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Educational Note

Guidance for the 2020 Valuation of Insurance Contract Liabilities of Life Insurers

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Educational Note

Guidance for the 2020 Valuation of Insurance Contract Liabilities of Life Insurers

Committee on Life Insurance Financial Reporting

August 2020

Document 220126

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The actuary should be familiar with relevant educational notes. They do not constitute standards of practice and are, therefore, not binding. They are, however, intended to illustrate the application of the Standards of Practice, so there should be no conflict between them. The actuary should note however that a practice that the educational notes describe for a situation is not necessarily the only accepted practice for that situation and is not necessarily accepted actuarial practice for a different situation. Responsibility for the manner of application of standards of practice in specific circumstances remains that of the members. As standards of practice evolve, an educational note may not reference the most current version of the Standards of Practice; and as such, the actuary should cross-reference with current Standards. To assist the actuary, the CIA website contains an up-to-date reference document of impending changes to update educational notes.

MEMORANDUM

To: Members in the Life Insurance Practice Area

From: Steven W. Easson, Chair
Actuarial Guidance Council

Marie-Andrée Boucher, Chair
Committee on Life Insurance Financial Reporting

Date: August 13, 2020

Subject: **Educational Note: Guidance for the 2020 Valuation of Insurance Contract Liabilities of Life Insurers**

Introduction

The Committee on Life Insurance Financial Reporting (CLIFR) has prepared this educational note to provide guidance to actuaries in several areas affecting the valuation of the 2020 year-end insurance contract liabilities of life insurers for Canadian generally accepted accounting principles (GAAP) purposes. In addition, the note provides an update on recently published experience studies and introductory information about potential changes in future financial reporting. The guidance in this educational note represents a majority view of the members of CLIFR of appropriate practice consistent with the Standards of Practice.

The educational note is structured in six sections and an appendix. The six sections provide content on the following topics: experience studies, life insurance and annuity mortality, economic assumptions, IFRS 17 stochastic scenarios and capital. Appendix A contains a list of relevant educational notes and research papers sorted by topic area.

A preliminary version of the educational note was shared with the following committees:

- Property and Casualty Financial Reporting Committee (PCFRC)
- Committee on Risk Management and Capital Requirements (CRMCR)
- Committee on the Appointed/Valuation Actuary (AA)
- International Insurance Accounting Committee (IIAC)
- Committee on Worker's Compensation.

The educational note was also presented to the Actuarial Guidance Council (AGC) in the months preceding its approval. CLIFR and the subcommittee feel that they have addressed the material comments received by the various committees.

The creation of this cover letter and educational note has followed the AGC's protocol for the adoption of educational notes. In accordance with the Institute's Policy on Due Process for the Approval of Guidance Material other than Standards of Practice and Research Documents, this educational note has been prepared by CLIFR and has received approval for distribution from the AGC on August 11, 2020.

The actuary should be familiar with relevant educational notes. They do not constitute standards of practice and are, therefore, not binding. They are, however, intended to illustrate the application of the Standards of Practice, so there should be no conflict between them. The actuary should note however that a practice that the educational notes describe for a situation is not necessarily the only accepted practice for that situation and is not necessarily accepted actuarial practice for a different situation. Responsibility for the manner of application of standards of practice in specific circumstances remains that of the members. As standards of practice evolve, an educational note may not reference the most current version of the Standards of Practice; and as such, the actuary should cross-reference with current Standards. To assist the actuary, the CIA website contains an up-to-date [reference document](#) of impending changes to update educational notes.

CLIFR would like to acknowledge the contribution of its sub-committee that assisted in the development of this educational note: Dan Doyle and Marie-Andrée Bouché-Hilare.

Questions or comments regarding this educational note may be directed to Marie-Andrée Boucher at mboucher@eckler.ca.

Guidance to Members on Specific Situations

From time to time, CIA members seek advice or guidance from CLIFR. Both the CIA and CLIFR strongly encourage such dialogue. CIA members are assured that it is proper and appropriate for them to consult with the chair or vice-chair of CLIFR.

CIA members are reminded that responses provided by CLIFR are intended to assist them in interpreting the CIA Standards of Practice, educational notes, and Rules of Professional Conduct, in assessing the appropriateness of certain techniques or assumptions. A response from CLIFR does not constitute a firm opinion as to whether the work in question is in compliance with the CIA Standards of Practice. Guidance provided by CLIFR is not binding upon the member.

