



EFFECTIVE FEBRUARY 2024

# Canadian (CA) Supplemental Exam Handbook



# Table of Contents



- About the CA Exam..... 3
- Value and Eligibility..... 4
- CA Exam Outline ..... 5
- CA Exam Content Outline ..... 6 - 8
- CA Exam Preparation Resources ..... 9
- CA Exam Application and Scheduling..... 10
- Purchase/Retake/NDA..... 11
- Taking a Remote Exam..... 12
- On the Day of the Exam ..... 12
- Exam Rules: Testing Area..... 14
- CA Exam Rules: Conduct..... 15

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# About the CA Exam



*This handbook is for those interested in writing the Canadian Supplemental Exam (the 'CA Exam'). For information regarding the Certified Professional in Healthcare Information and Management Systems Exam (the 'CPHIMS Exam'), please review the most current copy of the [CPHIMS Candidate Handbook](#).*

## **What is the difference between the CA and the CPHIMS Exams?**

The CA Exam differs from the CPHIMS Exam in two key areas:

- It covers competencies that are not included in the CPHIMS Exam
- It requires exam writers to demonstrate a higher level of understanding of the Canadian context

## **Who administers the CA Exam?**

The CA Exam is administered by Digital Health Canada (the CPHIMS Exam is administered by HIMSS) and can be purchased in the [Digital Health Canada online store](#). Digital Health Canada contracts with virtual testing provider Prolydian to assist in delivering the CA exam. Remote proctoring is provided by Proctor360.

## **About Digital Health Canada**

Digital Health Canada is a member-supported not-for-profit professional association that connects, inspires, and empowers those enabling digital healthcare in Canada.

Digital Health Canada fosters network growth and connection; brings together ideas from multiple segments for incubation and advocacy; supports members through professional development at the individual and organizational levels; and advocates for the digital health industry in Canada.

Digital Health Canada membership is ideal for anyone with an interest in health informatics, health information management, digital health, m-health, e-health, or related healthcare issues and practices.

**Digital Health Canada membership is not a requirement for writing the CA Exam, however, Digital Health Canada members enjoy discounted rates on exam writing fees. Visit the Digital Health Canada website to join Digital Health Canada and purchase the CA Exam at a reduced rate.**

# Value and Eligibility

## What is the value of the CPHIMS-CA Certification?

The CPHIMS-CA Certification Program promotes and enhances the digital health and healthcare information and management systems field through certification of qualified individuals. The program offers:

- Formal recognition of those individuals who meet the CPHIMS-CA eligibility requirements and who have passed both required examinations (CPHIMS Exam + CA Exam).
- Certification renewal through demonstrated personal and professional growth in the practice of healthcare information and management systems.
- A national standard of requisite knowledge for healthcare information and management systems professionals to guide employers, the public, and the profession.

## What are the eligibility requirements?

Candidates must meet one of the following eligibility requirements and pass both the CPHIMS Exam and the CA Exam to attain the CPHIMS-CA designation.

- 1. Baccalaureate degree from an accredited college or university plus five years of information and management systems experience** (work experience in systems analysis; design; selection, implementation, support, and maintenance; testing and evaluation; privacy and security; information systems; clinical informatics; management engineering), **with at least three of those years in a healthcare setting.** Healthcare setting includes provider of health services or products to a healthcare facility (e.g. hospital; healthcare consulting firm; vendor; federal, provincial/ territorial or local government office; academic institution; payer; or public health organization). - OR -
- 2. Graduate degree or higher from an accredited college or university plus three years of information and management systems experience** (work experience in systems analysis; design; selection, implementation, support, and maintenance; testing and evaluation; privacy and security; information systems; clinical informatics; management engineering), **with at least two of those years in a healthcare setting.** Healthcare setting includes provider of health services or products to a healthcare facility (e.g. hospital; healthcare consulting firm; vendor; federal, provincial/ territorial or local government office; academic institution; payer; or public health organization). - OR -
- 3. Ten years of information and management systems experience,** (work experience in systems analysis; design; selection, implementation, support, and maintenance; testing and evaluation; privacy and security; information systems; clinical informatics; management engineering), **with at least eight of those years in a healthcare setting.** Healthcare setting includes provider of health services or products to a healthcare facility (e.g. hospital; healthcare consulting firm; vendor; federal, provincial/ territorial or local government office; academic institution; payer; or public health organization).

