GEORGE MASON UNIVERSITY

Disease Intervention Certification Cost Containment and Subsidization Models

CENTER FOR PUBLIC HEALTH WORKFORCE DEVELOPMENT
ASPPH

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Acknowledgements
Report publication support was provided by Maanasa Kanimilli, MPH (formatting and publication support), Stella J. Carter, MFA (creative direction and brand oversight), Isabella Padilla (graphic design and layout), and Sarah Murray (copyediting).

Acknowledgement of Federal Funding: Funding for the Certified in Disease Intervention (CDI) program was provided through CK20-2003 Improving Clinical and Public Health Outcomes through National Partnerships to Prevent and Control Emerging and Re-Emerging Infectious Disease Threats from the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services (HHS) as part of financial assistance award NU50CK000612 funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, CDC/HHS, the U.S. Government, or ASPPH

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Project Purpose and Background

Disease intervention (DI) professionals are an essential part of the public health workforce, supporting the prevention and control of infectious diseases through activities such as case investigation, contact tracing, partner services, care coordination, outbreak response, and community engagement. Although DI work has historically focused on sexually transmitted infections (STIs) and tuberculosis (TB), DI professionals increasingly support responses to emerging and re-emerging public health threats. As the scope of disease intervention has expanded, so has the need for a standardized approach to preparing, training, and recognizing this workforce.

To address this need, the Centers for Disease Control and Prevention (CDC), in collaboration with national public health partners, initiated efforts to establish the Certification in Disease Intervention (CDI) program. The CDI program is designed to standardize and validate the knowledge, skills, and abilities of DI professionals, improve the quality and consistency of disease intervention services, and strengthen recruitment, retention, and professionalization of the workforce.

The CDI project has advanced through several phases over more than a decade. In 2013, CDC and the National Association of County and City Health Officials (NACCHO) collaborated on a feasibility assessment to evaluate the potential for a national DI certification program. NACCHO supported stakeholder engagement and contracted with International Credentialing Associates to assess workforce needs, training gaps, operational requirements, and sustainability considerations. Beginning in 2014, the Public Health Accreditation Board (PHAB) served as the coordinating organization for the assessment phase, leading foundational activities such as the DI workforce registry, Job Task Analysis, workforce enumeration studies, and evaluation of certification models. This work helped define DI competencies and supported the selection of a test-based certification model.

In 2022, the Association of Schools and Programs of Public Health (ASPPH) assumed leadership of the CDI project through a CDC-funded cooperative agreement. In partnership with the National Board of Public Health Examiners (NBPHE), subject matter experts, and national public health partners, ASPPH has supported certification infrastructure, examination development, stakeholder engagement, and strategies to strengthen pathways into the DI workforce.

As the CDI program moves toward implementation, ensuring that certification remains accessible and affordable is critical to supporting broad workforce participation. Financial barriers associated with certification and maintenance of certification may limit participation among current and prospective DI professionals and affect the long-term sustainability of the credential.

To address this need, ASPPH awarded a subaward to the George Mason University College of Public Health to identify and recommend strategies for offsetting the costs associated with CDI certification and maintenance of certification. The purpose of this project was to develop cost containment and subsidization models that can improve affordability and access to certification while supporting workforce recruitment, training, and retention. The resulting recommendations are intended to provide a strategic framework for public health agencies, academic institutions, and other stakeholders seeking to strengthen participation in the CDI program and support the continued growth of the disease intervention workforce. Disease intervention workforce.

CHAPTER 1

Objectives

A. Certified in Disease Intervention (CDI) Program

Disease intervention (DI) professionals have existed in the US since the 1940s as a federally-funded workforce responsible for confirming cases of syphilis and preventing its spread in local communities (Cope, 2019). Since then, DI professionals have expanded their role to confirm cases and prevent the spread of gonorrhea (starting in the 1970s) and HIV (starting in the 1990s). In the early 2000s, many DI professionals contributed to bioterrorism readiness and response as part of broader public health preparedness efforts after the 9/11 terrorist attacks. In 2009, DI professionals were mobilized during the H1N1 pandemic and they have subsequently supported responses to hepatitis, measles, and Mpox outbreaks. More recently, during the COVID-19 pandemic DI professionals expanded their role to confirm cases and prevent its spread (Bachmann, 2023). DI professionals include disease intervention specialists (DIS), but also many other public health workers that have long performed DI activities.

In recognition of the widening range of workers engaged in DI activities, the CDC approved a Certified in Disease Intervention (CDI) certification program to help expand and support the DI workforce. The CDC initiated a national disease certification project to standardize DI skills and professionalize the DI workforce. The project is being implemented by ASPPH in collaboration with the certification provider, the National Board of Public Health Examiners (NBPHE). The CDI certification is a skills-based national standard that aims to validate and unify the DI workforce. In summary, DI professionals help to reduce the spread of infectious diseases through activities such as contact tracing, partner services, health education, and improved access to health care (TIDI website, 2025).

This voluntary, national CDI certification will include an exam covering six knowledge areas, or domains, that exist at the core of the work of DI professionals, as defined below:

- Planning and Case Analysis
- Interviewing and Case Management Activities
- Field Services and Outreach Activities
- Surveillance and Data Collection
- Collaboration
- Outbreak Response and Emergency Preparedness

(NBPHE CDI Website, 2025)

B. Project Tasks

In January 2025, the ASPPH awarded a nine-month subawardee grant to George Mason University (GMU) to

develop recommendations for DI certification cost containment and subsidization models. The primary goal of the project is to identify cost-related barriers to CDI exam uptake, to find solutions to those barriers, and to strengthen demand for CDI certification to support DI professionals and their employers.

This project includes three main tasks under the ASPPH subawardee grant.

- **Task A** aims to identify other public health certification programs and assess their exam costs, educational pathways, and re-certification requirements to provide context for the launch of the CDI certification and inform the cost-model analysis.
- **Task B** focuses on sharing perspectives on the facilitators of, barriers to, and benefits of certification from nine listening sessions with DI workers, DI managers, and related professionals.
- **Task C** provides a cost-subsidization model analysis to estimate the potential take-up of the CDI exam under three scenarios (no subsidy, partial subsidy, and full subsidy).

C. Overview of the Final Report

The overall purpose of this final report is threefold:

- To present a matrix of public health certification programs, which includes certification exam costs, recertification requirements, and educational eligibility
- To summarize key perspectives on certification from nine listening sessions with organizations that employ DI workers from across the US
- To provide insights from a cost-model analysis to estimate the potential demand for the CDI exam (take-up) based on different assumptions of employer cost subsidization

CHAPTER 2

Methods/Activities

A. Task A - Certification Program Matrix

To evaluate the potential pricing range for the CDI program, the GMU project team performed a detailed review of existing certification programs in public health and other healthcare fields. The review looked at certifications relevant to public health nurses, correctional healthcare providers, public health educators, behavioral health specialists, and community health workers.

Certifications were organized by accrediting bodies to facilitate comparison of exam structures, costs, and eligibility requirements.

- The National Board of Public Health Examiners (NBPHE) administers the Certified in Public Health (CPH) examination.
- The National Commission for Health Education Credentialing (NCHEC) oversees the Certified Health Education Specialist (CHES) credential.
- The American Correctional Health Association manages the Correctional Nurse Certification (CCN) and related nursing specialties.
- The Behavior Analyst Certification Board (BACB) issues the Registered Behavior Technician (RBT).
- Grouping certifications this way highlights commonalities and differences in both cost structures and professional requirements.

