HIV CLINICIAN WORKFORCE STUDY

SUPPORTING STATEMENT PART A:
JUSTIFICATION FOR HIV WORKFORCE SURVEYS

REVISED

MAY 25, 2012

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ATTACHMENTS

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1. Circumstances Making the Collection of Information Necessary

The United States is facing a growing demand for medical care related to HIV and AIDS. Because of advances in HIV treatment, people are living longer with the disease, and AIDS-related deaths are declining (Centers for Disease Control and Prevention [CDC] 2006). In 33 states with name-based reporting, the estimated number of people living with HIV or AIDS grew by 15 percent between 2003 and 2006; the estimated number of people living with AIDS alone grew by 24 percent (CDC 2006). About one-quarter of the people who are living with HIV or AIDS do not know they are infected, and many who know their serostatus are not in regular treatment (CDC 2006). As the CDC's recommendation for universal routine HIV testing becomes more widely adopted and linkage-to-care and adherence counseling strategies become more effective, the demand for HIV-related medical care will increase rapidly and create significant new challenges for the health care system (Kaiser 2008). The spread of the disease within racial/ethnic minority communities, the shift in the HIV epidemic from major metropolitan areas to more rural ones, the increase in age-related comorbidities as the infected population grows older, the development of health problems associated with long-term use of highly active antiretroviral therapy (HAART), and the expansion of health insurance coverage under health reform will also contribute to greater demand for HIV care.

Many policymakers and providers perceive looming barriers to future HIV-related health care services because of a shortage of trained and experienced clinicians. The current literature on the HIV health profession workforce emphasizes that physician availability might be declining because the workforce is aging, working fewer hours, experiencing greater pressure on personal time, facing greater complexity in treatment, and retiring earlier; in addition, the profession is not attracting large numbers of replacement clinicians (HIV Medicine Association [HIVMA] 2008; Gilman et al. 2009a; Health Resources and Services Administration [HRSA] 2010; Chen et al. 2006). Anecdotal information suggests that the shortage of clinicians available to treat patients with HIV or AIDS is already adversely affecting access to and quality of care. In a recent analysis of Medicaid policy reforms, providers reported that a lack of qualified clinicians willing to treat people with HIV has led to disruptions in care and deterioration in their patients' health (Gilman et al. 2009b). Providers interviewed for a qualitative HIV workforce study reported having to sacrifice basic primary and preventive care to meet the immediate clinical needs of their HIV-positive patients (Gilman et al. 2009a). In a letter to Congress, the HIVMA concluded: "Both the increase in patient load and the demands of HIV medicine are exacerbated by retirement and burnout among the first generation of HIV clinicians. Many of us from the first generation of HIV care providers will be retiring during the next decade, and there is not a sufficient and qualified pool of HIV medical providers to take our places" (HIVMA 2008).

The HIV/AIDS Bureau (HAB) within HRSA in the Department of Health and Human Services (HHS) is embarking on a 24-month quantitative HIV clinician workforce study to provide HRSA and other federal and state agencies with national and regional estimates of the number of primary care clinicians providing medical care to people living with HIV or AIDS in the United States, as well as projections of the magnitude of the shortage or surplus of HIV-related primary care clinicians through 2015. The study focuses on the supply and demand of health professionals who treat and manage care for patients living with HIV and AIDS. The study includes physicians (internal medicine, family/general medicine, and infectious disease); nurse practitioners; and physician assistants. To implement a forecasting model designed specifically to capture the unique characteristics of the HIV clinician workforce, HRSA proposes to conduct two national surveys. One focuses on HIV *clinicians* (defined as individual medical practitioners who provide care to a minimum number of patients with HIV or AIDS). The other survey focuses on HIV *practices* (defined as the clinical practices or facilities within which these practitioners provide care). The target respondent for the clinician survey will be the individual clinician and for the practice survey it will be the medical director or practice administrator. The primary purpose of the dual surveys is to collect comprehensive information necessary for developing HIV-specific input parameters for the workforce forecasting model. HRSA is requesting Office of Management and Budget (OMB) approval to conduct these two interrelated HIV workforce surveys.

Legislative authorization for this study comes from Title XXVI of the Public Health Service Act as amended by the Ryan White HIV/AIDS Treatment Extension Act 2009 (Public Law 111-87). (See Attachment A for the legislative authorization for this study.) The goal of the Ryan White HIV/AIDS Program is to improve the availability and quality of health care and supportive services for low-income and medically underserved individuals and families living with HIV and AIDS. The findings from this study will also help HRSA develop specific action steps to meet the goals of the White House Office of National AIDS Policy's National HIV/AIDS Strategy and Implementation Plan. The goals of the plan are to reduce new infections, increase access to care, improve health outcomes, and reduce health disparities for people living with HIV or AIDS.

