



# 2018 STATEWIDE PROVIDER HIV PREVENTION AND CARE SURVEY

Prepared for Division of Public Health HIV Surveillance and Prevention Programs



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# STATEWIDE PROVIDER HIV PREVENTION AND CARE SURVEY

## EXECUTIVE SUMMARY

### OVERVIEW

According to the *State of Nebraska Integrated HIV Prevention and Care Plan 2017-2021*, a total of 2,217 persons were living with Human Immunodeficiency Virus (PLWH/HIV) at the end of 2015 in Nebraska. The Centers for Disease Control and Prevention (CDC) estimates that 15% of the 1.1 million people in the U.S. currently living with HIV are unaware that they have this infection suggesting that an additional 332 persons are in Nebraska who are not aware (DHHS, 2019). A new initiative has been proposed by the U.S. Department of Health and Human Services to reduce numbers of incident infections by 75% within 5 years and then by 90% within 10 years using a cross agency shared agenda. Central to this effort is active engagement with city, county, and state public health departments (Fauci, 2019). The Nebraska Department of Health and Human Services (NDHHS) has set a priority to implement new, innovative strategies and methods to prevent new cases of HIV in Nebraska, as well as supporting PLWH with access to medical care and other support services to ensure an enhanced quality of life (Williams TL, 2016). To achieve this outcome, the NDHHS seeks to gain greater insights into the primary care practices in Nebraska, to target the development of these strategies for optimal effectiveness.

### PURPOSE

The purpose of this contract is to conduct an HIV prevention and care comprehensive statewide survey of primary care providers and infectious disease specialists to inform NDHHS about: (1) baseline data describing primary care and infectious disease practices and attitudes about HIV care and prevention, and (2) interpret the data to prepare NDHHS to support local community health care delivery system improvements for HIV-positive individuals or those at an increased risk for HIV infection across Nebraska. Monthly meetings were coordinated and facilitated with NDHHS to provide status updates on this scope of services. This is the final report describing the survey administration, analysis, findings, and interpretations.

## METHODS

The survey instrument was developed specifically for the NDHHS. Development details are provided in the *Final Report - Development of an HIV Prevention and Care Comprehensive Statewide Survey of Primary Care Providers contract no. 80165-04*, submitted to the NDHHS in January of 2018. Survey-eligible participants included physicians licensed in the state of Nebraska who actively practiced in either adult primary care or infectious disease. After establishing the mailing list for all eligible, the survey was distributed with an introductory letter inviting participants to respond, and providing a return, pre-paid postage envelope (see figure 1). Three mailings took place with reminder post cards after each. The third post card mailing included an abbreviated set of questions to those who were non-responsive to the first three attempts (see figure 2).

## FINDINGS

A large proportion (nearly half) of primary care physicians have or have had a patient who is HIV positive.

Most primary care physicians both refer the patients to HIV specialty care *and* continue to see the patient for general medical care.

The average number of years that have passed since the most recent training received about sexually transmitted diseases, including management of HIV, is 18 years, with a range of 1 to 44 years. A little more than one-third (37%) have received their most recent training within the last two years, with near two-thirds (61%) receiving this training more than two years ago.

About 1 in 5 primary care physicians have prescribed PrEP for the prevention of transmission of HIV/reduction in HIV viral load. The primary reason this rate is so low is that the physicians did not feel they had enough knowledge about proper PrEP use (40%)(Mimiaga, 2014).

Only about 10% of the primary care physicians indicate having worked with patient's local pharmacies to provide care to patients with HIV or AIDS, while 80% indicated they do not. There is a large missed opportunity for patient advocacy by sharing and collaborating between the physician and pharmacist locally to provide service.

Available programs are not well known state-wide by primary care physicians. Specific topics and training areas were listed, and more primary care physicians indicated a desire and interest for training than were knowledgeable about program availability.