Exam cost data and eligibility requirements were collected from the websites of the professional associations and certification bodies listed above. A cost matrix for certification exams was created to compare financial and programmatic requirements across different certifications, including the educational degrees needed for eligibility.

B. Task B - Methodology for Listening Sessions

This section of the report provides an overview of the methods for conducting listening sessions with DI workers, managers, and related personnel to gather perspectives on certification for DI professionals.

1. **Project Objectives**

   Objectives of the listening sessions were to:

   (1) Identify and understand the facilitators and barriers faced by DI workers in obtaining certification

   (2) Gather insights from DI workers and employers on existing programs or incentives that may be

used to support DI workers in pursuing certification

(3) Develop recommendations based on the listening session findings that can inform decisions aimed at improving access to certification for DI workers

2. Ethical Guidelines and Protocols

All protocols for the listening sessions were reviewed by the GMU Institutional Review Board (IRB), which determined that the project was not "human subjects research" based on the definition in the US federal regulations under the **Common Rule (45 CFR 46.102)**. "Human subject" means a living individual about whom an investigator (whether professional or student) conducting research (1) obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes that information or those biospecimens; or (2) uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens.

"Research" means a systematic investigation, including research development, testing and evaluation, that is designed to develop or contribute to generalizable knowledge. Activities that meet this definition constitute research for the purposes of this policy, whether or not they are conducted or supported under a program that is considered research for other purposes. For example, some demonstration and service programs may include research activities.

For this project, our team maintained the same standard for informed consent and confidentiality as projects that are determined to be human subjects research. For example, we obtained verbal informed consent from all participants at the start of the listening session. At this time, we also provided information about our protocols, including the goals of the project, expectations of participants, and confidentiality and privacy protocols. See Appendix B for the IRB Determination Letter.

3. Listening Session Format

Between June and September 2025, we conducted nine virtual listening sessions, with participants consisting of DI professionals, managers, and related workers. Each listening session was held with three-to-six individuals, with one session held with only one participant due to difficulties with scheduling. The listening sessions were conducted using Zoom videoconferencing software and lasted between 55 and 60 minutes. Dr. Debora Goldberg, along with other project team members, facilitated the listening sessions, which consisted of participants from a diverse group of DI professionals across the US, ensuring a comprehensive understanding could be gained of the facilitators of and barriers to obtaining certification for disease intervention.

4. Sampling and Recruitment

At the beginning of the project, we developed a list of potential organizations for participation in the listening sessions. This included state, county, and city health departments, correctional facilities, and public hospitals and health systems. After consultation with ASPPH staff, we updated our recruitment strategy to concentrate on state and city health departments with an emphasis on those located in the northeastern part of the US and those that included American Indian and Alaska Native (AI/AN) populations.

We employed a snowball sampling approach. This involved starting with a small number of initial participants ("seeds") who met the inclusion criteria and inviting these individuals to identify or refer

to us others in their social or professional networks who also fit the sampling criteria. This process allowed the sample to expand iteratively through participant referrals. We reached out to our current partners to gain insights into the recruitment of DI professionals and employers in various regions across the US. For example, we reached out to our contacts in the Department of Health in the states of Virginia, Washington DC, and Maryland.

5. **Data Collection**

We worked with staff members at ASPPH to develop a listening session guide for the listening sessions of DI professionals and employers and for planning for the recruitment of listening session participants. Topics addressed in the listening sessions included the costs associated with certification and ability to pay, availability of financial assistance, organizational support for certification such as leadership encouragement and time for training and exam testing, and personal experiences regarding similar training and certifications. During the listening sessions we asked participants about existing programs or resources that help offset costs for employees, such as tuition reimbursement, grants, or partnerships with educational institutions. We also asked about their perceptions of the value of certification to the DI field. See Appendix A: CDI Certification Listening Session Guide for more detailed information.

6. **Data Analysis**

All listening sessions were recorded using Zoom videoconferencing software and transformed into transcripts by the software. We used NVivo's data analysis software to analyze the transcripts from all listening sessions using thematic content analysis. Before analyzing the transcripts, we developed a set of codes based on a literature review of the DI workforce, our knowledge of certification processes in other fields, and on our meetings with ASPPH. To identify emerging themes, we used qualitative data analysis, which involved one cycle review of all transcripts, as well as weekly team meetings. Key themes centered on the perceived value and benefits of certification, facilitators of and challenges to certification, and strategies to overcome these challenges.

C. Task C - Cost Subsidization Model Analysis

For the cost subsidization model analysis, the GMU team conducted a literature review of journal articles on the DI workforce and cost subsidization models for certification exams. Although no prior studies examined cost subsidization models for public health certification programs, several studies helped, by providing assumptions regarding the potential size of the DIS workforce (PHAB Report, 2017) as well as the number of epidemiologists (Arrazola, 2022) and public health nurses engaged in DI activities (Castner, 2023). From these studies, we obtained parameters for the CDI exam cost subsidization analysis based on data from the U.S. Bureau of Labor Statistics (BLS).

In addition to the exploratory literature review, the GMU team participated in two videoconference meetings with ASPPH, NBPHE, and the Chair of the CDI Advisory Committee to gain a better understanding of the history of the CDI program, its development costs, the projected number of CDI examinations in the initial year, and pricing strategy. Based on these discussions, we learned that the total overall cost of administering the CDI exam has three primary components: (1) fixed costs, such as the development of CDI exam content and questions; (2) variable costs, which are incurred per applicant; and (3) other cyclical or periodic expenses.

NBPHE shared information about its fixed annual development costs, which include item development and verification, reference materials, marketing, outreach, and accreditation approval, which account for 80% or more of the total costs for the CDI exam. Variable costs (per applicant) include the CDI exam administration fee, vendor application fee, and the cost of mailed certificates or digital badges. Lastly, periodic costs involve a

job task analysis (conducted every five-to-seven years) and periodic updates to exam content.

The certification of DI professionals will be valid for three years before re-certification is required. For CDI re-certification, a second exam is not required. Instead, DI professionals will become re-certified after accumulating a minimum of 30 credits for professional development activities or continuing education (e.g., conferences, webinars) over three years.

Since CDI exam pricing was not finalized as of September 1, 2025, we used NBPHE's Certified in Public Health (CPH) exam fee ($385 this year) as our benchmark assumption for the CDI cost model analysis.

CHAPTER 3

Results/Recommendations

A. Task A - Certification Program Matrix

1. Exam Costs and Eligibility

Costs varied considerably across programs (Table 1). For example, the CCN exam costs approximately $280, with an annual recertification fee of $135. The CHES credential, on the other hand, ranges from $230 to $400 for the exam, accompanied by a recurring yearly maintenance fee of $60. The CPH exam costs $385, with a biennial recertification fee of $95. While the RBT credential only requires a high school diploma and training for eligibility, the CPH mandates at least a bachelor's degree and relevant field experience.