2. Purpose and Use of Information Collection

To quantify the magnitude of the HIV workforce shortage, HRSA is seeking OMB clearance to conduct two surveys, one with HIV clinicians and the other with HIV practices. HRSA will use the information from the clinician survey to forecast provider supply relative to the demand for HIV-related medical care and to identify areas with potential shortages. HRSA will use the information from the practice survey to measure current capacity constraints and to assess the effect of changes in practice patterns on productivity. These two interrelated surveys will enable HRSA to conduct the first in-depth, quantitative assessment of workforce capacity issues related

to HIV care in the United States. With these data, HRSA and other stakeholders will be able to assess the size and distribution of the HIV workforce relative to the need for care; determine the potential magnitude of the HIV clinician shortage in the future; assess the potential impact of external trends, such as an increase in the number of newly diagnosed cases in care or an increase in the proportion of the infected population with health insurance; and develop effective strategies to meet the goals of the White House's National HIV/AIDS Strategy to reduce new infections, increase access to care, improve health outcomes, and reduce health disparities for people living with HIV and AIDS.

HRSA will use the information from the HIV clinician and practice surveys to (1) develop HIV-specific parameters for estimating and forecasting clinician supply, (2) obtain self-reported measures of HIV workforce capacity and its impact on access to and quality of care, (3) identify the determinants of HIV workforce capacity variation regionally, and (4) identify clinical practices associated with increases in HIV workforce productivity. Specifically, the study will enable HRSA to answer the following research questions:

1. How many clinicians currently provide HIV-related medical care in the United States? What are their characteristics? How are they distributed geographically?
2. What is the level of excess demand for HIV care in the health care market today? How does HIV workforce capacity vary by region?
3. What are the primary determinants of the variation in workforce productivity among HIV clinics in the United States today?
4. What specific factors will influence the effective supply of and demand for HIV-related primary care clinicians in the future?
5. Will the available supply of HIV clinicians be sufficient to meet the growing demand and need for HIV-related medical services in the future?
6. How does the capacity of the HIV clinician workforce vary by type of health care profession, practice setting, and region?
7. What are the most effective strategies for increasing the capacity of the HIV clinician workforce to meet the growing demand for care?

The survey instruments have been designed to collect the information needed to answer these research questions. The clinician survey will include questions related to the clinician's age, gender, medical profession, medical specialty, number of hours spent in direct patient care, size and characteristics of HIV patient load, primary practice characteristics, patient management strategies, plans to increase or decrease the number of hours spent in direct patient care, and plans for retirement. The practice survey will include questions related to the type and size of the clinic, clinic specialty

and affiliation, number and acuity of patients, acceptance of new patients, number and composition of staff, type of staffing model and patient management strategies, meaningful use of electronic medical record systems, appointment scheduling practices and policies, and appointment wait times and length of visits. Attachment B provides the HIV clinician instrument (Attachment B-1) and the HIV practice instrument (Attachment B-2).

HRSA proposes to use pharmacy and outpatient medical claims obtained from a national health care data warehouse and analytics organization to identify clinicians in all 50 states and the District of Columbia who individually provide and bill for a minimum volume of HIV-related medical care (measured by the number of patients with HIV or AIDS, the number of visits for HIV-related medical care, or the number of HIV-related prescriptions).[1] Using the national provider identifiers on claims with an HIV-related diagnosis, procedure, or drug code, HRSA will create a list of practitioners who bill for HIV-related medical services. HRSA will also include providers who are members of one of the two HIV medical societies in the United States (American Academy of HIV Medicine [AAHIVM] and HIVMA), as well as clinicians who attended the national HIV clinical care conference in any of the past four years. From these claims and administrative data sources, HRSA will identify nearly all clinicians providing clinical care to patients with HIV or AIDS. From this list of providers, HRSA will create a master list of HIV primary care clinicians using the HIVMA's minimum volume standard for quality HIV care. HRSA will use this census of HIV primary care clinicians to draw a nationally representative sample of 5,000 clinicians and 500 practices to be surveyed. By using a national probability sample, the surveys' results will be generalizable at the national and regional levels. (HRSA has attached the design report, with a more complete discussion of our survey design and sampling methodology, as Attachment A in the **Part B Supporting Statement**.)

