.50%	Not since 1994 PEI adopted the Ontario Rules of Civil Procedure in 1990 but did not harmonize subsequent to Ontario’s 1999 changes.	Prince Edward Island Rules of Civil Procedure, r. 53.09(1)
Québec	Loss of earnings: 2.00% Future Care (Goods): 3.25% Future Care (Services): 2.00%	Act: 1991 Regulation: 1997	Civil Code of Québec (S.Q., 1991, c. 64.) Regulation under article 1614 of the Civil Code respecting the discounting of damages for bodily injury, RRQ, c. CCQ, r. 1,
Saskatchewan	For Trials Commencing After January 1 of: **Year** **Select (1)** **Ultimate (2)** 2017 0% 2.5% 2018 0.1% 2.5% 2019 0.1% 2.5% 2020 0% 2.5% 2021 0% 2.5% 2022 0% 2.5% 2023 0.5% 2.5% (1) Select Rate applies for the 15-year period from the start of the trial (2) Ultimate Rate applies thereafter	Annual review. Current rule was introduced September 1, 2017. Prior to September 1, 2017, the mandated rate was 3.0%.	Queen's Bench Rules, Rule 9-21(1)(b)
Yukon	No mandated rate	n.a.	n.a.

Appendix B

Illustration of the Effect of Different Mandated Discount Rates across Canada – Loss of Earnings

Present value of a loss of $50,000 per annum until age 65, to a male, mortality decrement only (Statistics Canada 2018-20 Life Table)

	Discount Rate	**Valuation age 12 Commencement age 25**	**Valuation age 40 Commencement age 40**
Alberta	-	-	-
British Columbia	1.5%	$1,195,000	$1,009,000
Manitoba	3.0%	$772,000	$857,000
New Brunswick • Default • Evidence-based (per *Chiasson v. Thériault*)	 2.5% 0.5% for 15 years, then 2.5% thereafter	 $890,000 $1,194,000	 $904,000 $1,096,000
Newfoundland & Labrador	-	-	-
Nova Scotia	2.5%	$890,000	$904,000
Northwest Territories	2.5%	$890,000	$904,000
Nunavut	2.5%	$890,000	$904,000
Ontario • 2023 trials	 0.5% for 15 years, then 2.5% thereafter	 $1,194,000	 $1,096,000
Prince Edward Island	2.5%	$890,000	$904,000
Quebec	2.0%	$1,029,000	$954,000
Saskatchewan • 2023 trials	 0.5% for 15 years, then 2.5% thereafter	 $1,194,000	 $1,096,000
Yukon	-	-	-

Appendix C

Illustration of the Effect of Different Mandated Discount Rates across Canada – Future Care Costs (Goods)

Present value of a loss of $20,000 per annum for life, to a male, mortality decrement only (Statistics Canada 2018-20 Life Table)

	Discount Rate	**Valuation age 12 Commencement age 12**	**Valuation age 40 Commencement age 40**
Alberta	-	-	-
British Columbia	2.0%	$736,000	$553,000
Manitoba	3.0%	$576,000	$464,000
New Brunswick			
• Default	2.5%	$648,000	$505,000
• Evidence-based (per *Chiasson v. Thériault*)	0.5% for 15 years, then 2.5% thereafter	$823,000	$632,000
Newfoundland & Labrador	-	-	-
Nova Scotia	2.5%	$648,000	$505,000
Northwest Territories	2.5%	$648,000	$505,000
Nunavut	2.5%	$648,000	$505,000
Ontario			
• 2023 trials	0.5% for 15 years, then 2.5% thereafter	$823,000	$632,000
Prince Edward Island	2.5%	$648,000	$505,000
Quebec	3.25%	$545,000	$445,000
Saskatchewan			
• 2023 trials	0.5% for 15 years, then 2.5% thereafter	$823,000	$632,000
Yukon	-	-	-