# CA Exam Outline

## LANGUAGE

The CA Exam is provided in English only. If your first language is not English, and you would like accommodation (additional 30 minutes) to complete the exam, please email [education@digitalhealthcanada.com](mailto:education@digitalhealthcanada.com).

## CATEGORIES

CA Exam questions are categorized by the following three cognitive abilities: The ability to recall or recognize specific information; the ability to comprehend, relate or apply knowledge to new or changing situations; the ability to analyze and synthesize information, determine solutions or evaluate the solution.

## CONTENT AREAS

CA Exam questions are drawn from seven main content areas (see pages 6-8). These content areas align with domains identified in Digital Health Canada's [Health Informatics Competencies](#).

## NUMBER OF QUESTIONS

The CA Exam consists of 50 multiple-choice questions, with the final score being based on 45 of these questions (five random trial questions are included but not identified in the exam).

## DURATION

The CA Exam must be completed in 60 minutes (one hour).

# CA Exam Content Outline

28-32%  
of questions  
on the CA Exam  
will be about  
Information  
Management

*Candidates should start by examining the CA Examination Content Outline to familiarize themselves with the content categories and associated tasks. They should pay particular attention to tasks they do not regularly perform or are less acquainted with. It is important to note that questions in the CA Examination are rooted in job-related experiences and emphasize the application and analysis of knowledge, rather than merely memorizing facts. A Competency Gap Assessment is recommended to effectively pinpoint areas needing further study or review. After identifying these areas, candidates can then determine the most appropriate resources to address their learning needs.*

## CA Exam Content Outline

### Domain: Information Management

- A1.1 Advance the management of information as a key strategic resource
- A1.2 Demonstrate an understanding of the key attributes of data and information (e.g. quality, integrity, appropriateness) and their limitations within the context of intended uses
- A1.3 Determine appropriate data sources and gaps in data sources in relation to identified business needs across the healthcare system
- A1.4 Demonstrate an understanding of the data interrelationships and dependencies among the various health information systems (e.g., decision support systems, electronic health records, order entry, registries, etc.)
- A1.5 Demonstrate an understanding of the implications of ethical, legislative, and regulatory requirements related to the management of health information
- A1.6 Apply accepted policies, principles and guidelines for the management of health information (e.g. Digital Health Canada Guidelines and Canadian Health Information Management Association practices, business intelligence, data security, etc.)
- A1.7 Demonstrate an understanding of relevant health information standards and their appropriate use (e.g. classifications, nomenclature, interoperability, standards, messaging, terminology, etc.)
- A1.8 Integrate data quality principles and methodologies into the identification, use and management of information sources (people and systems)
- A1.9 Demonstrate an understanding of system integration and clinical workflow among health information systems (e.g. decision support systems, electronic health records, order entry, registries, etc.)
- A1.10 Demonstrate an understanding of the principles of good information governance
- A1.12 Demonstrate an understanding of existing privacy frameworks and how to apply them to projects (e.g. strengths and weaknesses of these frameworks)

# CA Exam Content Outline

## Domain: Technology Ecosystem

- A2.5 Apply appropriate health informatics standards and enterprise models to enable system interoperability (e.g., terminology, data structure, system to system communication, privacy, security, safety, governance)
- A2.9 Demonstrate an understanding of emerging technologies and their impact on healthcare including addressing the interoperability challenges to sharing health data among systems and providers
- A2.10 Promote the safe and appropriate use of health information technologies to ensure patient safety

10-14%  
of questions  
on the CA Exam  
will be about  
Technology  
Ecosystem

## Domain: Clinical and Health Sciences

- B3.1 Apply knowledge of basic clinical and biomedical concepts, clinical care processes, technologies and workflow for purposes of analysis, design, development and implementation of health information systems and applications
- B3.3 Recognize commonly used formats, structures and methods for recording and communicating clinical data and how these are incorporated into system and application use
- B3.5 Facilitate appropriate consumer use of health information and communication technologies