Commercial List Coverage. To evaluate the completeness of the SDI claims and the appropriateness of the data for identifying the universe of clinicians who manage care for a significant number of patients with HIV on an on-going basis, we asked our contractor to conduct an ex-ante review of the claims database and to summarize the findings in a technical memorandum dated March 25, 2011 (Attachment I). SDI collects and maintains a warehouse of both pharmacy (RX) and medical (DX) claims from all payer sources, including managed care plans, billing providers, and geographic regions. The RX database includes electronic final-action claims submitted primarily by retail pharmacies. Although the RX file likely includes a large and nationally representative group of retail pharmacies, specialty pharmacies and pharmacy claims for mail-order prescriptions are underrepresented in the database. The RX file captures approximately 50

[1] We will determine the exact threshold for defining the HIV clinicians for this study after reviewing the claims data. HIV providers who participated on a review panel for this study proposed using a cutoff of 20 unique patients to identify the survey frame for this study.

percent of all electronically transmitted pharmaceutical records in the country and includes between 120 and 130 million covered lives. The DX file includes medical claims transmitted electronically between providers and payers via third-party “transaction houses” or medical practice management companies. The DX database captures approximately two-thirds of all electronically filed medical claims in the country, includes roughly 1.1 billion records per year, and represents about 157 million covered lives.

The 2011 RX and DX files contain 89,638 physicians in family and general practice medicine (representing 84 percent of those listed in the AMA master file); 89,845 physicians in internal medicine (representing 66 percent of those listed in the AMA master file); and 5,453 physicians in infectious disease medicine (representing 66 percent of those found in the AMA master file) (see Table 1 in technical memorandum dated March 25, 2011). Because the AMA master file includes approximately five percent of physicians who are not engaged in direct patient care, the effective treatment universe counts are likely smaller than shown in Table 1, which increases the effective coverage of the SDI claims database. The remaining tables in the March 25, 2011 technical memorandum show the number and distribution by payer and state of clinicians with at least one HIV-related claim. The RX file contains 27,885 clinicians who prescribed at least one HIV prescription, representing 536,956 projected patients, in 2010 (see Table 21 in technical memorandum). The DX file contains 70,289 clinicians who submitted at least one medical claim with an HIV-related diagnosis code (see Table 5A1 in technical memorandum). We circulated these state-level counts among several program officers for our state grants and they confirmed that the counts are consistent their understanding of the number of HIV clinicians in their states. In addition, the projected number of HIV patients in care based on the RX file (536,956) is consistent with the treated prevalence of HIV nationally (see Table 21 in technical memorandum).

To assess the completeness of the source after identifying the survey frame, we asked our contractor to compare the list of HIV clinicians identified from our analysis of SDI claims with the membership lists of the two HIV medical societies in this country: the HIV Medicine Association (HIVMA), an affiliate of the Infectious Disease Society of American, and the American Academy of HIV Medicine (AAHIVM). The results of this ex-post analysis of the survey frame is included in the technical memorandum dated January 25, 2012 found in Attachment J. Eighty-five percent of the 3,931 members of HIVMA or AAHIVM who met our medical profession and specialty criteria were identified through our analysis of SDI claims. (See Table 5 in the January 25, 2012 technical memorandum.) The percentage of HIV medical society members who were captured on the SDI claims file was similar for physicians and nurse practitioners/physician assistants. Forty-eight percent of the member physicians who were identified on our claims file fall into our high-volume group (that is, treated 10 or more HIV patients in 2010), compared with 40.0 percent among nurse practitioners and physician assistants. We shared these findings with the directors of HIVMA and AAHIVM, and they

confirmed that the results of the SDI claims analysis are consistent with their understanding of the number of clinicians managing HIV care on an on-going basis. The directors explained that approximately 15 percent of their members focus on research, work in industry, serve as pharmacists, are in medical school, and/or have other roles where they do not provide or only do minimal patient care.

One limitation of the use of claims data to identify the baseline supply of HIV clinicians is that claims data will not capture clinicians who do not bill for their services under their own names, such as many nonphysician clinicians. We will address this limitation through the HIV practice survey. This survey will be sent to a sample of the practices in which the sampled clinicians practice. To estimate the number of nonphysician clinicians providing HIV services who are not billing independently, we will include the following question on the survey:

- We are interested in the number of clinician FTEs in this clinic and the share of these FTEs that is allocated to caring for patients with HIV or AIDS. In column A, please indicate the number of clinician FTEs in this clinic providing patient care in general. In column B, please indicate the number of clinician FTEs devoted to HIV patient care.

Type of Clinician	Column A Number of FTE clinicians in total patient care	Column B Number of FTE clinicians in HIV patient care
Infectious disease specialists		
Primary care physicians		
Physician assistants		
Nurse practitioners		

Note: Primary care physicians include internal medicine, family/general medicine, pediatrics, and geriatrics.

We will use responses to this survey question to estimate the ratio of nonphysician HIV clinicians to physicians providing HIV services. We will assess the variation in this ratio across practice settings and geographic areas (for example, regions and urban versus rural areas) and incorporate it into the baseline estimate of nonphysician clinician supply. Then, the baseline supply of nonphysician clinicians nationally will be calculated for each geographic areas and practice settings and nationally, based on the number of sampled physicians multiplied by this ratio.

