

# An Evaluation of Dental Continuing Professional Development Programs in the USA and Canada

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## What is Continuing Professional Development?

- The practice of dentistry is constantly evolving, as such, all regulated oral health care providers must continuously update their knowledge base and refine their skills through continuing professional development programs to maintain the highest standards of care
- Continuing Education (CE):** Life-long learning activities provided for professionals
- Continuing Professional Development (CPD):** program that consists of lectures, seminars, courses, individual study, and other activities to advance your professional development
- Mandatory CPD:** as a requirement to maintain licensure
- Voluntary CPD:** to maintain registration to a specific professional association (e.g., ABPD)

## Ideal Components of a CPD Program<sup>1-3</sup>

### Learning Strategies

- Predisposing Activities:** gauges competence and knowledge of learners before an activity
- Enabling Activities:** eliminating or reducing gaps in knowledge during an activity
- Reinforcing Activities:** recall what dentists have learned and when they can apply it

### Assessments

- Needs:** collects and analyzes information to identify gaps
- Formative:** reduce or eliminate a gap through practice and feedback
- Summative:** after a learning experience to determine if learners have improved

## Research Questions

There is great deal of variability in the quantity, quality, and associated costs of CPD activities. Thus, this research attempts to address the following exploratory questions:

- What are the differences in minimum CPD requirements as it relates to CE credits, assessment strategies, and learning outcomes?**
- What are the attitudes and behaviours towards CE, assessment strategies, and learning strategies?**

## Methods

- Environmental Scan:** Consisted of a review of all existing licensing (mandatory) CPD requirements posted on the websites of State (USA) and Provincial/Territorial (Canada) regulatory authorities
- Survey:** A 40-item questionnaire was developed to assess the knowledge, attitudes, and behaviours towards CPD requirements, learning strategies, and the use of assessments. Survey questions were pilot tested, and then distributed to representatives from each regulatory body (62 total) via SurveyMonkey
- Data Analysis:** the combined dataset was anonymized, cleaned, and coded. The first step included a descriptive analysis of the data. Data for continuous variables were calculated as means and standard deviations and categorical data are presented as proportions. All analysis was performed using STATA 15 software

## Main Results

### Summary of CPD Requirements

	Total	USA	Canada
Sample (n)	62	51	11
Dentists per 100,000 population	59.9 ± 20.3	57.13 ± 10.7	72.88 ± 41.51
Mean CE hours per year	19.58 ± 5.42	18.20 ± 4.23	26.67 ± 5.44*
Min	8	8	16
Max	30	30	30
Renewal Cycle			
1	7%	8%	0
2	66%	77%	9%
3+	28%	14%	91%

\* Independent t-test; p-value < 0.05

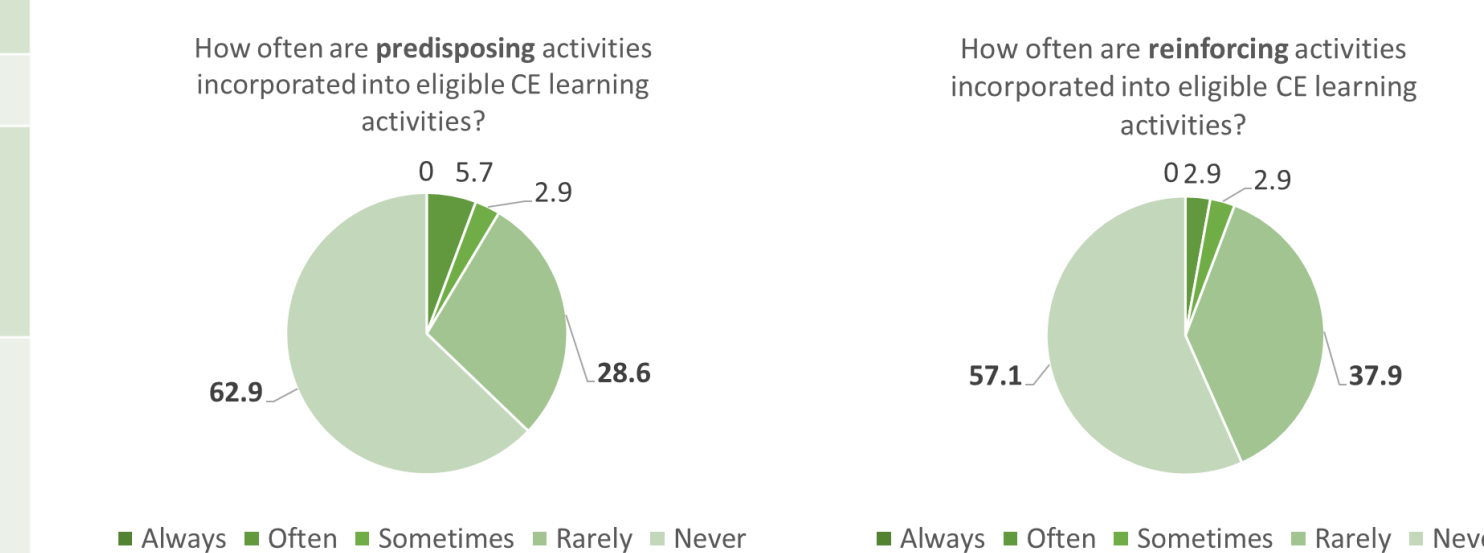
### Analysis of Responses Related to Current CPD Programs