10-14%  
of questions on  
the CA Exam will  
be about Clinical  
and Health  
Sciences

## Domain: Canadian Health System

- B4.1 Demonstrate knowledge of health and health systems in Canada and appropriately apply this information to work products and services, including:
  - Key characteristics (e.g., governance, funding, structures, related organizations, emerging trends, etc.)
  - Determinants of health (e.g., environment, genetics, socioeconomic)
  - Key factors affecting healthcare (e.g., demographics, new technologies, incentives)
  - Understanding basic Health informatics associations across Canada (e.g., Digital Health Canada, Canadian Nursing Informatics Association, Information Technology Association of Canada, Canadian Institute for Health Information, Infoway, etc.)
  - Understanding the cultural and community context of care access and delivery
- B4.2 Demonstrate knowledge of the way HI benefits are realized and measured in the Canadian healthcare system
- B4.3 Demonstrate an understanding of different types of Canadian healthcare delivery models across the continuum of care and their interrelationships (e.g., hospitals, clinics, ambulatory centres and community health agencies, regional health authorities)

20-24%  
of questions  
on the CA Exam  
will be about the  
Canadian Health  
System

# CA Exam Content Outline

## Domain: Canadian Health System (continued)

- B4.4 Demonstrate knowledge of strengths and weaknesses of how people, resources and information flow through the health system and key drivers (e.g., chronic disease management)
- B4.5 Apply knowledge of the roles and relationships of health professionals along with the organizational and regulatory structure in which they work
- B4.6 Address the challenges related to the adoption and realization of clinical value of information systems in the health sector
- B4.7 Understand emerging needs and approaches to including the privacy of personal health information while improving care delivery and managing health systems (e.g., OCAP)
- B4.8 Promote the safe and appropriate use of health information technologies to ensure patient safety

## Domain: Healthcare Transformation

- C5.3 Promote an information culture by facilitating appropriate uses of information and knowledge
- C5.8 Apply best practices of change management in the implementation of new processes or systems

4-8%  
of questions  
on the CA Exam  
will be about  
Healthcare  
Transformation

## Domain: Project Management

- C6.2 Apply project management principles and best practices throughout the project life cycle by fostering collaboration and taking into account the unique challenges inherent in health information systems projects.

2-4%  
of questions on  
the CA Exam will  
be about Project  
Management

## Domain: Analysis and Evaluation

- C7.1 Identify and frames information queries in collaboration with stakeholders in order to meet their needs for analysis and interpretation of data
- C7.2 Identify relevant sources of data and information in order to: i. assess the quality of information, and ii. draw appropriate conclusions
- C7.4 Contribute to quality analysis by organizing and transforming data into reliable and meaningful information for diverse audiences
- C7.6 Demonstrate knowledge of indicators and metrics for healthcare delivery and population health

14-16%  
of questions on  
the CA Exam will  
be about Analysis  
and Evaluation



# CA Exam Prep Resources

## Core HI Course Bundle

Digital Health Canada has defined a set of core competencies as a guide for health informatics and digital health professionals. These recommended competencies are divided into seven core areas:

- A1 Information Management
- A2 Technology Ecosystem
- B3 Clinical and Health Services
- B4 The Canadian Health System
- C5 Healthcare Transformation
- C6 Project Management
- C7 Analysis and Evaluation

These seven areas form the basis for the modules and units of Digital Health Canada's Core Health Informatics course. The course is recommended for candidates pursuing the CPHIMS-CA credential or anyone with an interest in health informatics in the Canadian Health System.

The course bundle is available for purchase in the **Digital Health Canada store**; individual modules can also be purchased.

## Canadian Supplemental (CA) Practice Exam

This Canadian Supplemental (CA) Practice Exam will give you a better understanding of the format and content of the final CA exam. Use this exercise as an opportunity to get comfortable with the exam writing process and to sharpen your digital health knowledge.