Outreach and Engagement Materials. HRSA is in the process of conducting a marketing campaign among HIV clinicians and practices to publicize the importance of the study and to encourage sample members to participate in the survey. A list of venues in which HRSA has disseminated information about the pending survey follows. In addition to these venues,

HRSA will provide an announcement and informational brochure about the survey at conferences attended by HIV clinicians, such as the Conference on Retroviruses and Opportunistic Infections (CROI), the Ryan White Provider Clinical Conference, and the AIDS Institute Conference.

- Monthly and biweekly emails to Ryan White HIV/AIDS Program grantees and stakeholders
- CDC/HRSA Advisory Committee meetings (November 2010, May 2011, and November 2011)
- HHS Minority AIDS Initiative (MAI) Advisory Group meetings (October 2010, March 2011, and September 2011)
- HRSA Office of Regional Operations meeting (September 2011)
- HRSA/HAB HIV Workforce Consultation meeting (February 2011)
- CDC Prevention Conference (August 2011)
- Ryan White HIV/AIDS Program All Grantee Meeting (August 2010)
- HRSA/HAB Consultation Meeting on HIV Workforce (2008)
- "30 for 30 Campaign" meeting at HHS with women living with HIV or AIDS

The data collection process will involve several mailings. First, HRSA will mail clinicians and practices advance letters, along with an informational brochure about the study, requesting sample member participation, introducing the contractor who will collect information, and notifying participants that they will shortly receive a survey packet from the contractor. Ten days after mailing the advance letter, the contractor will mail the survey packet. The survey packet cover letter will solicit cooperation from the sample members, mention the honorarium payment (clinicians only), and refer questions to the contractor's survey operations center. Other material in the packet will include a paper copy of the survey instrument, a business reply envelope for returning the completed instruments, and a URL address and unique user name and password in case the clinician sample member prefers to complete the survey via the web-based instrument (available for clinician respondents only). The contractor will mail similar packages to sampled practices; because the practice instrument is in paper format only, there will be no URL address. In addition, the contractor will mail two letters and conduct telephone calls prompt nonrespondents to complete the surveys.

Attachment B-1 contains the paper version of the clinician survey, Attachment B-2 provides sample web-based questionnaire screen shots for the clinician survey, and B-3 includes the practice survey instrument. Attachments C-1 and C-2 include the informational flyers for the clinician and practice surveys. Attachment D provides additional respondent materials, including the advance letter from HRSA to sample clinicians and practice

administrators (Attachments D-1 and D-2), the cover letter from the survey contractor to sample members (Attachments D-3 and D-4), the prompt letters to nonrespondents (Attachments D-5 through D-10), the URL address and personal password for accessing the web-based clinician instrument (D-11), the thank you letters from the contractor to respondents (Attachments D-12 and D-13), and promotional material (Attachment D-14).

3. Use of Improved Information Technology and Burden Reduction

To minimize respondent burden to clinicians, HRSA will offer HIV clinician sample members the option of responding by one of three survey modes: web, mail, or telephone. Telephone interviews will be conducted using the mail (paper) instrument. The cleaned data from the mail survey will be entered into the same electronic software in which the information from the web instrument was collected. Whether implemented via electronic or paper format, the clinician survey instrument will use the same questions and logical skips. The electronic software will improve the quality of the data by enforcing skips and automatically checking response ranges. The web instrument will be programmed using a Blaise software called WebSurv. The instrument will be user-friendly and will enable respondents to stop and start at will. Based on prior experience conducting multimode surveys, we expect approximately 50 percent of all completed clinician surveys will be completed on the web, 40 percent by mail return, and 10 percent by telephone follow-up. The HIV practice sample size is small (500 sample members with 350 expected completed returns) and does not warrant the additional costs of creating a web-based data collection instrument. HRSA will administer the practice survey by mail with telephone follow-up only. Survey operations staff will closely monitor the quality of the collected data and will call respondents to retrieve missing information or to correct erroneous entries.

4. Efforts to Identify Duplication and Use of Similar Information

The planned information collection effort does not duplicate any other effort and will provide unique information unavailable from any other source. This study represents the first effort to collect information that can be used to estimate, at the national and regional levels, HIV workforce supply relative to the demand for care, and to project these estimates through 2015. The study builds on, but does not duplicate, two prior surveys, one conducted jointly by HIVMA and the Forum for Collaborative HIV Research, and the other conducted by AAHIVM. Because the previous studies focused on a limited set of workforce issues, relied on nonrepresentative convenience samples, and collected a relatively small number of completed surveys, the information cannot be used to generate national and regional estimates of workforce capacity. There have been no other efforts to collect information that can be used to estimate the magnitude of the HIV clinician workforce surplus or shortage.