Table 1. Comparison of Certification Exam Costs and Educational Requirements

Certification Title	Exam Cost	Course Materials	Education / Experience Level
Correctional Behavioral Health Certification (CBHC-BS)	$240	$45	Bachelor's - master's degree
Correctional Nurse Certification (CCN)	$280	$80	B.S.N, (1+ years in field minimum)
Certified Health Education Specialist (CHES)	$230-$400	$75	A bachelor's, master's, or a doctoral degree from an accredited institution of higher education; AND one of the following: • An official transcript (including course titles) that clearly shows a major in health education • An official transcript that reflects at least 25 semester credits or 37 quarter hours of course work (with a grade "c" or better) with specific preparation addressing the Eight Areas of Responsibility and Competency for Health Education Specialists. These are: Area I: Assessment of Needs and Capacity; Area II: Planning; Area III: Implementation; Area IV: Evaluation and Research; Area V: Advocacy; Area VI: Communication; Area VII: Leadership and Management; and Area VIII: Ethics and Professionalism
Registered Behavior Technician (RBT)	$85	$50	High-school diploma - master's degree)

Certified in Public Health (CPH)	$385, retake fee $150 for each subsequent attempt	Three-month subscription - $59.95 One-year subscription - $85.95	At least a bachelor's degree and at least five years' public health work experience, OR at least a master's degree and at least three years' public health work experience
Certified Case Manager (CCM)	$195	$225 (Non-refundable): application fee; between $30 and $100 for a study guide or practice test book	Baccalaureate or graduate degree in a health or human services field that promotes the physical, psychosocial, and/or vocational wellbeing of the persons being served
Certified Infection Control (CIC)	$430	Depends on the provider, $695 - $895 with printed book/online access	Completed post-secondary education in a health-related field including but not limited to medicine, nursing, laboratory technology, public health, or biology. Post-secondary includes public or private universities, colleges, community colleges, etc.
Certified Social Work Case Manager (C-SWCM)	No additional cost, replacement C-SWCM certificates for $20	Information not available	A bachelor's degree in social work from a Council on Social Work Education (CSWE) accredited university with the social work program accredited at the time the degree was received
Certified Peer Educator (CPE)	NASPA institutional member: $89 per student; non-members: $109 per student	Comprehensive, 12-hour foundation training suitable for any collegiate peer education group	No student requirements
Peer Specialist Certification Program	Free, and includes a stipend	Training: six weeks of half-day training and stipend of $300	At least 18 years of age with a high school diploma, GED, or higher, and in recovery from a mental illness and/or substance use disorder for two years or longer
Certified Correctional Health Professional (CCHP)	$220, service charge of $15; additional subtypes of exams are available	Information not available	No educational requirements

2. Prior Examples of Cost Subsidization

Employer subsidization and organizational pricing models also varied across professions. Nursing-related certifications tended to receive higher institutional support. For instance, the CCN often involves institutional contracts of $30,000 to $35,000 for groups of 15 participants, with employers absorbing a significant portion of the cost. Similarly, the CBHC-BS required a minimum of $21,000 to $26,000 in organizational contracts for 25 students. In contrast, public health certifications such as the CPH and CHES offered both individual and institutional discounts. Still, they required smaller or no minimum cohort sizes, resulting in fewer direct employer subsidies. These organizational costs show the scalability of different certification programs and their effect on employer adoption. This pattern suggests that many clinical and nursing certifications are likely to receive cost subsidies from employers (e.g., hospitals and health systems) to cover the cost of taking their certification exams, whereas public health professionals are more likely to bear a greater out-of-pocket expense burden for taking their public health certification exams.

3. Recertification Costs

In addition to published exam fees, the GMU team gathered qualitative information from professional networks in correctional health and communicable disease intervention on potential additional costs that might be necessary for recertification (Table 2). The team also obtained information

through professional connections within the fields of infectious disease intervention. These insights revealed indirect costs often overlooked in official documentation, such as required continuing education units (for example, the CHES requires 75 credits for recertification), study materials, and training durations. Such commitments represent additional time and financial burdens beyond the certification exam itself.

Table 2. Comparison of Recertification Requirements

Certification Title	Recertification Cost	Recertification Requirements	Accreditation Length (yrs)
Correctional Behavioral Health Certification (CBHC-BS)	$80	40 CME/CE Credit Hours	Three years
Correctional Nurse Certification (CCN)	$135	60 CME/CE Credit Hours	Three years
Certified Health Education Specialist (CHES)	$60 (annual fee)	75 CE Credit Hours	Five years
Registered Behavior Technician (RBT)	$35	RBT Competency Assessment	One year
Certified in Public Health (CPH)	$95, Recertification is required every two years	Earn 30 recertification credits	Two years
Certified Case Manager (CCM)	$285 renewal fee plus any post-approved CE review fees	80 hours of CE	Five years
Certified Infection Control (CIC)	$430	Effective January 1, 2026, recertification can be obtained through infection prevention units (IPUs) or by retaking the initial CIC® proctored examination. The open-book, untimed recertification examination will no longer be offered.	Five years
Certified Social Work Case Manager (C-SWCM)	Not available	Not available	Two years
Certified Peer Educator (CPE)	Does not expire	Once a student is certified they do not need to retake the course or exam.	Not available
Peer Specialist Certification Program	Free	To maintain certification, at least 20 hours of continuing education must be completed within two years.	Accredited by the Substance Abuse and Mental Health Services Administration (SAMHSA)
Certified Correctional Health Professional (CCHP)	$100 (annual)	Requires 18 hours of continuing education every year, with a minimum of six hours specifically related to correctional healthcare	One year
Certified Clinical Trauma Professional (CCTP)	$49.99 for a one-year renewal $79.99 for a two-year renewal $99.99 for a three-year renewal	Usually requires six, 12 and 18 hours respectively for one year, two years, and three years of the renewal period	One year
Certified Clinical Trauma Professional Level II: Complex Trauma	$149.99 (two-year renewal fee)	Two-year renewal requires 12 clock hours of Complex Trauma, PTSD, EMDR, IFS, Trauma-Focused CBT, Somatic Experiencing, Dissociation or Cognitive Processing Therapy continuing education	One year
Certified Mental Health Professional (CMHP)	$85	20 hours per year due each renewal period	Two years

Certified Community Health Worker (CCHW)	1-3 Domains $50 4-6 Domains $75 All Domains (60-hour training) $250	Recertification every two years	One year

4. Integrative Analysis

By combining quantitative exam cost data with qualitative insights, the certification cost matrix allows for a more thorough comparison among accrediting bodies and workforce categories. Additionally, qualitative insights from professionals experienced in managing certification programs were included to identify hidden or indirect costs, such as continuing education requirements and training duration. This approach emphasizes the affordability of CDI exam pricing.

This approach aligns with established practices in public health program evaluations, where both financial viability and workforce accessibility are carefully considered. By evaluating not only certification exam costs but also the educational and experience prerequisites for eligibility, this report looks at accessibility to certification pathways and out-of-pocket pricing from the employee's perspective. Notably, the analysis shows that while some health care workers, especially in nursing, receive strong institutional backing and financial support, others, such as public health workers, depend more on individual financing. Recognizing these patterns is essential for creating a CDI certification that is both sustainable and accessible.

B. Task B - Results from Listening Sessions

1. Participant Characteristics

To provide context for the cost model analysis, we held listening sessions with employees from nine organizations that represent state and city health departments from across the US (Table 3). State health departments involved in the project included participants from Regions 1, 2, 3, 8, and 9. City health departments included Region 2 and 3 participants. There were five participating organizations from states with low population density (large rural areas) and four in states or cities with high population density. A total of 36 health department employees participated in the listening sessions, which included case managers, DI professionals, epidemiologists, field managers, lead investigators, program directors, public health advisors, regional health directors, and supervisors.