## IMPLICATIONS

Willingness to treat a patient with HIV is the single most indicator of physician responses in support of improving engagement with HIV testing, HIV related counseling, receptivity to other outreach such as engaging with pharmacists/local pharmacies, engaging with telehealth as an alternative, and completing training opportunities. Most primary care physicians are willing to treat patients with HIV but identify barriers to care being related to themselves and their concerns about ongoing competency and being up to date on behalf of their patients. The fact that a large proportion (nearly half) of primary care physicians have or have had a patient who is HIV positive is compelling, supporting the need to strengthen physician knowledge and community engagement of the public health programs to our communities state-wide. Findings support the priorities of establishing and improving on-going communication and efforts to coordinate care between the infectious disease specialist and the primary care provider in the locale where patients who are HIV positive reside.

Most physicians were last trained about management, treatment, prevention and care of HIV positive patients at a time historically when the outcomes of care were less successful. The concept of undetectable = untransmittable (U = U) changes the world, and directly reinforces the need for local physician engagement and participation in the prevention and counseling practices important to HIV (Fauci, 2019). This survey suggests that Nebraska primary care physicians are willing and would participate in the activities required to end the HIV epidemic in the United States.



# STATEWIDE PROVIDER HIV PREVENTION AND CARE SURVEY

## FINAL REPORT

### OVERVIEW

According to the *State of Nebraska Integrated HIV Prevention and Care Plan 2017-2021*, a total of 2,217 persons were living with Human Immunodeficiency Virus (PLWH/HIV) at the end of 2015 in Nebraska. The Centers for Disease Control and Prevention (CDC) estimates that 15% of the 1.1 million people in the U.S. currently living with HIV are unaware that they have this infection suggesting that an additional 332 persons are in Nebraska who are not aware they have this infection as well (DHHS, 2019). A new initiative has been proposed by the U.S. Department of Health and Human Services to reduce numbers of incident infections by 75% within 5 years and then by 90% within 10 years using a cross agency shared agenda. Central to this effort is active engagement with city, county, and state public health departments (Fauci, 2019).

The Nebraska Department of Health and Human Services (NDHHS) has set a priority to implement new, innovative strategies and methods to prevent new cases of HIV in Nebraska, as well as supporting PLWH with access to medical care and other support services to ensure an enhanced quality of life (Williams TL, 2016). To achieve this outcome, the NDHHS seeks to gain greater insights into the primary care practices in Nebraska, to target the development of these strategies for optimal effectiveness.

## BACKGROUND

While Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) is heavily researched, prior literature in relation to primary care providers and HIV is largely concentrated in two areas: (a) HIV/AIDS in countries other than the United States and (2) the stigma surrounding HIV/AIDS. Federal funding for HIV has risen from a few hundred thousand in fiscal year 1982 to more than \$34.8 billion in fiscal year 2019; most of the growth accounted for in use by mandatory domestic care and treatment programs through Medicaid and Medicare (Kaiser Family Foundation, 2019). For our purposes and desired outcomes, no existing literature contains a fully comprehensive tool to survey primary care providers in the United States on the topics deemed important for this project.

A survey was developed specific to the purposes of the NDHHS and distributed state-wide to gather relevant information needed to optimize the state's ability to meet its goals. Development details are provided in the *Final Report - Development of an HIV Prevention and Care Comprehensive Statewide Survey of Primary Care Providers contract no. 80165-04*, submitted to the NDHHS in January of 2018. Topics include: (a) "Descriptive Information and Demographics"; (b) "Knowledge, Education, and Training in HIV Prevention, Care, and Treatment" (Provider Stigma included in this section, unlabeled, as to not compromise integrity); (c) "Culturally Responsive Sexual Education and Care"; (d) "Knowledge of PrEP (pre-exposure prophylaxis)"; (e) "Taking Sexual Histories and Providing Sex Education"; (f) "Nebraska's HIV Case Reporting Policies"; (g) "Collaboration Between Various Health Sectors"; (h) "Community-based Resources"; and (i) "Barriers to Provision of Services".

## **PURPOSE**

The purpose of this contract is to conduct an HIV prevention and care comprehensive statewide survey of primary care providers and infectious disease specialists to inform NDHHS about: (1) baseline data describing primary care and infectious disease practices and attitudes about HIV care and prevention, and (2) interpret the data to prepare NDHHS to support local community health care delivery system improvements for HIV-positive individuals or those at an increased risk for HIV infection across Nebraska. This is the final report describing the survey administration, analysis and findings.