HRSA recognizes that some of the questions asked on the HIVMA/HIV Forum and AAHIVM studies, as well as on other existing health profession workforce survey instruments, are relevant, valid, and reliable for this study's target respondents. Where possible, HRSA has repeated or modified questions from other health profession workforce surveys for the HIV workforce surveys that are the subject of this information collection request. In developing the instruments for this study, we consulted the following survey instruments:

- 2008 Ryan White Part C Program Capacity Survey conducted by HIVMA
- 2008 American Academy of HIV Medicine Member Workforce Survey
- 2006 Survey of Clinical Oncologists conducted by the American Society of Clinical Oncologists and the Association of American Medical Colleges
- 2008 Physicians' Foundation Survey conducted by the Physicians' Foundation
- 2008 Community Tracking Study Physician Survey
- 2009 Rural Physician Survey and the Registered Nurse Survey conducted by the Colorado Health Institute
- 2009 Oregon Physician Workforce Survey conducted by the Oregon Department of Human Services
- 2005–2006 Rheumatologist Workforce Survey conducted by the American College of Rheumatology
- 2005 Arizona Physician Workforce Survey
- 2007 Podiatric Practice Survey conducted by the American Podiatric Medical Association
- 2006–2008 Physician Survey conducted by New York State Department of Education
- 2008 Medical Practice Survey
- 2008 Survey of Cardiologists

Attachment E is a table listing question sources, whether borrowed or modified from existing instruments or newly created for this study.

5. Impact on Small Businesses or Other Small Entities

Respondents for the clinician survey are physicians, physician assistants, and nurse practitioners who treat and manage care for a minimum number of patients with HIV or AIDS. Clinician survey respondents will respond for themselves, not for their practices. HRSA has made every effort to limit respondent burden by designing the clinician survey to take no more than 20 minutes to complete and by making the survey available in multiple modes.

Respondents for the practice survey are practice administrators, and the practice survey sample might include small businesses. HRSA has attempted to minimize the impact on small businesses by designing a practice survey that should take no more than 30 minutes to complete and by limiting the sample size to the minimum number needed to gather the necessary data.

The four program managers that participated in our pre-test of the practice survey, including several from small practices, reported that they were able to answer the questions within the length of time included in our burden estimates. In addition, given the way in which we identified our survey frame based on high-volume practitioners, most practices will be treating a large proportion of patients with HIV, and thus the aggregate practice-level information requested on the survey is likely to be readily available to them without consulting medical records. We believe that small practices that focus on the treatment of patients with HIV will be able to complete the survey without consulting their medical records, thus adding no additional burden to these practices.

6. Consequences of Not Collecting the Information or Collecting the Information Less Frequently

This is a one-time data collection effort; each sample member will be surveyed only once. If the data are not collected, HRSA will be unable to accurately assess the ability of the current and projected HIV clinician workforce to meet the growing demand for HIV-related medical care. The survey data will help HRSA and other federal and local program administrators prepare for meeting the expected increase in demand for care under health reform and to develop effective action steps for achieving the goals of the White House's National HIV/AIDS Strategy and Implementation Plan.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances related to the proposed data collection.

8. Comments in Response to the *Federal Register* Notice/Outside Consultation

A 60-day notice for this study was published in the *Federal Register* on May 27, 2010, Volume 76, No. 103, pp. 30949–30950. The 30-day notice was published in the *Federal Register* on November 29, 2011, Volume 76, No. 229, pages 73652-73653. A second 30-day notice was published in the *Federal Register* on January 10, 2012, Volume 77, No. 6, pages 1495-1496.

Public comment and responses. No public comments were received in response to the 60-and 30-day Federal Register notices.

Consultation outside the agency. On February 23 and 24, 2011, HRSA convened a group of expert consultants and other stakeholders in Washington, D.C., to discuss the goals of the study, the design of the HIV clinician supply and demand forecasting model, the survey design and methodology, and the development of the survey instruments. In addition to the government sponsors and staff from the organizations contracted by HRSA to conduct this study (Mathematica Policy Research and The Lewin Group), participants invited to the expert consultation meeting included the following:

- Andrea Weddle, M.S.W
  HIV Medicine Association
- Bob McNellis, M.P.H, P.A
  American Academy of Physician Assistants
- Clese Erikson, M.S.
  Association of American Medical Colleges
- James Friedman, M.H.S.A.
  American Academy of HIV Medicine
- Jason Farley, Ph.D., M.P.H., C.R.N.P.
  Johns Hopkins School of Nursing; Johns Hopkins AIDS Service
- Jean Moore, Ms.N.
  Center for Health Workforce Studies
- Kathleen Clanon, M.D.
  Alameda County Medical Center
- Kathy McNamara, R.N.
  HIV National Association of Community Health Centers
- Lyn Stevens, M.S., N.P., A.C.R.N., F.N.A.P.
  Association of Nurses in AIDS Care
- Peter Gordon, M.D.
  NYP SelectHealth/Columbia University
- Yvette Calderon, M.D.
  Emergency Medicine Department Jacobi Medical Center
  National Hispanic Medical Association

Attachment F provides contact information for the individuals who participated in the expert consultation meeting.