Table 3. Listening Session Participant Characteristics by U.S. Department of Health and Human Services (HHS) Region

Health Department Region	Date of Listening Session	Number of Attendees	Participant Titles	High/Low Population Density
Region 1	7.7.2025 7.28.2025 9.3.2025	10	Program Chief Supervisor Manager DI Professional/ DIS	Low
Region 2	7.2.2025 7.17.2025	11	Director Supervisor Public Health Advisor DIS Case Manager DIS Lead Investigator Epidemiologist	High – Very High

Region 3	6.16.2025 8.19.2025	10	Director Manager DIS Case Manager DIS Lead Investigator DI Professional/ DIS	High
Region 8	8.20.2025	<5	Manager STD Investigator Epidemiologist DI Professional/ DIS	Low
Region 9	8.18.2025	<5	DIS Case Manager	Low

2. Listening Session Themes

This section of the report reviews findings from listening sessions conducted between June and September 2025 for the project on Cost Containment and Subsidization Models for the CDI Program. Listening sessions were held with employees from nine state and city health departments across the US to understand their perspectives on certification, facilitators and barriers to certification, and recommendations for certification exam uptake (Table 4).

Perceptions of Certification Value/Expected Outcomes of Certification

In a key question posed to listening session participants, they were asked to rate the importance of certification for DI professionals. The answer options for this question used a five-point Likert-type scale ranging from Not important to Critically important (Not important; Minimally important; Moderately important; Substantially important; Critically important).

Key Themes and Supporting Quotes.

Theme 1: The importance of CDI certification is moderate or low for many DI workers.

While some individuals were extremely enthusiastic about the national certification for DI professionals, the majority of participants rated CDI certification as having "moderate" or "low" importance to their work and career. Individuals who were more likely to rate certification as "substantially" or "critically" important were either involved in developing the certification program (for example, writing questions for the exam) or were managers or supervisors of DI employees. Those who were more likely to rate CDI certification as having "moderate" or "low" importance were those who had worked in the DI field for a long time (i.e., five or more years), were proponents of on-the-job training, or were individuals who thought their current DI training courses were sufficient.

> "I understand the value of certification, but as a supervisor providing extensive hands-on training, what really matters to me is the materials and training provided to prepare for the certification… Whether someone passes a certification exam doesn't necessarily reflect how well they perform the work in practice. It really depends on the materials and opportunities provided beforehand and whether those can effectively prepare someone to be a successful DIS."—supervisor, DIS

Most participants placed high value on their on-the-job training programs for DI workers. This was seen as a critical approach for gaining the necessary skills for DI work. Several participants stressed that the focus and organization of DI work differed across states and reflected local and regional variations in

population characteristics and context, requiring on-the-job training for DI workers.

> "I have high confidence in our in-house training, you know, we know our community needs really well."—DIS supervisor

Participants raised a range of concerns that merit careful consideration in the implementation of a CDI certification program. These concerns highlighted challenges related to the cost of CDI certification and recertification; the possibility that the CDI credential might overlook local or regional disease pathways and care/consultation delivery mechanisms; apprehension that CDI certification could diminish on-the-job training opportunities; and fears that it might devalue the contributions of individuals with extensive DI field experience and training.

> "Every state is different, and I think we have come up with an excellent training model for our DIS in this state and the populations we serve."—DI professional

We also asked participants whether they thought certification would eventually improve the prevention and treatment of communicable diseases. Participants had difficulty answering this question and waited a few moments before responding. Several indicated "yes," agreeing that CDI certification would improve prevention and treatment of communicable diseases at the point when most DI professionals are certified. Many others responded "no" to this question or did not respond. The reasons provided by those responding "no" was based on the belief that DI professionals had little control over the societal norms and accepted behaviors that contribute to the spread of STIs and other communicable diseases.

Theme 2: The benefits of certification include standardization, professional recognition, and career development.

During discussions on the value and outcomes of certification, participants identified a number of benefits that would result from increased CDI certification of DI professionals. Key subthemes for participants who rated the importance of certification as "valuable" included increased standardization and skills, increased professional credibility, and increased number of job opportunities and career advancement possibilities. Many participants reported greater standardization as a key benefit to certification and discussed a need for standardized knowledge of STIs and other communicable diseases, motivational interviewing, data collection and survey methodologies, knowledge of community resources, and expertise in coalition building.

> "DIS certification is good in the sense that it ensures across the board… a standard skill set, and that whether you're in Vermont or Miami, you know that this DIS is going to come with the same package of skills."—program chief, DIS unit

Multiple participants stated that certification would lead to increased professional credibility, since most DI workers do not have a professional credential or license. Several participants described situations where physicians and other healthcare workers had discounted their perspectives regarding disease management strategies and care support plans for clients. These participants believed that the certification for DI workers would give them more professional credibility when interacting with healthcare providers.

> "…having a certification will give them that level of credibility with providers. A lot of the role is doing provider education and ensuring that the providers are following the CDC's treatment recommendations."—DIS supervisor

Many participants thought that CDI certification would lead to professional development and job opportunities. Several participants thought that CDI certification would offer the opportunity to interact with other DI professionals at conferences or training events. Numerous participants also thought that certification would allow them to transfer into other positions within the same organization or to transfer to DI positions at health departments in other states, counties, or cities.

> "People who are focused on getting to the next stage of their career or trying to advance in a way that doesn't require going back to get a full other degree but might indicate that they have a skill set that they could then translate into another position."—regional manager, public health department

Facilitators and Barriers to Certification

A large part of the listening session was spent on discussing the facilitators of and barriers to CDI certification. Participants most often pointed to external financial assistance, organizational support, and professional development as key facilitators of CDI certification. A large number of barriers to certification were described by participants. These included financial limitations, moderate-low importance of certification, and time needed to study and prepare for certification.

Theme 3: Facilitators for certification include external financial assistance, organizational support, and professional development.

As part of the listening sessions, we asked participants whether their organization offered education/tuition benefits for full-time or part-time employees. For all participating organizations, education/tuition benefits, if offered, were strictly intended to support employees with costs associated with higher education coursework. We also asked participants whether their organization covered the costs associated with certification for other types of health workers such as the Certified Health Education Specialist/Master Certified Health Education Specialist (CHES/MCHES) credential or the Certified in Public Health (CPH) credential. Responses from participants were mixed, with several participants stating that they knew of other health department employees who received financial support for certification and others stating that their organization did not provide financial support for certification.

Most participants stated that the most important facilitator for CDI certification would be the provision of external financial support through state or federal grants or through foundation funding. Most DI participants said they had no knowledge of available grant funding mechanisms. However, several participants in management positions had knowledge of possible grant funding sources and stated that including funding for CDI certification in grants would be one approach to supporting DI workers who would like to obtain certification.

Another facilitator many participants highlighted was organizational support for time to train, prepare, and take the CDI certification exam. Responses from DI managers and supervisors were mixed on whether their organization was able to give employees time for on-the-job training and to take the CDI certification exam. Most participants indicated that they received training on-the-job for their current DI work. DI managers and supervisors stated that they were supportive of providing time on-the-job for certification training and the exam. However, they said this would depend on the workload and availability of other staff to complete required tasks.
Several participants described current staff shortages as a barrier to taking on-the-job time for certification training and taking the exam.