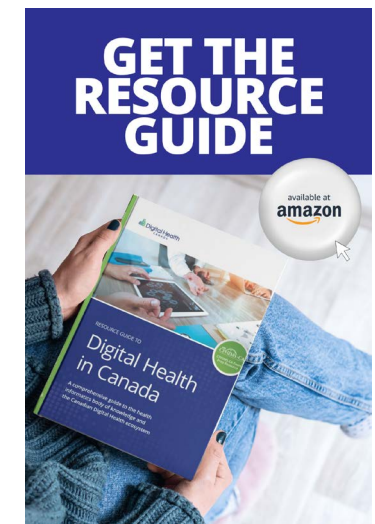
**Available for purchase in the Digital Health Canada store.**

## Resource Guide to Digital Health in Canada

While a single resource is not sufficient for preparing for the CA Examination, the *Resource Guide* is a perfect study companion. Topics include: The Canadian Health System, Clinical Health Services, Information Management, Technology Ecosystem, Health Analytics, Business Intelligence and Healthcare Transformation.

The *Resource Guide* can be used to:

- Provide foundational knowledge in digital health to new and experienced professionals
- Orient staff and stand as an ongoing reference for professional or academic development
- Provide insight to vendors or interest groups currently facing challenges entering digital health
- Supplement knowledge gaps that currently exist municipally and provincially due to varying terminology and knowledge of the field
- Act as a resource for students and emerging professionals who are new or entering the field of digital health
- Assist with standardizing processes carried out by individuals, teams, institutions and governing bodies; Assist with preparing for the Canadian Supplemental (CA) exam.



# CA Exam Application + Scheduling



## STEP 1 ELIGIBILITY

Candidates self-assess to determine eligibility by reviewing the [CPHIMS eligibility guidelines](#).

## STEP 2 PURCHASE

Are you eligible to write the exams? Now you can purchase the CA Exam in the [Digital Health Canada store](#).

Important! Ensure that you meet the eligibility requirements stated on page 4 of the CPHIMS eligibility guidelines.

## STEP 4 AUTHORIZE

You will receive an email from Digital Health Canada after you have purchased the CA Exam.

Follow the instructions in the email to set up your profile via the link.

Digital Health Canada will review your profile and Authorize you to test.

## STEP 5 SCHEDULE

You will receive an *Authorization to Test* email from Prolydian after you have registered.

Follow the instructions in the email to schedule your exam.

## STEP 6 WRITE

You're all set. Don't forget to prep with available [Digital Health Canada resources](#).

Good luck on your exam!

### IMPORTANT!

- Keep track of your exam date and time. There will not be a reminder.
- To prevent Prolydian exam notifications from going to your spam folder, white-list or add support@prolydian.com to your contacts.

The Canadian Supplemental (CA) Exam is computer-based and offered through the Prolydian system, proctored by Proctor360. The exam is administered by Digital Health Canada. Please contact [education@digitalhealthcanada.com](mailto:education@digitalhealthcanada.com) if you have any questions.

CPHIMS-CA

Prolydian

Proctor360

# Purchase/Retake/NDA



## Purchase the CA Exam

The CA Exam can be purchased at [digitalhealthcanada.com](https://digitalhealthcanada.com). The price is C\$345 for Digital Health Canada members and C\$455 for non-members (plus tax). Exam fees are non-refundable and non-transferable. You will forfeit your exam fee and will be required to reschedule if you:

- Cancel or miss your exam appointment with less than 48 hours notice
- Show up late
- Provide inadequate identification

## If you fail the CA Exam

The score report received once the exam results have been released to the candidate will indicate whether the candidate has passed or failed. If a candidate failed the exam, the score report provides diagnostic information which shows the competency areas the candidate did not perform as well in.

Candidates who are unsuccessful in the CA exam must wait 60 days before testing again. Candidates may retake immediately and their 60 days begin after the last exam date. They may retake up to 2 times per year of their initial exam date.