Attachment G contains a summary of the discussion from the expert consultation meeting.

9. Explanation of Any Payment/Gift to Respondents

HRSA recognizes the time burden associated with survey completion. Incentives paid to respondents have been shown to encourage participation

and thereby increase response rates, which in turn improves the validity and reliability of the data (Abreu and Winters 1999; Shettle and Mooney 1999). Recent research has also shown that offering physicians incentive payments both before and after completing a survey promotes a higher response rate than offering only a post-completion incentive payment (Delnevo et al. 2004). Based on this evidence, HRSA will include a $20 check in the survey packet mailed to all sample members at the start of data collection. In addition, to encourage clinicians to complete the survey via the web-based instrument, HRSA will offer an additional $40 check to those who complete the survey by web and a $20 check to those who complete and return the survey by mail or telephone. (Table 1 summarizes the incentive payment amounts for the clinician survey.)

As mentioned above, we proposed a prepayment of $20 and a differential postpayment of $20 for mail responses or $40 for web-based responses. Studies have shown that incentive payments for physicians need to be in the range of $50 to $100 to significantly impact participation (Keating, et al., 2008, Peugh et al., 2010). In addition, prepayments have been shown to be an effective strategy for increasing participation among this group (Flanigan et al., 2008; VanGeest et al., 2007). We have incorporated the prepayment methodology, and approximated the lower portion of the commonly accepted incentive amounts for physicians, as allowed by the project budget.

We propose providing the incentive in the form of a check, rather than as a gift card. In a recent experiment with a small sample of physicians (n=100), Hogan and Laforce (AAPOR 2008) showed that with a monetary incentive of $25, physicians receiving checks had a higher response rate than physicians receiving gift cards (50 percent among physicians receiving checks compared with 16 percent among those receiving gift cards). Physicians may view gift cards as a marketing tool or a commercial effort, while considering checks from a reputable organization to be more legitimate. Gift cards pose several additional concerns. First, providing a specific gift card (for example, from Target or Starbucks) might result in non-response if physicians without a nearby retail store feel alienated. Second, because a gift card can be redeemed regardless of participation in the survey, using using gift cards is financially disadvantageous. With checks, HRSA only bears the costs when the respondent cashes a check.

Table 1. Incentive Payment Amounts for HIV Clinician Survey

Response Mode	Pre-Completion Incentive	Post-Completion Incentive
Web	$20 gift card	$40 gift card
Mail	$20 gift card	$20 gift card
Telephone	$20 gift card	$20 gift card

While we would prefer to offer practices an incentive for completing the practice survey, it is not feasible within the available incentive budget. We prefer not to reduce the clinician incentive because we are already near the low end of the incentive amounts that have been shown to facilitate clinician participation. Further, with a small practice sample (n=500), our contractor will be able to facilitate participation through repeated, personalized follow-up contact in the form of letters, emails, and phone calls. Also, a majority of the organizations we sample are likely to be receiving Ryan White program funds, with a mission of providing comprehensive quality care and treatment to people living with HIV/AIDS. As a result, we believe they share HRSA's dedication and commitment to help ensure sufficient capacity to meet the demand for care and a willingness to participate in this survey effort.

10. Assurance of Confidentiality Provided to Respondents

HRSA has embedded protections for privacy in the study design. The proposed information collection will fully comply with all aspects of the Privacy Act. Individuals and practices will be ensured of the privacy of their replies under Section 934(c) of the Public Health Service Act, 42 USC 299c-3(c). All clinician and practice survey participants will be told in the advance letter that the data they provide will be kept private to the extent allowed by law, reported at the aggregate level, and used for research purposes only. The four elements of consent will be explained to ensure each participant understands (1) the nature of the survey (subject matter and duration); (2) the privacy of the information he or she provides as well as privacy of his or her identity; (3) the voluntary nature of participation; and (4) any benefits, risks, or discomfort involved. In paper and web surveys, we assume that completion of the survey constitutes the respondent's consent.

At the time of sample selection, all sample members will be assigned a randomly generated identification number that can be linked to the respondent for research data collection purposes only. Sample member names and contact information will be used for recruitment and contacting purposes only. As soon as an interview is completed, the contact information will be separated from the survey data and will be processed and stored on the contractor's password-protected local area network (LAN). The contractor protects its LAN with several security mechanisms. Access to private information stored on LAN directories is restricted to authorized project staff. In addition, network servers containing private information are kept in a locked area. Thus, the survey data will not contain names or other personally identifying information. Survey responses will be reported only at the aggregate level; none of the results will be attributable to individual clinicians or practices.