Standards of Practice

The following revisions to the Standards of Practice have been approved recently:

- [Standards of Practice](#)
 - Revisions to the Practice-Specific Standards for Pensions (Section 3500), effective December 1, 2020;
 - Revisions to Part 1000 and Section 2500 within the Practice-Specific Standards for Insurance pertaining to Financial Condition Testing (FCT) replacing Dynamic Capital Adequacy Testing (DCAT), effective January 1, 2020;
 - Revisions to Sections 1400 and 1500 of the General Standards pertaining to quality assurance (formerly peer review), effective July 1, 2019;

- Addition of Subsection 3270 to the Pension-Specific Standards for Pensions pertaining to disclosure for stochastic models used to comply with specific regulatory pension plan funding requirements, effective July 1, 2019;
- Revisions to the Practice-Specific Standards for Public Personal Injury Compensation Plans (Part 5000), effective December 15, 2019.

These publications can be found on the CIA website under [Publications](#). A list of relevant educational notes and research papers can be found in Appendix A.

Some guidance provided last year is still appropriate and has been duplicated in this educational note. The guidance is labelled as unchanged. Other guidance has been modified, either to reflect recent developments or to improve clarity and is labelled as modified. The previous versions of this document can also be found in Appendix A.

The topics covered herein are

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1. COVID-19 (new)

The COVID-19 pandemic has generated a broad set of challenges for actuaries. The impacts of COVID-19 in many areas are still unknown at this stage.

The CIA is engaged in informing members about COVID-19, through a [hub](#) on its website. Actuaries are encouraged to visit the hub regularly as it contains analyses, webcasts, links and articles that are relevant to actuarial practice in the face of the current situation.

The CIA is also actively working with several insurers to collect insured mortality data with respect to COVID-19 with the objective of providing more frequent updates on how this virus may impact insured mortality experience.

Although there are more questions than answers at this point, there are many considerations that actuaries would be encouraged to analyze and review as they assess the continued appropriateness of their current processes, methods or assumptions. Each actuary would need to take the necessary steps to determine and introduce changes, if required.

2. Experience Studies (modified)

The Experience Research Committee (of the Research Council) has published the following studies since the beginning of 2019:

- Mortality study – [Canadian Standard Ordinary Life Experience 2017–2018 Using 86–92 and 97–04 Tables](#) (July 2020)

This annual study covers the mortality experience of Canadian standard individual ordinary insurance over 2017 and 2018 on a policy year basis.

- Mortality and Lapse survey – [Report on the Survey of Post-Level Premium Period Lapse and Mortality Assumptions for Level Premium Term Plans](#) (April 2020)

This is Phase 1 of the mortality and lapse study. A survey was performed at the end of 2017 on the mortality deterioration and lapse assumptions used for pricing and modeling level premium term products. The report summarizes the findings from the 15 survey responses received. Phase 2 will include a study of the mortality and lapse experience of level premium term policies as they transition out of the level premium period.

- Morbidity Study – [Canadian Group Life Waiver Study \(2009-2015\)](#) (January 2020)

This study updates the disabled life mortality and recovery experience using the recent Canadian Institute of Actuaries (CIA) 2009–2015 Group Long-Term Disability (LTD) Termination Study. It is anticipated that the Group Life Waiver review will become a regular study.

- Morbidity study – [Canadian Individual Critical Illness Insurance Morbidity Experience Study Including Policy Anniversaries Between 2007 and 2016 Using Expected Incidence Rate Tables 2008 CANCI](#) (June 2019)

This is the fourth report detailing the intercompany morbidity experience for Canadian individual critical illness (CI) insurance policies.

- Mortality study – [Canadian Group Annuitant Mortality Experience, Calendar Years 2007–2016](#) (March 2019)

This is the second report of a study of experience for Canadian group annuitants with contributions from six companies. It covers the experience for calendar years 2007 to 2016. It also includes the development of a new mortality table, GAC2012, based on the underlying experience data from the study.