## Non-disclosure agreement

CA Exam takers will be asked to agree to the following non-disclosure agreement before starting the exam:

*"You understand and agree that the exam, and all information provided to you or obtained by you related to the exams, including, but not limited to, the questions and answers, are confidential information owned by Digital Health Canada.*

*You agree not to disclose, publish, reproduce, transmit or discuss information about the exam and any related information including, without limitations, the content, the questions, answers, length or number of exam segments, in whole or in part, in any form or by any means (orally, in writing, electronically, in any other media, in any internet forums or otherwise) to any third party or provide any third party access to the exams for any purpose.*

*You understand and agree that a breach of this agreement or the exam guidelines, which may include, but is not limited to, cheating and sharing information about the exams in any way with any third party, shall subject you to Digital Health Canada taking actions against you such as issuing a failing grade for the exam, banning you from Digital Health Canada Membership, prohibiting you from future certification, and/or civil legal liability and criminal prosecution.*

*I have read, I understand, and I agree to comply with all terms in this agreement."*

## IMPORTANT!

You must schedule your exam within 30 days of purchase

# Taking a Remote Exam

Digital Health Canada has made taking the CA Exam as convenient as possible. You can write the CA Exam from the comfort of your home or office through Prolydian with remote proctoring by Proctor360.

- Learn more about Prolydian ([LINK](#))
- Learn more about Proctor360 ([LINK](#))
- Proctor 360 System Requirements ([LINK](#))

## Proctor360 system requirements

Windows	Mac	Chromebook
Operating System: Windows 10 & Above	Operating System: Mojave & Above	Operating System: ChromeOS 112.0.5615.134 & Above
Browser: Chrome or Edge	Browser: Chrome or Edge	Browser: Chrome or Edge
Memory: 4GB (minimum)	Memory: 4GB (minimum)	Memory: 4GB (minimum)
Recommended Internet Connection: 10 Mbit/s upload, 10 Mbit/s download	Recommended Internet Connection: 10 Mbit/s upload, 10 Mbit/s download	Recommended Internet Connection: 10 Mbit/s upload, 10 Mbit/s download
Web Camera: 640×640 resolution (minimum)	Web Camera: 640×640 resolution (minimum)	Web Camera: 640×640 resolution (minimum)
Microphone	Microphone	Microphone
Speaker	Speaker	Speaker

Note: If using Proctor360's 360° Headset you will need 1 standard USB port.

# On the Day of the Exam



**Log in to the Prolydian exam portal using the link emailed to you and follow the onscreen instructions.** Prep and check time will not count as part of the time allotted for the exam (one hour).

**Start your exam when instructed to do so.** The exam will end 60 minutes after you start. An onscreen timer shows the time remaining. NOTE: you can access a Calculator and Notepad through the "Tools" icon.

**Questions are presented one at a time, with four answers to choose from.** Click and highlight to select an answer; change your answer by selecting another option. An answer may be changed multiple times.

NOTE: Candidates who have an issue with a particular test question are welcome to contact [education@digitalhealthcanada.com](mailto:education@digitalhealthcanada.com) with their concerns, which will be shared with the Digital Health Canada Exam Committee. To maintain exam security, decisions regarding question content or correct answers will not be disclosed.

**To proceed, click the "Next" button in the lower right-hand corner of the screen.** Any questions you are unsure about may be left unanswered or flagged for later. You can return to them later in the session, if time remains.

**When the exam is completed, the total number of questions answered is reported.** If fewer than 50 questions were answered and time remains, you may return to the CA Exam and answer the remaining questions.

**You will be notified by of your results via email from Prolydian 48-72 hours\* after completing the exam.** To prevent Prolydian exam notifications from going to your spam folder, white-list or add [support@prolydian.com](mailto:support@prolydian.com) to your contacts. \*Exam recordings may be selected for audit and affect these time frames

## IMPORTANT!

To be allowed to test remotely, candidates must present at least one form of government issued identification. The primary ID must be government-issued, current (valid), and must include the candidate's name, signature, and a photograph. Temporary forms of identification are not acceptable.

Valid examples of primary identification include a current driver's license, identification card, passport, or military identification card, all with photographs.

It is crucial that the candidate's name on the submitted application matches exactly with the names on their forms of identification.