Multiple participants mentioned that another facilitator would be tying certification/recertification to

national or regional conferences and networking opportunities that support professional development for DI workers.

> "To encourage others to pursue certification, it could be tied to a conference or other networking opportunities. It's really beneficial to learn from other states, especially if this is going to be a national certification. Having a space where DIS can share what's working, and what's not, would be helpful… having an in-person conference or networking event could be a strong facilitator."—DIS supervisor

Theme 4: There are many barriers to certification, including the cost of the certification exam, moderate-to-low value placed on certification, and time for training and taking the exam.

The major barriers to certification, as described by DI workers and DI managers, are paying for the cost of training and the certification exam and the time needed to complete these activities. These barriers are compounded by the moderate-to-low value that many DI workers place on CDI certification. Many DI workers expressed concern about paying for training and exam costs out of pocket, especially since they consider themselves to be low-wage public health workers. Some participants stated that they would pay the costs of the certification exam out of pocket. However, most stated that they did not have the disposable income or discretionary funds to cover these costs. Organizational support for paying the costs of training and the CDI exam was also seen as a potential barrier, since many participants stated that their organizations currently do not have dedicated funds to support these CDI exam costs.

> "A lot of those certification exams are pretty pricey, like $500 plus… for jurisdictions expecting DIS to pay for it themselves, a high cost could really be a barrier."—DIS manager

> "Paying $500 for certification is a lot… Someone elsewhere is getting paid more than I am, but I'm paying the same price… $500 would be a lot when my salary is like $20,000 or $30,000. I think a baseline salary requirement would be needed."—DIS worker, rural state

Participants also expressed concern over the time needed for additional training and taking the exam. Several participants stated that they could use on-the-job time for training and taking the exam. However, most said their workload was high and they had to meet specific CDC required metrics, which would prevent them from completing certification activities while on the job.

> "Being able to use work hours to study could be a facilitator, but it really depends on morbidity levels and priorities. If multiple new syphilis diagnoses need immediate intervention, we can't just set aside whole afternoons for studying."—DIS worker, urban state

> "One facilitator for us is that our staff has the time to do it; we can allot them time during work hours for certification. I know that might be harder in higher-burden jurisdictions, but for us, having that flexibility makes it more feasible."—DIS supervisor, rural state

Table 4. Listening Session Themes & Supporting Quotes

Theme Category	Theme Name	Definition	Supporting Quotes
Benefit	Standardization	Establishing consistent practices and expectations across the workforce	"I think a DIS certification is good in the sense that it ensures across the board… a standard skill set, and that whether you're in Vermont or Miami, you know that this DIS is going to come with the same package of skills."—program chief
	Professional Recognition	Gaining validation and credibility for skills and DI expertise	"A certification could make themselves [DIS] marketable to an employer working in the same role because they want that employer to recognize that they were coming in with a certain amount of training or approach to the subject matter."–DIS case manager
	Career Development	Expanding opportunities for advancement, training, and growth	"The benefit to something like certification is also networking, and so having access maybe to, like, a network of other certified disease intervention specialists, that can be really beneficial."—DIS supervisor
Barriers	Financial Limitations	High costs of certification or training, reducing accessibility	"If the burden of paying for a certification were on me, I would probably not opt into doing it."—DIS worker "I've never been in a situation at a local health department where we were about actually pay for our employees' professional development."—regional health director
	Moderate-Low Importance	Certification not viewed as essential by some employers or staff	"I think as a supervisor, it is moderately important."—case manager
	Time	Competing work and personal responsibilities, making it difficult to complete certification	"I mean, are people busy, juggling high caseloads. I don't know what kind of time they might necessarily have at some point, but I think we could support that, it's just, I don't know how much time they'd have." —DIS Supervisor
Facilitators	External Financial Support	Grants, scholarships, or organizational funding that reduce personal cost	"I feel like a big facilitator that could encourage certification would be the state supporting this and allocate funding for it or receiving federal support."—human resources staff
	Willingness to Facilitate	Employers or organizations showing openness to supporting certification efforts	"It's part of our agency mission and our strategic plan to have a valued and competent workforce and upskilling your workforce like this would fall very neatly into that bucket."—program —hief

Cost Subsidization Recommendations from Listening Session Participants

1. **Provide resources through state and federal grants to support the CDI certification process**

   One of the most prominent themes identified during the listening sessions was the financial obstacle encountered by DI professionals and related public health professionals when contemplating voluntary certification. In the absence of external support, numerous DI personnel indicated that they would probably not pursue certification. This finding mirrors attitudes toward other public health credentials, such as the CPH examination. One recommendation from participants to subsidize CDI examination costs was to include funding for certification in federal and state grants, which could potentially include the Strengthening STD Prevention and Control for Health Departments (STD PCHD) , the Ryan White HIV/AIDS Program, and the CDC's Public Health Infrastructure Grant. Through these financial mechanisms, health departments could reduce the individual economic burden on employees and demonstrate that certification holds organizational and governmental significance. This structural support would not only promote increased CDI examination uptake but could also improve access to CDI certification.

2. **Provide financial support and scholarships to reduce state and local funding barriers**

   Scholarships and targeted financial aid constitute a crucial facilitator for the adoption of certification. Another suggestion from participants was that scholarships could enhance awareness of the CDI exam and provide a mechanism to support individuals with certification costs. State and federal initiatives could include scholarship competitions or voucher programs, where candidates submit brief applications outlining their professional aspirations. For example, states might purchase prepaid packages of 10–20 exam vouchers at a discounted rate from the NBPHE and distribute them to local health department directors. Such measures would improve accessibility while ensuring that financial difficulties would not prevent otherwise qualified DI workers, public health nurses, or community health workers from obtaining certification. Notably, scholarship programs could also be linked to retention agreements, such as requiring recipients of the exam to remain employed for a designated period after certification, thus offering a return on investment for employers.

3. **Encourage employer-sponsored certification and support for professional development**

   The listening sessions found that organizational support acts as a significant catalyst for exam participation, especially in scenarios where a "full subsidy" is provided, covering both examination fees and time for training and taking the exam. Entities that endorse certification demonstrate a dedication to workforce development, which both incentivizes engagement and enhances morale and staff retention. For instance, several participants in the listening sessions remarked that their respective agencies already incorporated upskilling into their strategic frameworks, indicating a robust likelihood of employer endorsement. Promoting the integration of CDI certification into existing professional development policies could help establish the credential as an indicator of professionalism. Additionally, employers might opt to combine exam fee coverage with allowances for ongoing professional education, such as lifelong learning programs.

Other Supplemental Insights for DI Workforce Development

1. **Offer regional DI conferences to enhance networking, recognition, and training opportunities**

   Participants in the listening sessions suggested that offering professional conferences could provide unique opportunities for networking, recognition, and skills development. They consistently highlighted the importance of peer exchange and the professionalism associated with certification. Regional conferences for DI professionals could function as platforms for knowledge sharing, facilitating connections between certified and non-certified personnel, and promoting best practices across states and localities. Hosting conferences in multiple regions could also expand accessibility for individuals in rural and resource-constrained areas, promoting increased geographic access. These regional events could be co-hosted through collaborations between state health departments and national organizations, such as the National Coalition of STD Directors.