- Morbidity study – [Group Long-term Disability Termination Study](#) (January 2019)

This is the Phase 1 of the Group LTD study. Phase 1 is an updated study of Canadian Group Long-Term Disability termination tables based on recent experience for calendar years 2009 to 2015 with contributions from sixteen companies. Phase 2 – [Predictive Analytic Models for Canadian Group Disability Termination Experience](#) (May 2019) used the updated data from the Phase 1 study and applied predictive analytics techniques to analyze the effects of approximately 15 variables.

The Experience Research Committee plans to publish the following study in the near future:

- Canadian Post-Level Premium Lapse and Mortality Study

As mentioned above, Phase 1, published in April 2020, presents the results of the survey performed on the mortality and lapse assumptions used for level premium term products. Phase 2 will present a study of the mortality and lapse experience of level premium term policies as they transition out of the level premium period. This study is expected to be published in 2020.

3. Life Insurance and Annuity Mortality (*modified*)

There have been no changes in standards with regards to Life and Annuity Mortality. The most recent promulgation occurred in 2017.

The actuary is reminded that on July 30, 2017, the Actuarial Standards Board (ASB) published a [Final Communication of a Promulgation of Prescribed Mortality Improvement Rates Referenced in the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health \(Accident and Sickness\) Insurance \(Subsection 2350\)](#) with an effective date of October 30, 2017.

The CIA has established a Project Oversight Group (POG) to review the 2017 mortality improvement scale with the intention of deriving a revised scale. The review will start in 2020 with an expected completion in 2021+.

4. Economic Assumptions (*modified*)

Negative Interest Rates (*new*)

Globally, there are developed markets where negative interest rates are or have been prevalent. The actuary would consider the implications of the valuation of insurance contract liabilities when interest rates are negative. CLIFR believes that the construction of the prescribed Canadian asset liability method (CALM) scenarios remains appropriate even if initial risk-free interest rates are negative.

Section 4.1 of the 2015 revised educational note [Investment Assumptions Used in the Valuation of Life and Health Insurance Contract Liabilities](#) discussed the development of interest rate scenarios. The following is an excerpt from this Section: “In developing deterministic scenarios, any negative or zero forward rates would be set to 1 basis point.” CLIFR believes that this statement may have been included for practical (e.g., system limitation) or other reasons. We feel that it is appropriate to reflect negative interest rates when they occur within the valuation. The actuary would ensure that they are modeled appropriately and do not lead to any unintended consequences.

Credit Spreads (modified)

The revised educational note: [Investment Assumptions Used in the Valuation of Life and Health Insurance Contract Liabilities](#) (September 2015) provides guidance on developing assumptions for credit spreads, including margins and limits. Two clarifications follow:

- If testing at the level at which the CALM liabilities are determined demonstrates that the promulgated maximum net credit spread after margin (net of defaults) increases the liabilities, then the additional margin pertaining to the net credit spread after margin would be applied on each fixed-income asset. This is illustrated by the following example:
 - The investment strategy in a given CALM segment assumes that reinvestment will be in three equally weighted fixed-income assets, with assumed ultimate net credit spreads after margin of 130 bps, 90 bps, and 50 bps respectively.
 - The average net credit spread after margin, prior to the application of the paragraph 2330.08 additional margin is 90 bps.
 - After application of the paragraph 2330.08 additional margin, the net credit spreads after margin for the first two assets are reduced to 80 bps each, and there is no change to the 50 bps assumption for the third asset. The resulting average net credit spread after margin is 78 bps.
- Additional scenarios (as defined in paragraph 2330.33) are limited to varying risk-free interest rates and not credit spreads.

In 2017, CLIFR formed a subcommittee to review the promulgated net credit spread. The mandate of the subcommittee was to update the data used by the prior group for recent years, and assess if there was a need to recommend a change to the maximum of 80 bps promulgated in May 2014 ([Document 214046](#)). At the time, the subcommittee recommended that no change be made to the promulgated maximum net credit spread.

No changes are forthcoming in 2020. However, following its protocol of timely updates, the ASB has approved the formation of a designated group to review the promulgated maximum net credit spread, with any changes effective in 2021.

Ultimate Reinvestment Rate (modified)

The ASB is responsible for promulgating the calibration criteria for stochastic risk-free interest rate models and the ultimate reinvestment rates (URRs) from time to time. The ongoing low interest rate environment has prompted the ASB to monitor these developments closely, and

the ASB promulgated updated URRs and updated calibration criteria for year-end 2019. The [final promulgation](#) was published in July 2019, and the effective date was October 15, 2019. For further information on the calibration criteria, see section 6 below.