# Exam Rules: Testing Area



- Your chosen testing area (the space you have selected in which to complete your exam) must be indoors in a walled space, clear and orderly, with good lighting and no background activity, noises, or disruptions.
- Your desktop or laptop must be on a table or desk.
- The workstation in your testing area and the surrounding space must be free of clothing; books or reference materials; pens and paper; and electronic devices, including watches, cell phones, tablets, second monitors, or other smart devices.
- If the proctor sees or hears a phone, smart watch, or alarm in the testing area after the exam has started, the exam will be cancelled.
- All personal items must be stored away from the testing area during the exam.
- Light clothing removed for comfort such as sweaters, suit jackets, hats, or scarves must be hung on the chair, not placed in laps or on the desktop. Outerwear such as heavy coats, parkas, or raincoats are not permitted in the testing area.
- No third party may be present in the testing area or enter the testing area for the duration of the exam.
- Content that could potentially provide an unfair advantage during your exam, including that posted on walls or within your immediate area, is prohibited.
- No breaks, food, or beverages are allowed during the exam.

## **IMPORTANT!**

Candidates found in violation of these rules risk dismissal from the exam session and loss of their exam results and fees. The CA Exam is recorded and evidence of misconduct is reviewed to determine whether a candidate will be permitted to re-apply to take the exam. If permission is granted, the re-application process and all accompanying fees apply.

# Exam Rules: Conduct



The following conduct is not permitted. Candidates observed engaging in any of this conduct during the CA Exam risk dismissal from the exam session and loss of their exam results and fees. The CA Exam is recorded and evidence of misconduct is reviewed to determine whether a candidate will be permitted to re-apply to take the exam. If permission is granted, the re-application process and all accompanying fees apply.

- Gaining unauthorized admission to the CA Exam
- Creating a disturbance or being abusive to or otherwise uncooperative with the remote proctor
- Displaying and/or using electronic communications equipment including but not limited to pagers and cellular/smart phones
- Allowing other people into the testing area and conversing with other people during the exam session
- Receiving help or being suspected of doing so
- Leaving the testing room during the exam session
- Attempting to record CA Exam questions in any manner or making notes
- Attempting to take the CA Exam for someone else
- Having personal belongings (cellphone, tablet, smart devices, watches and other items) in the testing area
- Using notes, books, or other aids
- Attempting to take screen shots or photos of the CA Exam screen

## **IMPORTANT!**

All questions on the CA Examination are copyrighted property of Digital Health Canada. Federal copyright law prohibits copying, reproducing, recording, distributing, or displaying these questions, either wholly or in part, by any method. Violations of these provisions may lead to significant civil and criminal consequences.



Digital Health Canada is a member-supported not-for-profit professional association that **connects, inspires,** and **empowers** those who are creating the future of health in Canada.

Our members are a diverse community of accomplished, influential professionals working to make a difference in advancing healthcare through information, technology, and data management.

Digital Health Canada fosters network growth and connection; brings together ideas from multiple segments for incubation and advocacy; supports members through professional development at the individual and organizational level; and advocates for the Canadian digital health industry.



## GOALS

- **Excellence for Members** – growing and empowering our membership and empowering through tools and relationships;
- **Acting for Equity** – supporting our membership and advancing our network with equity, diversity and inclusion; and
- **Leadership for Industry** – distinguishing Digital Health Canada as a knowledge authority and enabler of innovation in the digital health industry.

## VISION

Digitally connected and accessible healthcare for all.

## MISSION

Connect, empower, and inspire those enabling digital healthcare in Canada.

## VALUES

- **Service:** We serve our members by anticipating and responding to their changing needs.
- **Integrity:** We are values aligned in our approach to relationship building and decision making.
- **Innovation:** We bring awareness to and advocate for new innovations that challenge the status quo and support new models and methods to enhance healthcare.
- **Belonging:** We actively and equitably create a sense of belonging for the diverse professional and personal identities in our membership.
- **Continuous Learning:** We are committed to continuous learning to improve outcomes for our organization and members.
- **Collaboration:** We work intentionally alongside our members and strategic partners to advance common goals.