Contractor staff assigned to work on this project all sign confidentiality pledges as a term of employment. The confidentiality pledge requires that

staff maintain the confidentiality of all information collected. Attachment H provides a copy of the contractor's confidentiality pledge.

Only the contractor will have access to the survey data and will use them to estimate HIV workforce-specific supply parameters, which will be entered into the aggregate model developed by The Lewin Group for this project. At the completion of this process, the contractor will provide HRSA with a fully-populated version of the aggregate supply and demand model, including the HIV workforce-specific input parameters. At the end of the contract, the contractor will destroy the survey data and all related sample data, including contact information. While HRSA might ask to review aggregated responses to examine the quality of the data, the contractor will suppress table cells with counts of less than 25 to avoid the risk of disclosing individuals through the combination of direct and indirect personally identified information. Linking the aggregated results back to the individual-level survey responses will not be possible.

HRSA has not sought institutional review board (IRB) clearance because the data from the surveys will contain no identifiers that could be linked to specific individuals nor will it put individuals at risk for criminal or civil liability or be damaging to the individual's financial standing, employability, or reputation. Our determination is consistent with the regulations stated in 45 CFR Part 46 section 46.101 (c) which grants final judgment to Federal department or agency heads regarding submission of research protocols for IRB review. Thus, we have not submitted project materials for IRB review and have not received a waiver from an IRB. However, our data collection contractor routinely incorporates practices that are consistent with the Common Rule and will execute those practices for this survey. Such practices include removing direct and indirect means of identifying providers and practices, including consent language in correspondence material with survey participants, and stating the voluntary nature of participation in this survey. In addition, the data collected do not include sensitive or intrusive questions and these data do not pose more than normal daily risk to individuals who participate in this survey.

In addition, HRSA did not request IRB approval of the HIV clinician workforce survey because we believe it meets the criteria for Exemption 45 CFR 46.101(b)(5) for Public Benefit or Service Programs, namely the survey has been approved by the head of Department of Health and Human Services (HHS) and it examines the provision of services for individuals living with HIV. Information collected will enable HHS to make decisions about how to best allocate resources to ensure that the future supply of providers is sufficient to meet the demand for care among individuals living with HIV/AIDS.

11. Justification for Sensitive Questions

Other than race, ethnicity, and income (clinician survey only), which might be considered sensitive by a small number of respondents, there are no sensitive questions in the surveys. Nonetheless, both instruments will be pilot tested and feedback from the pretest participants will be used to monitor and address any concerns about sensitive questions. If pretest respondents indicate concern about a question, we will consider eliminating it or explore alternate wording.

12. Estimates of Annualized Hour and Cost Burden

Table 2 presents HRSA's estimated annualized burden hours based on the budgeted length of the interviews. These estimates remain unchanged since HRSA's telephone call with OMB in March 2021. HRSA will sample 5,000 clinicians and expects to complete 3,500 interviews. HRSA will sample 500 practices and expects to complete 350 practice interviews. Based on a pretest of the two instruments with potential sample members, we estimate that the clinician survey will take 20 minutes to complete and the practice survey will take 30 minutes to complete. (The pretest memorandum is included as Attachment E in the **Part B Supporting Statement**.) Total respondent burden is estimated to be 1,330 hours, 1,155 hours for the clinician survey and 175 hours for the practice survey.

Table 2. Estimated Annualized Burden Hours

Forms	Type of Respondent	Number of Respondents	Number of Responses per Respondent	Average Burden Hours Per Response	Total Burden Hours
HIV Clinician Survey	Clinician	3,500	1	0.33	1,155
HIV Practice Survey	Administrator	350	1	0.50	175
Total Burden		3,850			1,330

Table 3 presents HRSA's estimated annualized cost to respondents for the hours burden using wage rates published by the Department of Labor, Bureau of Labor Statistics (BLS), May 2010 Occupational Employment Statistics (BLS 2010). According to the BLS report, the national hourly wage rate for family and general practitioners is $83.59; for general administrators and operational managers, it is $54.38. The total respondent cost is $106,063; $96,546 for clinicians; and $9,517 for clinic administrators.

Table 3. Estimated Annualized Cost to Respondents for the Hours Burden

Type of Respondent	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Physician	1,155	$83.59	$96,546

Type of Respondent	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Clinic Administrator	175	$54.38	$9,517
Total	1,330		$106,063

13. Estimates of Other Total Annual Cost Burden to Respondents or Recordkeepers/ Capital Costs

This is a one-time data collection effort and there are no capital or start-up costs. There are no direct costs to respondents other than the time to participate in the study.