No changes are forthcoming in 2020. However, given the deferral of IFRS 17 to January 1st, 2023 and the continued low interest rate environments prevailing since the last promulgation, following its protocol of timely updates, the ASB has approved the formation of a designated group to review the URR and calibration criteria promulgations, with any changes effective in 2021.

5. International Financial Reporting Standards (*modified*)

IFRS 17 (*modified*)

In May 2017, the International Accounting Standards Board® (the Board) published the initial standards for Insurance Contracts, IFRS 17. The implementation date was deferred earlier in 2020 to fiscal years beginning on or after January 1st, 2023. The Board discussed amendments to IFRS 17 Insurance Contracts in its recent meetings, in response to concerns and challenges raised by stakeholders as IFRS 17 is being implemented. The amendments to IFRS 17 were published in June 2020. For the most current information please see the [IASB website](#). Note that an eIFRS professional account is required to access the final standards and related documents.

The CIA is very active in this area, with several committees involved in reviewing the IFRS 17 standard and related guidance.

An IFRS 17 Steering Committee was created by the CIA to ensure that members are provided with the education and guidance they will need on a timely basis to be ready for the implementation of IFRS 17. This committee is also working with other interested parties to understand areas of potential overlap or gaps.

The ASB has established two designated groups: one pertaining to revisions to the Canadian Insurance Contract Standards of Practice (SoP) to reflect IFRS 17 and one pertaining to the role of the Appointed Actuary under IFRS 17.

The ASB Designated Group on revisions to the SoP, published the following document in March 2020: [Revised Exposure Draft to Incorporate changes required by the adoption in Canada of IFRS 17 Insurance Contracts, including Principles of International Standard of Actuarial Practice 4 – Actuarial Practice in Relation to IFRS 17 Insurance Contracts, into the Canadian Standards of Practice](#). The Canadian Accounting Standards Board has indicated its intention that IFRS 17 will be adopted without modification for the valuation of insurance contracts in Canadian generally accepted accounting principles (GAAP) financial statements.

The [International Actuarial Association](#) (IAA) adopted the International Standard of Actuarial Practice 4 (ISAP 4) on IFRS 17 Insurance Contracts in November 2019. ISAP 4 covers actuarial practice in support of valuation of insurance contract liabilities in accordance with IFRS 17. The significant changes proposed in the CIA exposure draft align the SoP with the requirements of IFRS 17 and incorporate the guidance of ISAP 4.

The ASB Designated Group on the Impact of IFRS 17 on the Role of the Appointed Actuary published a [notice of Intent](#) in December 2019 on the proposed changes. The DG expects to recommend draft changes to the SoP later in 2020.

The CIA Committee on International Insurance Accounting (IIAC) under the International Affairs Council has the following mandate with regards to international accounting and actuarial standards for the valuation of insurance and related products:

- Monitor developments and ensure that news of relevant and material developments is dispersed appropriately within the CIA;
- Recommend where specific additional Canadian guidance may be helpful, and if so, assist in its development; and
- Where relevant and appropriate, provide input from a CIA perspective to the international governing bodies.

The CIA Actuarial Guidance Council (AGC) recently released the following draft educational notes prepared by IIAC:

- [Transition from CALM to IFRS 17 Valuation of Canadian Participating Insurance Contracts](#) identifying the key components involved in the valuation of participating contracts, and how those components might change under the IFRS 17 framework compared to the current CALM framework, which was published in draft form in March 2019;
- [Comparison of IFRS 17 to Current CIA Standards of Practice](#) highlighting the key differences between CALM and IFRS 17, which was published in draft form in September 2018.

The IAA is developing an International Actuarial Note (IAN 100). The AGC reviewed the current exposure draft of IAN 100 and released it as a draft educational note [Application of IFRS 17 Insurance Contracts](#) in February 2019. This draft educational note is intended to assist CIA members in the application of IFRS 17.