2. **Host a national DI-specific conference to promote professional identity and increase morale**

   Participants also suggested hosting regional and national conferences for DI professionals. While regional conferences focus on accessibility, a national conference would establish a wider platform for DI professionals, enabling them to participate in collective identity formation and advocacy. If supported by the CDC and ASPPH, a national gathering would function not only as a training venue but also as a forum for recognition and morale building. Additionally, such a national platform could strengthen the voice of DI professionals within the broader public health community, highlighting the importance of their roles in infectious disease prevention and outbreak response.

3. **Encourage employers to offer educational advancement incentives, such as salary increases or other benefits**

   To maintain momentum and promote recertification, participants suggested that employers could offer tangible rewards for certification. Incentives such as salary differences, promotion opportunities, or bonuses linked to CDI certification could help align individual workers' motivations with organizational objectives. However, as the listening session participants pointed out, salary increases might require additional grant funding to cover the increased personnel expenses. Participants suggested that salary increases would need to be reflected in future grant applications, which would increase the amount of the grant award. Educational incentives not only acknowledge employees' efforts but also provide a long-term value, encouraging continuous recertification and ensuring the long-term sustainability of the CDI program.

Other Contextual Considerations

1. **High value placed on existing on-the-job training**

   DI professionals have traditionally depended on hands-on, practical training delivered directly by health departments. This on-the-job training model is deeply rooted in organizational culture and is highly esteemed by both personnel and supervisory staff. Many DI professionals consider this form of training to be better suited to the realities of fieldwork than a standardized examination. Participants in the listening sessions frequently underscored the effectiveness of shadowing and direct supervision in preparing them for their responsibilities. Consequently, the introduction of a

national certification might need to be framed as complementing on-the-job learning.

2. **Union influence regarding adoption of CDI certification**

   Unions representing public health workers can significantly influence the adoption of the CDI certification. Unions may support certification if it is linked to clear advantages, such as salary raises, career growth, or improved safety. Conversely, unions could oppose certification if they viewed it as an unfunded mandate demanding new obligations without proper funding or job security guarantees. Concerns about access could also arise if employers were to cover CDI exam costs for some, but not all employees. Early involvement of unions in designing and implementing certification policies is thus essential to secure their backing. Engaging unions in discussions on financial support, continuing education credits, and career progression could help present CDI certification as a means of empowering workers rather than as something creating an added burden.

3. **Political use of CDI certification and distrust in centralized systems**

   Another challenge in the field is the potential politicization of CDI certification. As public health increasingly becomes a political battleground, some stakeholders worry that a centralized, national certification could be exploited for political purposes. The listening sessions also uncovered distrust in federal oversight among some participants. This distrust could foster doubts about the value or impartiality of a national certification program. Some comments from the listening sessions reflected this concern, with several participants questioning whether certification would serve as a means of recognition and standardization or be used as a tool for advancing certain political narratives. Also, some employers were concerned about the administrative and political consequences of requiring a national certification for a workforce that has traditionally operated at the local or state level. To address these concerns, transparent communication and a clear explanation of the benefits for workers and communities are recommended.

C. Task C - Cost Subsidization Analysis

The goal of the cost-subsidization simulation analysis is to estimate potential demand for the CDI exam among public health workers interested in obtaining a voluntary CDI certification to improve their professional development and job satisfaction. In this analysis, public health workers are divided into two target groups for the CDI exam. Group 1 workers are known to engage in DI activities and are employed in local health departments or public clinics. Group 2 workers are less frequently involved in DI activities but may still represent an additional source of demand for the CDI exam.

1. **Group 1 Workers**

   Group 1 includes three types of workers in local health departments or public clinics (Table 5). The first type of worker includes DI professionals who prevent the spread of sexually transmitted infections (STIs) or HIV (n = 1,600), as well as DI supervisors (n = 400) in local health departments. Baseline estimates were obtained from the existing literature (PHAB report, 2017). A second type of Group 1 worker includes epidemiologists (n = 1,498), who conduct DI activities related to monitoring and preventing the spread of infectious diseases within a local community. The estimate for the epidemiologist workforce was obtained from a recent study (Arrazzola, 2022). The third type of Group 1 worker includes public health nurses who conduct DI activities (n = 7,352), those employed in a federally qualified health center or public clinic (n = 2,279), and those working in a public health or community agency (n = 441). These workforce estimates were obtained from a secondary data analysis of responses to a 2018 national survey of registered nurses (Castner, 2023). While public

health nurses must have a state license to practice as a registered nurse (RN), epidemiologists and DI professionals are not subject to a mandatory licensure requirement.

In Table 5, the model includes parameter assumptions for three hypothetical scenarios and CDI exam take-up rates. The estimate of a 2% exam take-up rate for the DI workforce is based on a prior study of the national take-up rate for a CPH exam (Leider, 2023). All other exam take-up rates are hypothetical estimates based on the author's assumptions. The first column assumes a baseline scenario of **"no subsidy"** in which an employer does not provide any financial support to the employee to offset the cost of the CDI exam. In this baseline case, a public health worker is assumed to pay the full cost of the CDI exam ($385) out of pocket and is deemed to incur the opportunity cost of time spent studying for the exam (two-to-three days) as well as the time required to sit for the three-hour CDI exam. The second column assumes a **"partial subsidy"** in which an employer pays for most or all of the CDI exam cost ($385) but does not provide the employee with time off to study for the exam (two-to-three days) or to take the exam. The third column assumes a **"full subsidy"** scenario, in which the employer pays for all of the CDI exam costs and provides the employee with paid time off to study and take the exam.

Table 5. Cost-Subsidization Model with Group 1 Workers

	Infectious Disease Focus	Mandatory Licensure	NO SUBSIDY	PARTIAL SUBSIDY	FULL SUBSIDY
DI Workforce			Takeup (2%)	Takeup (10%)	Takeup (25%)
STI/HIV focused DI professionals	1,600	No	32	160	400
DI supervisors in local health departments	400	No	8	40	100
Epidemiologists					
Conducting DI activities	1,498	No	30	150	375
Public Health Nurses			Takeup (1%)	Takeup (5%)	Takeup (10%)
Conducting DI Activities	7,352	Yes			
in a Public Clinic or FQHC (31%)	2,279	Yes	23	114	228
in a Public Health Agency (6%)	441	Yes	4	22	44
Group 1 Workers (Subtotal)	**6,218**		97	486	**1,147**

Table 5 Notes: "Partial" subsidy assumes employer pays for CDI exam cost itself ($385), but no other paid time (CDI exam study time is on weekends or late nights). The "Full" subsidy assumes the employer pays for the CDI exam cost ($385) and provides two-to-three paid days to study for the CDI exam, as well as one day to take the exam. This model utilizes the CDC-approved definition of a disease intervention professional, which is not limited to specific job titles or disease categories. DI Professional Definition

Results from the cost subsidization simulation analysis show that about 100 Group 1 workers would potentially take the CDI exam without any employer cost subsidy. Given the modest earnings of many public health workers (with average salaries between $50,000 and $75,000) and uncertainty about whether an employer values the CDI certification itself, the "no subsidy" result of fewer than 100 workers (n = 97) can be attributed mainly to the financial barrier of the $385 cost of the CDI exam. This result is well below the target of 500 CDI exam takers anticipated by the NBPHE.

However, in the "partial subsidy" case, 486 workers are estimated to take up the CDI exam with some employer cost subsidization. The higher demand for the CDI exam is due to the lower out-of-pocket cost paid by public health workers and a clear signal that the employer values CDI certification, as evidenced

by offering a partial subsidy. The "full subsidy" case more than doubles the demand to 1,147 workers. With employer cost subsidization, the analysis suggests that it is feasible to reach a target of 500 CDI exam takers.