14. Annualized Cost to Federal Government

Although the study will take place over a two-year period, the data collection effort will occur within a one-year time frame. The total cost of the study to the government is $2,333,993. HRSA determined the annualized cost to be $1,166,996.50 per year by dividing the total funded amount by two years. The total study cost was based on the contractor's budget that calculated wages and hours for all staff, all mailing costs, telephone charges, and overhead costs per contract year.

In addition to the evaluation costs, there are personnel costs of several Federal employees involved in the oversight and analysis of information collection that amount to an annualized cost of $36,600 for Federal labor. The total annualized cost for the evaluation is therefore the sum of the annual contracted evaluation cost ($1,155,996.50) and the annual Federal labor cost ($36,600), or a total of $1,192,596.50.

15. Explanation for Program Changes or Adjustments

Data collection for the HIV workforce surveys is new; there are no changes to burden.

16. Plans for Tabulation and Publication and Project Time Schedule

a. Tabulations

The contractor has already begun to develop the survey frame, that is, to create a national census of HIV primary care clinicians based on claims data and other administrative lists of providers. HRSA anticipates drawing the survey samples in the fall of 2011. Data collection for the HIV workforce surveys will begin immediately after OMB approves the clearance package; data collection is currently scheduled to begin on February 1, 2012. Data collection will continue for four months, through May 30, 2012. The project requires the contractor to deliver monthly survey monitoring reports and a

final survey report one month after the completion of the data collection activities.

HRSA will first develop baseline estimates of the supply of HIV clinicians, their professional and demographic characteristics, and their geographic distribution relative to the demand for care. HRSA will then use the survey responses to develop input parameters specific to the HIV workforce (for example, entry and retirement rates, hours worked in clinical care, average size and acuity of patient panels, average number of visits per week, length of visits for new and returning patients, and practice management strategies) that will be necessary for implementing the forecasting model. Based on these input parameters and other sources of secondary data, HRSA will implement the model to estimate the future supply of and demand for HIV-related medical care and to measure the magnitude of the potential shortage of HIV clinician workforce. HRSA will also produce disaggregated workforce capacity estimates by region, care setting, patient population, and type of practitioner.

Specifically, HRSA will use the survey data for the following four tasks:

1. Describe and forecast the capacity of the HIV workforce, nationally and by region, to meet the growing demand for HIV-related medical care.
2. Analyze the variation in HIV workforce capacity by region, type of health profession, and type of health care setting.
3. Develop and assess measures of workforce productivity among HIV primary care clinicians (such as patient panel sizes, type of patients served, and practice management models).
4. Identify strategies and practice models associated with increases in productivity and capacity.

b. Publications

The contractor will prepare and submit a final report to HRSA, currently scheduled to be submitted in September 2012. The final report will present the main findings from the HIV provider supply model at the aggregate level, including full-time equivalents (FTEs) requirements for HIV providers, HIV clinician supply projections, and expected shortages or surpluses in HIV providers in the future, in total and for different health care professions. The report will discuss all aspects of the study, including background and motivation for it, description of HIV provider supply model, data sources and methods, HIV workforce demand and supply conclusions under a range of assumptions and policy scenarios, implications for access and quality, and best practices and other strategies for increasing the supply of HIV clinicians. The final report will also identify future action steps for HRSA and other stakeholders and partners to improve current and future HIV workforce capacity. The final report will be submitted in the style of a manuscript with

American Psychological Association formats that can be disseminated and interpreted by a general audience, will summarize the main findings in easily understandable graphs and tables, and will include an executive summary and abstract designed for a nontechnical policy audience.

The contractor will also provide HRSA with a set of documentation that will enable the agency to replicate the HIV provider supply and demand models in the future. The documentation will include a complete description of the methods and procedures used to construct the model and estimate HIV provider demand and supply projections at the national and regional levels; a discussion of the model inputs and outputs and other data elements used to implement the model; a list of assumptions and parameter values and their sources, used to populate the model; and instructions on how to update the parameters' values and apply various policy scenarios to the model. The documentation will also include a set of attachments, including variable dictionaries for the survey data and other sources of data used to implement the model, annotated SAS code for accessing and analyzing the de-identified data, and preliminary outputs from the analysis. Finally, the contractor will provide to HRSA a copy of the de-identified survey data and all other publicly available data sets used to construct and implement the model.

17. Display of OMB Expiration Date

The OMB number and expiration date will be displayed on every document seen by a sample member. Interviewers will be able to access the OMB number and expiration date at any point in the survey.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

Data collection efforts for the HIV workforce surveys will conform to all provisions of the Paperwork Reduction Act. No exceptions are being sought.

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