CLIFR is also very active in reviewing and developing educational notes to provide guidance for life insurance practitioners and supplement international actuarial notes. Subcommittees have been formed to look at relevant topics. The mandate of these subcommittees includes providing guidance to members in the form of educational notes and reports. The guiding principles followed by the subcommittees are as follows:

- First and foremost, consider Canadian-specific perspectives, rather than simply repeating international actuarial guidance.
- Provide application guidance that is consistent with the IFRS 17 standard and applicable Canadian actuarial standards of practice and educational notes, without unnecessarily narrowing the policy choices available in the IFRS 17 Standard.
- Consider practical implications associated with implementation of potential methods; in particular, ensure that due consideration is given to options that do not require undue cost and effort to implement.

The following draft educational notes or reports have already been published or are planned to be published later in 2020 or 2021:

- [Compliance with IFRS 17 Applicable Guidance](#)¹
- [IFRS 17 Risk Adjustment for Non-Financial Risk for Life and Health Insurance Contracts](#)
- [IFRS 17 Estimates of Future Cash Flows for Life and Health Insurance Contracts](#)
- [IFRS 17 Coverage Units for Life and Health Insurance Contracts](#)
- [IFRS 17 Market Consistent Valuation of Financial Guarantees for Life and Health Insurance Contracts](#)
- [IFRS 17 Discount Rates for Life and Health Insurance Contracts](#)
- [Assessing Eligibility for Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance](#)²
- IFRS 17 Valuation of Canadian Participating Insurance Contracts (Q4 2020-Q1 2021)
- IFRS 17 Fair Value Approach (Q1 2021-Q2 2021)²
- IFRS 17 Disclosure requirements (2021)²
- IFRS 17 Expenses (2021)²
- IFRS 17 Application of Discount Rates for Life and Health Insurance Contracts (2021)

After having reviewed the IFRS 17 Standards and existing guidance, including guidance from the IAC and the IAA, the Investment Components and Embedded Derivatives subcommittee concluded that any Canadian-specific additional guidance was not needed at this time. The subcommittee will continue to monitor developments and coordinate guidance, as needed.

The CIA is also engaged in educating members about IFRS 17, through webcasts, sessions at CIA meetings, and other forums. The CIA website has an [IFRS blog](#) (you must log in to view the page). This members-only resource center serves as a repository for everything about IFRS 17, including documents, links to important websites, and updates from the committees working to help members for this significant change. Moreover, the mandates of each of the subcommittees mentioned above can be found on the blog.

IFRS 9 (slightly modified)

Many insurers will not adopt IFRS 9 until IFRS 17 becomes effective in 2023. However, some entities have already adopted, most notably those that are part of larger financial institutions, such as bank-owned insurers. For those entities, the actuary could have seen changes in the carrying value of assets that potentially affected the CALM valuation. There could also have been new credit loss provisions established by the accountants under IFRS 9; if so, the actuary would have taken steps to avoid any double-counting with the credit provisions included in the CALM liability.

¹ This was authored jointly by CLIFR, PCFRC and the Committee on Worker's Compensation.

² These are joint CLIFR and PCFRC publications.

6. Stochastic Scenarios (*unchanged*)

Calibration Criteria for Risk-Free Interest Rate Models Used in CALM Valuation (*modified*)

CLIFR created a working group in 2018 to update the calibration criteria for stochastic risk-free interest rate models, and published a revised [educational note supplement](#) on April 18, 2019. The ASB's [final promulgation](#) of recommendations from this paper occurred on July 3, 2019 and has an effective date of October 15, 2019.

Included in the educational note supplement are updates to the guidance for the long-term (term to maturity of 20 years and longer) risk-free interest rate and for the short-term (one-year maturity) risk-free interest rate, medium-term (five- to 10-year maturity) risk-free interest rates, and the slope of the yield curve. The previous exercise considered data to mid-year 2016; the current group updated data to mid-year 2018, but otherwise preserved the methodology applied in the previous educational note supplement from 2017.

7. Capital Section (*modified*)

Starting in 2019, the Committee on Risk Management and Capital Requirements (CRMCR) has launched a similar annual educational note that provides an overview of guidance relevant for capital and risk management purposes, including updates to guidelines and/or CIA guidance on LICAT, Financial Condition Testing (FCT) and ORSA. This educational note includes links to relevant capital educational notes, regulatory guidances and other useful references. It also covers introductory information about potential changes in regulatory capital reporting. The educational note [Guidance for the 2020 Reporting of Capital and Financial Condition Testing for Life, P&C, and Mortgage Insurers](#) was published in April 2020.