2. Group 2 Workers

Group 2 includes public health employees who are less commonly associated with DI activities but represent a potential source of additional demand for the CDI exam (Table 6). Although reducing the spread of infectious diseases is not the only focus of community health workers (CHWs), many CHWs gained valuable field experience in DI activities during the COVID-19 pandemic (Seiler, 2024). In the Group 2 analysis, we have included CHWs who conduct DI activities in local health districts (n = 2,927) or within healthcare systems (n = 91). The estimate for the national CHW count was obtained from a prior study in the literature (Lombardi, 2025). CHWs are not subject to a mandatory licensure requirement.

The simulation analysis model in Table 6 includes assumptions for three hypothetical scenarios ("no subsidy", "partial subsidy", "full subsidy") with CDI exam take-up rates based on the parameters applied to public health nurses. A CHW is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community they serve (APHA, 2009). Although CHWs have a general focus on providing health information and addressing unmet social needs for a broad array of patients, some CHWs with prior experience in DI activities may seek voluntary CDI certification (Seiler, 2024).

Table 6. Cost-Subsidization Model with Group 2 Workers

	Infectious Disease Focus	Mandatory Licensure	NO SUBSIDY	PARTIAL SUBSIDY	FULL SUBSIDY
Community Health Workers with DI Activities	Takeup (1%)			Takeup (5%)	Takeup (10%)
Total number	6,098	No			
Local health district	2,927	No	29	146	293
Healthcare system	91	No	1	5	9
Group 2 Workers (Subtotal)	**3,019**		30	151	**302**

Table 6 Notes: "Partial" subsidy assumes employer pays for CDI exam cost itself ($385), but no other paid time (CDI exam study time is on weekends or late nights). The "Full" subsidy assumes the employer pays for the CDI exam cost ($385) and provides two-to-three paid days to study for the CDI exam, as well as one day to take the exam. This model uses the CDC-approved definition of a disease intervention professional, which is not limited to specific job titles or disease categories. DI Professional Definition

Results from the cost subsidization simulation analysis indicate that only 30 Group 2 workers may take the CDI exam without any employer cost subsidy. Since DI activities may not be the primary focus of CHWs, the "no subsidy" result of 30 workers can be due to the financial cost of the exam as well as uncertainty regarding the value of CDI certification. However, this demand represents an additional pool of CDI exam takers beyond the 100 Group 1 workers (n = 97) noted in Table 5. In the "partial subsidy" case, 151 additional CHWs are estimated to take up the CDI exam with some cost subsidization. The "full subsidy" case doubles the demand to 302 CHWs. With employer cost subsidization and further outreach to Group 2 workers, the analysis suggests that it is feasible to reach a target of 500 CDI exam takers.

3. Recommendations

Based on the results of the cost-subsidization analysis, we have summarized our key findings and recommendations to provide cost offsets in order to improve CDI exam take-up.

1. **Without cost-subsidization, it will be challenging to reach the target of 500 CDI exam takers.** Requiring public health workers to pay $385 out of pocket for the cost of the CDI exam will create a significant financial barrier for most employees. In addition, public health workers may hesitate to take the CDI exam due to uncertainty about how much their employer values CDI certification. Therefore, we recommend that employers consider offering a partial or complete cost subsidy for the CDI exam to convey a strong signal to employees that the employer values CDI certification.

2. **Discounted exam fees through organizational affiliations can help to support CDI exam uptake.** For example, the NBPHE offers discounted exam pricing to workers in organizations that support the CPH certification. Instead of paying the full exam fee of $385, organizationally affiliated employees are eligible for a discount that reduces the cost to $315. We strongly recommend the use of discounted pricing for the CDI exam to improve uptake and build awareness of the CDI certification in organizations such as the National Coalition of STD Directors.

3. **Certification exam scholarships can raise awareness of the CDI exam and boost uptake.** Grants awarded to DI professionals or public health workers who submit formal applications can raise awareness of the CDI exam and provide insights into the motivation for seeking CDI certification. These CDI exam waivers could be supported through CDC funding. Additionally, one recommendation is to allow state departments of health to purchase a prepaid block of 10 discounted CDI exam vouchers, which could then be distributed to local health district (LHD) directors. In addition to receiving a CDI waiver or discounted exam voucher, a DI professional or public health worker would be eligible to receive notes of encouragement from supervisors and LHD directors to signal that the employer values CDI certification.

4. **Cost subsidization of the CDI exams may be possible with the braiding of existing grants.** Local health districts (LHDs) could use a braided funding strategy (which pools multiple funding streams) across two or more sources to support the $385 CDI exam fee. Although reporting for each financing source must be kept separate, this approach has the benefit of leveraging multiple grants. Potential federal funding sources might include Strengthening STD Prevention and Control for Health Departments (STD PCHD), Ryan White HIV/AIDS programs, and the Public Health Infrastructure Grant. One recommendation is to provide braided funding examples to support partial or complete cost subsidization of the CDI exam.

Two additional contextual recommendations were identified for the CDI program to consider as strategies to improve CDI exam uptake.

5. **Partnerships with healthcare systems and federally qualified health centers (FQHCs) could increase CDI exam uptake.** Some FQHCs hire community health workers who support and, in some cases, conduct DI activities focused on reducing the spread of infectious diseases. These organizations might have a greater financial capacity to subsidize CDI exam costs for employees with a DI focus. One recommendate is to disseminate information about the CDI exam with

national and state FQHC organizations.

6. **A follow-up evaluation survey for CDI exam takers is needed six-to-12 months after completing the exam.** A recommendation for the CDI program is to conduct a post-exam survey assessment of CDI exam takers. Questions might include the following: (1) To what extent was the CDI a valuable exam in demonstrating practical knowledge across the six domains? (2) How much does your employer value CDI certification? (3) Are you interested in and planning to obtain CDI recertification after three years?

CHAPTER 4

Challenges

We encountered several challenges in recruiting participants and scheduling listening sessions for the project. First, our sampling approach included contacting individuals at state and city health departments from our professional contacts, as well as those referred to us by ASPPH. We then used snowball sampling by asking participants to identify DI managers in other states and cities who might be interested in participating. We also conducted online searches to identify supervisors and managers of public health department units who were responsible for sexually transmitted infections (STIs), Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), and tuberculosis (TB). The combination of these approaches worked well in recruiting nine organizations to participate in the listening sessions. However, there were a number of additional challenges that should be taken into account for future efforts.

These included difficulties in identifying contacts for arranging listening sessions, difficulties in recruiting individual participants from human resources management or finance/accounting, and difficulties in arranging a suitable day and time for numerous DI managers and workers from one organization to attend.

The difficulties we experienced in recruiting participants for listening sessions include a lack of response to our outreach efforts, as well as receiving numerous bounce-back emails from employees who were no longer working for a specific health department. We also received several return messages from individuals at health departments stating that they recently participated in a similar data collection effort or were too busy to participate in our project.

Once we had recruited a health department to participate in the project, there were several challenges. It was difficult to arrange a time in the summer months for numerous DI professionals and managers and supervisors to attend. It was also hard for a DI manager/supervisor to recruit individuals from human resources, grants management, and the finance department, which resulted in few individuals with those areas of expertise participating in the listening sessions.