	Disagree/Strongly Disagree (%)	Undecided (%)	Agree/Strongly Agree (%)
Predisposing activities are an effective learning tool	65.7	8.6	25.7
Enabling activities are an effective learning tool	14.3	11.4	74.3
Reinforcing activities are an effective learning tool	62.8	8.6	28.6
Assessments should be a required component of CPD	34.3	28.5	37.2
It is important that a member's knowledge is assessed after completing each learning activity	42.8	28.6	28.6
Formative assessments are an important component of learning	48.5	14.3	37.2
Summative assessments are an important component of learning	48.5	14.3	37.2
Portfolio reviews are an effective assessment tool	62.9	14.2	22.9
Tests/quizzes are effective assessment tools	25.7	22.9	51.4
It is difficult to implement assessments in our CPD	14.3	11.4	74.3

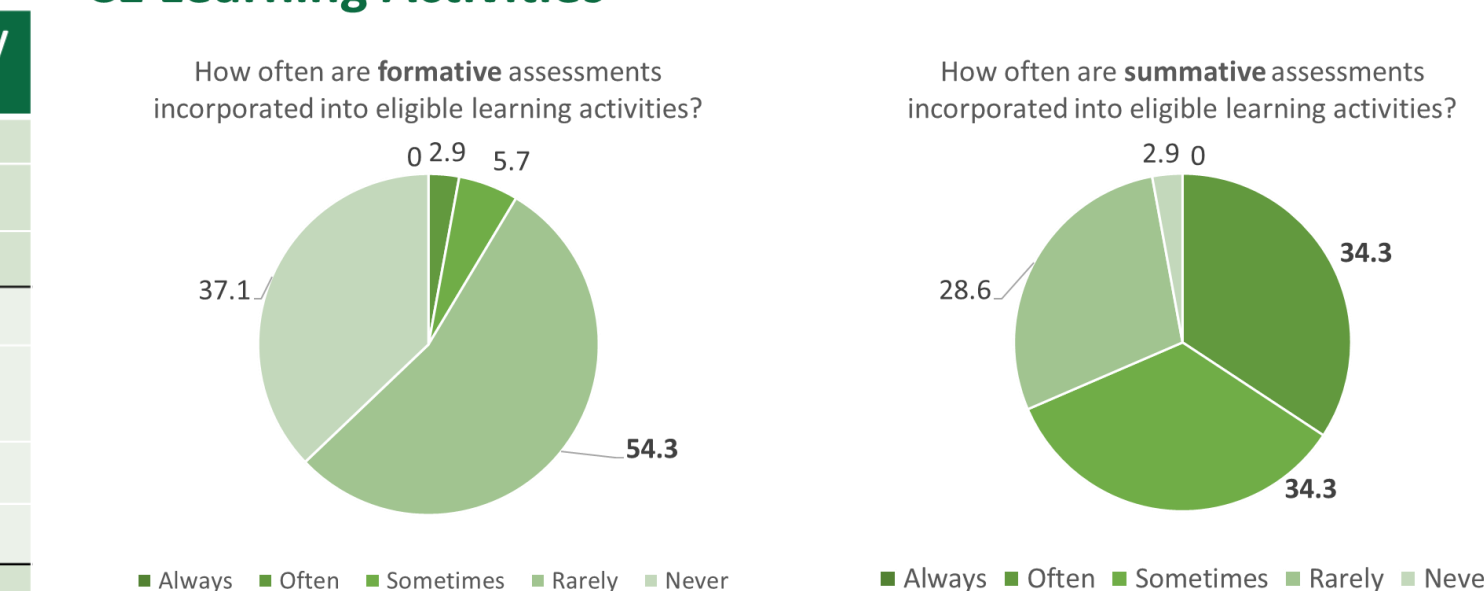
### Analysis of Responses Related to Existing CE Programs (N=35)