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Appendix A: CIA Guidance

Accession Number	Title	Publication Date
General		
219120	Research Paper: The Application of Credibility Theory in the Canadian Life Insurance Industry	November 6, 2019
219113	Final Standards: Revisions within the Practice-Specific Standards for Insurance (Section 2500 and Part 1000)	October 15, 2019
219058	Final Standards: Revisions to Sections 1400 and 1500 of General Standards of Practice (Part 1000)	May 13, 2019
219057	Memorandum: Revisions to Sections 1400 and 1500 of General Standards of Practice (Part 1000)	May 13, 2019
218076	Exposure draft to incorporate changes required by the adoption in Canada of IFRS 17 Insurance Contracts, including Principles of International Standard of Actuarial Practice 4 – Actuarial Practice in Relation to IFRS 17 Insurance Contracts, into the Canadian Standards of Practice	May 16, 2018
218023	Final Standards: Revisions within the Practice-Specific Standards for Insurance (Sections 2400 and 2500)	February 22, 2018
218024	Memorandum: Revisions within the Practice-Specific Standards for Insurance (Sections 2400 and 2500)	February 22, 2018
217125	Final Standards: General (Part 1000)	December 12, 2017
217126	Memorandum: Final Standards – Revisions to General Standards (Part 1000)	December 12, 2017
217015	Memorandum: Revisions to the Practice-Specific Standards for Insurance (Part 2000)	February 3, 2017
217014	Final Standards: Practice-Specific Standards for Insurance (Part 2000)	February 3, 2017
217007	Educational Note: Use of Models	January 26, 2017
217005	Final Standards: Revisions to General Standards to Reflect the Use of Models	January 26, 2017
217006	Memorandum: Final Standards – Revisions to General Standards to Reflect the Use of Models	January 26, 2017
214128	Memorandum: Final Standards – Revisions to the General and Practice-Specific Standards – Consistency of Reporting and Conformance with International Standard of Actuarial Practice 1	December 9, 2014

Accession Number	Title	Publication Date
214129	Final Standards: Revisions to the General and Practice-Specific Standards – Consistency of Reporting and Conformance with International Standard of Actuarial Practice 1	December 9, 2014
213008	Final Standards for Practice-Specific Standards on Insurance Contract Valuation (Section 2300) to Narrow the Range of Practice on Certain Elements	February 12, 2013
211091	Final Standards of Practice: Standards of Practice for Recognizing Events in Work (clean version)	September 26, 2011
210088	Research Paper: IFRS Disclosure Requirements for Life Insurers	December 13, 2010
210086	Educational Note: Valuation of Gross Policy Liabilities and Reinsurance Recoverables	December 1, 2010
206147	Educational Note: Use of Actuarial Judgment in Setting Assumptions and Margins for Adverse Deviations	November 30, 2006
206132	Educational Note: Margins for Adverse Deviations	November 8, 2006
205122	Educational Note: Applicability of Rules, Standards, and Other Guidance to CIA Members	November 30, 2005
20169	Research Paper: Use of Stochastic Techniques to Value Actuarial Liabilities Under Canadian GAAP	August 15, 2001
Economic and CALM		
219078	Final Communication of Updated Promulgations of the Ultimate Reinvestment Rates and Calibration Criteria for Stochastic Risk-Free Interest Rates to the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2330)	July 3, 2019
219046	Educational Note Supplement: Calibration of Stochastic Risk-Free Interest Rate Models for Use in CALM Valuation	April 18, 2019
218091	Explanatory Report: Development of the Ultimate Reinvestment Rates	June 26, 2018
218033	Educational Note: Life Insurance Capital Adequacy Test (LICAT) and Capital Adequacy Requirements for Life and Health Insurance (CARLI)	March 14, 2018
217085	Revised Educational Note Supplement: Calibration of Stochastic Risk-Free Interest Rate Models for Use in CALM Valuation	August 16, 2017