CHAPTER 5

Next Steps

Based on the results of the cost subsidization analysis, we identified several next steps for the CDI program to consider in order to improve CDI exam uptake.

- Implement a strategy of using organizational affiliation discounts to provide a lower out-of-pocket price for CDI exam takers.
- Assess the feasibility of using a braiding strategy of different grant sources to allow employers to offer partial or full cost subsidization for the CDI exam.
- Focus CDI outreach effort on potential employers of DI professionals to build awareness of the CDI exam and obtain "buy-in" and employer recognition of the value of CDI certification.

Additional considerations for successful CDI program implementation include the following:

- Target CDI outreach efforts to state health departments and DI supervisors (pre-paid block of discounted exam vouchers) to build CDI certification awareness.
- Consider potential demand for the CDI exam from DI specialists, epidemiologists, public health nurses, and community health workers with a DI focus.
- Adopt a post-CDI exam assessment (one year after completing the exam) to assess the employee's perceived value of CDI certification and the employee's willingness to seek recertification in three years.

References

American Public Health Association (2009). *American public health association support for community health workers to increase health access and to reduce health inequities.* 2009. https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/09/14/19/support-for-community-health-workers-to-increase-health-access-and-to-reduce-health-inequities

Arrazola, J., & Auer, S. (2022). Assessment of Epidemiology Capacity in State Health Departments - United States, 2021. *MMWR. Morbidity and mortality weekly report*, *71*(13), 484–488. https://doi.org/10.15585/mmwr.mm7113a2

Bachmann, L. H., & Kerani, R. P. (2023). Field Services-Facilitated Treatment and Prevention: Challenges and Opportunities. *Sexually transmitted diseases*, *50*(8S Suppl 1), S48–S52. https://doi.org/10.1097/OLQ.0000000000001757

Castner, J., Stanislo, K., Castner, M., & Monsen, K. A. (2023). Public health nursing workforce and learning needs: A national sample survey analysis. *Public health nursing (Boston, Mass.)*, *40*(3), 339–352. https://doi.org/10.1111/phn.13171

Cope, A. B., Mobley, V. L., Samoff, E., O'Connor, K., & Peterman, T. A. (2019). The Changing Role of Disease Intervention Specialists in Modern Public Health Programs. *Public health reports (Washington, D.C. : 1974)*, *134*(1), 11–16. https://doi.org/10.1177/0033354918813549

Leider, J. P., Yeager, V. A., Kirkland, C., Krasna, H., Hare Bork, R., & Resnick, B. (2023). The State of the US Public Health Workforce: Ongoing Challenges and Future Directions. *Annual review of public health*, *44*, 323–341. https://doi.org/10.1146/annurev-publhealth-071421-032830

Lombardi, B. M., de Saxe Zerden, L., & Fraher, E. (2024). Varying Estimates of Social Workers in the United States: Which Data Source to Use?. *Medical care research and review : MCRR*, *81*(5), 408–416. https://doi.org/10.1177/10775587241257983

Lombardi, B. M., Lombardi, B., Galloway, E., & Zerden, L. S. (2025). Understanding Available Data Sources to Estimate the Size and Distribution of Community Health Workers in the United States. *Medical care research and review : MCRR*, *82*(3), 276–283. https://doi.org/10.1177/10775587241304145

Public Health Accreditation Board (2017). Disease Intervention Specialist Certification Project. Final Report to the Centers for Disease Control and Prevention. pp.8-9. https://phaboard.org/wp-content/uploads/PHAB-DIS-Full-Report.pdf

Seiler, N., Horton, K., Organick-Lee, P., Heyison, C., Osei, A., Dwyer, G., Karacuschansky, A., Washington, M., Spott, A., & Pearson, W. S. (2024). Use of Community Health Workers to Help End the Epidemic of Sexually Transmitted Infections. *Public health reports (Washington, D.C.: 1974)*, *139*(3), 271–276. https://doi.org/10.1177/00333549231199481

APPENDIX A

Listening Guide – Disease Intervention Professionals

Project Title: Certification in Disease Intervention: Financing Models and Workforce Analysis to Enhance Public Health

Listening Session Protocol

Facilitator: _____

Note Taker: _____

Provider Type: _____

Organization: _____

Date: _____

Before Beginning the Listening Session:

1. Welcome the participant and thank them for participating in the listening session.
2. Summarize the intent of the project. Summarize the evaluation protocols for this listening session and for the data obtained from this listening session.
3. Restate the confidentiality policy: All written and oral reports, as well as other written materials arising from this project, written and oral reports and other written material coming out of this project will present only aggregate data and information. The participant responses will be kept confidential, and their name will not be cited.
4. Restate the voluntary nature of the project: The participant has the option to not answer any question they do not feel comfortable with and can stop the session at any time.
5. Describe the process for audio recording the listening session and transcribing for data analysis.
6. Describe the consent process for participating. If all individuals agree to participate in the project, the listening session can continue.
7. Ask if participants have any questions.

We will ask the following types of questions during the listening session to engage the respondent.

- Participant Demographics
- Organizational Characteristics

- Individual Knowledge and Perceptions of Cost/Funding for Certification
- Context and Work Environment (i.e., leadership support for certification)

Discussion

1. Name of Organization: _____
2. Contact Person Name: _____ Title: _____
3. Please describe your practice setting.
4. What is the primary geographic area served? (County/City and State)
5. Please describe the main population served.
6. Do you currently employ disease intervention (DI) professionals or other types of health professionals who perform the following tasks for disease intervention/investigation: disease intervention planning, patient interviewing and case management, field services and patient outreach, disease surveillance and data collection, and/or outbreak response and emergency preparedness?
7. What is your organization's primary focus area for disease intervention?
8. How important is certification for DI professionals?
9. Does your organization currently offer education or tuition benefits to full-time employees?
10. Does your organization currently offer education or tuition benefits to part-time employees?
11. Does your organization currently provide financial support for certification for other types of professionals?
12. What is your perception of the ability or willingness of the organization to pay for disease intervention professional certification costs for employees?
13. Can you talk about your perceptions of the value of disease intervention professional certification? How does your employer value disease intervention professional certification?
14. Can you talk about your perceptions of the following: certified disease intervention exam testing, study guide/exam review materials, and recertification costs?
15. What is your perception of the willingness of your employer to allow DI employees to complete the recertification process during work hours? For disease intervention/investigators, can you talk about your ability and/or willingness to pay for disease intervention professional certification training costs, exam costs and recertification costs?
16. What do you think are the main organizational barriers to assisting employees with their efforts to pursue disease intervention professional certification?
17. Based on the information I provided on the Certified in Disease Intervention certification for DI professional workers, is there other information that would be helpful in deciding on the appropriate

level of support for the certification?

18. Do you believe that a Certified in Disease Intervention certification will eventually improve prevention and treatment of communicable diseases? If yes, why? If no, why not?

APPENDIX B

IRB Determination Letter

This is a system generated email, DO NOT REPLY.

Notification of Not Human Research Determination

To: Debora Goldberg

IRB ID: STUDY00000522

P.I.: Debora Goldberg

Title: Certification in Disease Intervention

Description: The committee reviewed this submission and assigned a determination of Not Human Research. For additional details, click on the link above to access the project workspace.

This is a system generated email, DO NOT REPLY. Please contact the IRB Office with any specific questions at irb@gmu.edu.