	Total (%)
Does your association currently offer your own CE courses?	
Yes	48.6
No	51.4
Does your association currently review the content of external CE courses?	
Yes	77.1
No	22.9

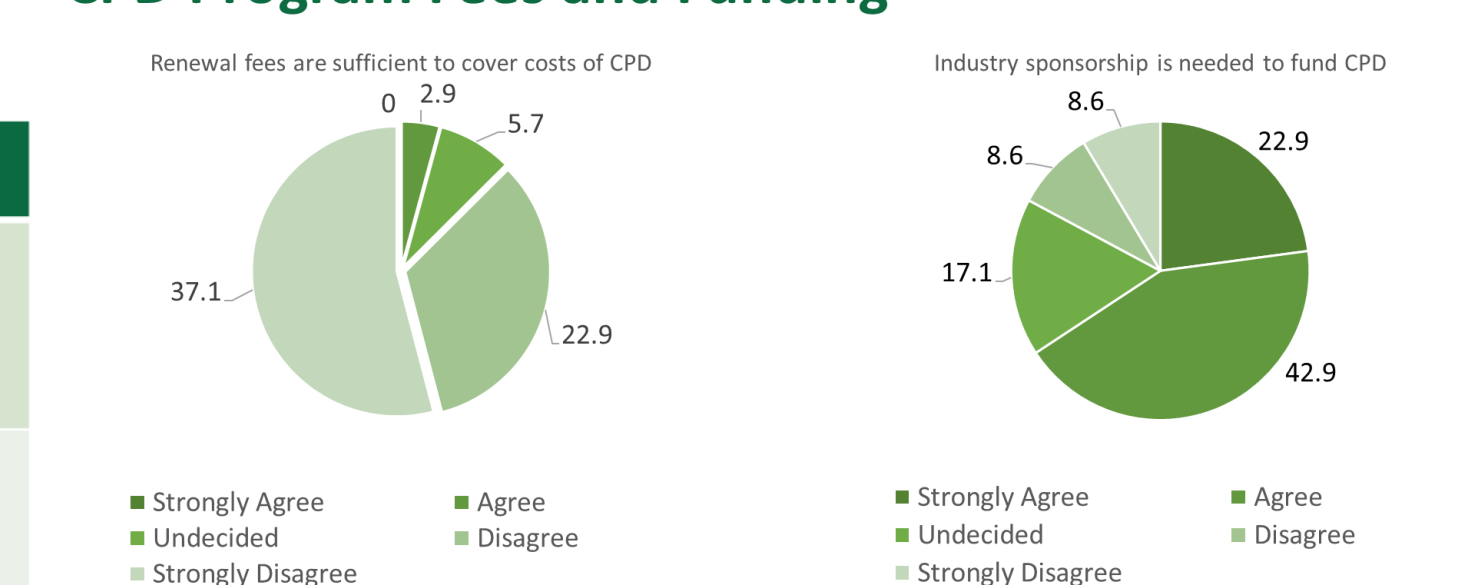
### CE Learning Activities



### CE Learning Activities



### CPD Program Fees and Funding



## Key Findings

- Learning activities and assessments are not often used nor seen as essential tools**, possibly due to funding, resources, and costs
- Summative assessments are preferred over formative assessments or portfolio reviews**, this is likely attributable to the increased resources required for formative assessments
- There was limited capacity amongst regulatory bodies to develop their own CE courses.** Over 75% of respondents incorporate content of external CE courses.

## Conclusions

- Learning activities and assessments are not seen as essential tools and are thus not often implemented into CPD programs as requirements
- Renewal fees are not enough to cover CPD programming and sponsorship/funding is required to support these programs

## Future Research

- Further work is needed to understand clinician preferences towards choosing specific learning activities and assessment strategies
- Research that focuses on the association between CPD and patient outcomes is also required

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## References

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