Accession Number	Title	Publication Date
217081	<u>Final Communication of Updated Promulgations of the Ultimate Reinvestment Rates and Calibration Criteria for Stochastic Risk-Free Interest Rates in the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2330)</u>	July 30, 2017
217080	<u>Final Communication of a Promulgation of Calibration Criteria for Equity Investment Returns Referenced in the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2370)</u>	July 28, 2017
217055	Research Paper: <u>Calibration of Equity Returns and Volatility for Stochastic Models</u>	May 17, 2017
215111	Educational Note Supplement: <u>Development of the Equilibrium Risk-Free Market Curve for the Base Scenario</u>	December 17, 2015
215111T	Educational Note Supplement: <u>Development of the Equilibrium Risk-Free Market Curve for the Base Scenario. Excel File</u>	December 17, 2015
215072	Revised Educational Note: <u>Investment Assumptions Used in the Valuation of Life and Health Insurance Contract Liabilities</u>	September 16, 2015
214109	Research Paper: <u>Development of New Prescribed Interest Rate Scenarios for CALM Valuations</u>	October 10, 2014
214096	<u>Final Communication of a Promulgation of Calibration Criteria for Investment Returns Referenced in the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2360) (Fixed Income Returns)</u>	August 21, 2014
214046	<u>Final Communication of Promulgations of the Maximum Net Credit Spread, Ultimate Reinvestment Rates, and Calibration Criteria for Stochastic Risk-Free Interest Rates in the Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2330 of the Final Standards for Revisions to the Standards of Practice)</u>	May 15, 2014
214047	Final Standards: <u>Revisions to Economic Reinvestment Assumptions within the Practice-Specific Standards on Insurance Contract Valuation: Life and Health (Accident and Sickness) Insurance (Section 2300 and Subsection 1110)</u>	May 15, 2014

Accession Number	Title	Publication Date
214048	Memorandum: Final Standards – Revisions to Economic Reinvestment Assumptions within the Practice-Specific Standards on Insurance Contract Valuation: Life and Health (Accident and Sickness) Insurance (Section 2300 and Subsection 1110)	May 15, 2014
211027	Educational Note: Investment Return Assumptions for Non-Fixed Income Assets for Life Insurers	March 1, 2011
209121	Educational Note: Currency Risk in the Valuation of Policy Liabilities for Life and Health Insurers	December 2, 2009
206133	Educational Note: Approximations to Canadian Asset Liability Method (CALM)	November 8, 2006
206077	Educational Note: CALM Implications of AcSB Section 3855 Financial Instruments – Recognition and Measurement	June 7, 2006
203106	Educational Note: Selection of Interest Rate Models	December 2003
203083	Educational Note: Aggregation and Allocation of Policy Liabilities	September 15, 2003
Segregated Funds		
214034	Research Paper: Calibration of Fixed-Income Returns for Segregated Fund Liability	April 11, 2014
213004	Final Standards: Introduction of Standards Relating to Appointed Actuary Opinions with Respect to Use of Internal Models to Determine Required Capital for Segregated Fund Guarantees	February 7, 2013
212027	Educational Note: Reflection of Hedging in Segregated Fund Valuation	May 10, 2012
210053	Report: Report of the Task Force on Segregated Fund Liability and Capital Methodologies	August 11, 2010
207109	Educational Note: Considerations in the Valuation of Segregated Fund Products	November 22, 2007
205111	Educational Note: Valuation of Segregated Fund Investment Guarantees (Revised)	October 26, 2005
202012	Final Report: CIA Task Force on Segregated Fund Investment Guarantees	March 6, 2002

Universal Life		
212012	Educational Note: Valuation of Universal Life Insurance Contract Liabilities	February 28, 2012
Mortality and Mortality Improvement		
217097	Task Force Report on Mortality Improvement (Final)	September 20, 2017
217097T	Task Force Report on Mortality Improvement (Final) – Excel File	September 20, 2017
217079	Final Communication of a Promulgation of Prescribed Mortality Improvement Rates and Associated Margins for Adverse Deviations within the Practice-Specific Standards on Insurance Contract Valuation: Life and Health (Accident and Sickness) Insurance (Subsection 2350) and the Accompanying Promulgation	July 30, 2017
217079T	Final Communication of a Promulgation of Prescribed Mortality Improvement Rates and Associated Margins for Adverse Deviations within the Practice-Specific Standards on Insurance Contract Valuation: Life and Health (Accident and Sickness) Insurance (Subsection 2350) and the Accompanying Promulgation – Excel Workbook	July 30, 2017
217054	Research Paper on Mortality Improvement Promulgation	May 17, 2017
217054T	Research Paper on Mortality Improvement Promulgation – Excel File	May 17, 2017
211070	Final Standards of Practice: Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and Sickness) Insurance (Subsection 2350) Relating to Mortality Improvement (clean version)	July 12, 2011
210065	Research Paper: Mortality Improvement Research Paper	September 23, 2010
202037	Educational Note: Expected Mortality: Fully Underwritten Canadian Individual Life Insurance Policies	July 8, 2002
Living Benefits		
218034	Research Paper: Model of Long-Term Health Care Cost Trends in Canada	March 14, 2018
Group Life and Health		
210069	Educational Note: Sources of Earnings Calculations – Group Life and Health	October 7, 2010

210034	Educational Note: Valuation of Group Life and Health Policy Liabilities	June 4, 2010
Lapse		
217019	Educational Note Supplement: Selective Lapsation for Renewable Term Insurance Products	February 16, 2017
217019t	Educational Note Supplement: Selective Lapsation for Renewable Term Insurance Products - Illustration of Methods	February 16, 2017
Par and Adjustable		
214008	Educational Note: Dividend Determination for Participating Policies	January 9, 2014
214006	Final Standards: Revocation of the Current Standards of Practice Entitled Recommendations – Dividend Determination and Illustration and Explanatory Notes in Amplification of Certain Dividend Recommendations, and Introduction of a New Subsection Relating to Participating Policy Dividend Determination in Part 2000 – Practice-Specific Standards for Insurance	January 9, 2014
211123	Educational Note: Guidance on Fairness Opinions Required Under the Insurance Companies Act Pursuant to Bill C-57 (2005)	December 14, 2011
211084	Final Standards of Practice: Practice-Specific Standards for Insurance, Incorporation of Standard Wording for Fairness Opinions (subsection 2400)	September 7, 2011
Tax and Expenses		
212096	Educational Note: Future Income and Alternative Taxes	December 17, 2012
208004	Educational Note: Implications of Proposed Revisions to Income Tax Legislation (Nov 7, 2007 Department of Finance Proposal)	January 23, 2008
207029	Educational Note: Implications of CICA Handbook Section 3855 – Financial Instruments on Future Income and Alternative Taxes: Update to Fall Letter	April 11, 2007
206134	Educational Note: Best Estimate Assumptions for Expenses	November 8, 2006
Guidance for the Valuation of Insurance Contract Liabilities of Life Insurers		
219093	Educational Note: Guidance for the 2019 Valuation of Insurance Contract Liabilities of Life Insurers	August 28, 2019

218115	Educational Note: Guidance for the 2018 Valuation of Insurance Contract Liabilities of Life Insurers	September 12, 2018
217098	Educational Note: Guidance for the 2017 Valuation of Insurance Contract Liabilities of Life Insurers	September 20, 2017
IFRS 17		
220103	Draft Educational Note: Assessing Eligibility for Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance	July 16, 2020
220079	Draft Educational Note: IFRS 17 Discount Rates for Life and Health Insurance Contracts	June 8, 2020
220061	Draft Educational Note: IFRS 17 Market Consistent Valuation of Financial Guarantees for Life and Health Insurance Contracts	May 4, 2020
220012	Draft Educational Note: Compliance with IFRS 17 Applicable Guidance	January 20, 2020
219131	Draft Educational Note: IFRS 17 Coverage Units for Life and Health Insurance Contracts	December 17, 2019
219102	Draft Educational Note: IFRS 17 Estimates of Future Cash Flows for Life and Health Insurance Contracts	September 18, 2019
219081	Draft Educational Note: IFRS 17 Risk Adjustment for Non-Financial Risk for Life and Health Insurance Contracts	July 17, 2019
219036	Draft Educational Note: Transition from CALM to IFRS 17 Valuation of Canadian Participating Insurance Contracts	March 27, 2019
219020	Draft Educational Note: Application of IFRS 17 Insurance Contracts	February 20, 2019
218117	Draft Educational Note: Comparison of IFRS 17 to Current CIA Standards of Practice	September 13, 2018