## **METHODS**

### Survey development

The survey instrument was developed specifically for the NDHHS. For this project, the instrument was reviewed by practitioner experts from the Nebraska Academy of Family Physicians, infectious disease specialists who care for positive-HIV patients, and the state NDHHS professionals for face and content validity. The U.S. Mail survey was designed for optimal response of all primary care providers in the state; with the intention of determining which of these providers would benefit from state sponsored education and facilitation.

### Survey participants

Survey-eligible participants included physicians licensed in the state of Nebraska who actively practiced in either adult primary care or infectious disease. Results are desired from a state-wide representation of potential HIV/AIDS primary care providers across rural and urban areas, as opposed to a focused dissemination to active practitioners in the care of HIV, found predominantly in urban areas. This strategy was chosen because fundamentally, the extent and scope of engagement of primary care providers in Nebraska with high risk individuals is not known.

### Data gathering

After establishing the mailing list for all eligible, the survey was distributed with an introductory letter inviting participants to respond, and providing a return, pre-paid postage envelope (see figure 1). Three mailings took place with reminder post cards after each. The third post card mailing included an abbreviated set of questions to those who were non-responsive to the first two attempts (see figure 2). Data was entered into a Microsoft Access database and quality assurance checked by a second individual. Monthly meetings were coordinated and facilitated with NDHHS to provide status updates on the project.

## Data analysis

IBM SPSS was utilized to perform statistical and mixed analysis. Descriptive analysis yielding frequencies and percentages for all responses to the survey question respondents. Chi square analyses were calculated to determine for differences in responses to some questions comparing respondents who indicate willingness to provide care to HIV positive patients and those who do not indicate a willingness. These analyses were conducted using IBM SPSS Version 25 (2017). Geographic information systems mapping was performed to determine the geographic areas and potential gaps in areas that the respondents represent across Nebraska. This analysis was conducted using ArcGis Version: [10.6.1 \(July 2018\)](#).

## FINDINGS

### Participation in survey

*Response rate.* Overall, the response rate of primary care physicians was 39% to the Abbreviated Survey and 33% to the more extensive, Comprehensive Survey; with a possible 956 eligible to respond. The response rate from infectious disease specialists was 54% to the Abbreviated Survey and 38% to the Comprehensive Survey; with a possible 13 eligible to respond (see Table 1).

Table 1. Survey Response Rate

Provider Type <sup>a</sup>	Eligible to Participate n (%)	Responded to Abbreviated Survey n (%)	Responded to Comprehensive Survey n (%)
Primary Care	956 (98.7%)	369 (39%)	316 (33%)
Infectious Disease	13 (1.3%)	7 (54%)	5 (38%)
TOTAL	969 (100%)	376 (39%)	321 (33%)

*Geographic distribution of primary care respondents.* Primary care respondent distribution shows access throughout the state, whereas, infectious disease respondent distribution is on the far eastern portion of the state. The distribution map displays that the respondents are widely dispersed overall in primary care, representing all areas of the state from the point of view of geographic access (see Figure 3). On the other hand, the infectious disease specialists are not geographically accessible across the state.

### Risk behavior health problems seen in primary care

Providers identified health problems seen in their patient population related to social drug consumption, both legal and illegal substances, sexually transmitted diseases, HIV infection specifically, and risky behaviors (see Table 2) (Jain CL, 2008).

Table 2. Health Problems Observed in Practice

Health Problem	Primary Care Physician n (%)	Infectious Disease Physician n (%)
Alcohol, tobacco, or legal drug (prescription drug) abuse	312 (96.9%)	2 (40%)
HIV Infection	138 (42.9%)	7 (100%)
Illegal substance use/abuse	274 (85.1%)	2 (40%)
Pregnant women at risk for HIV infection or sexually transmitted disease	131 (40.7%)	2 (40%)
Risk behaviors	279 (86.6%)	3 (60%)
Sexually transmitted diseases	274 (85.1%)	7 (100%)

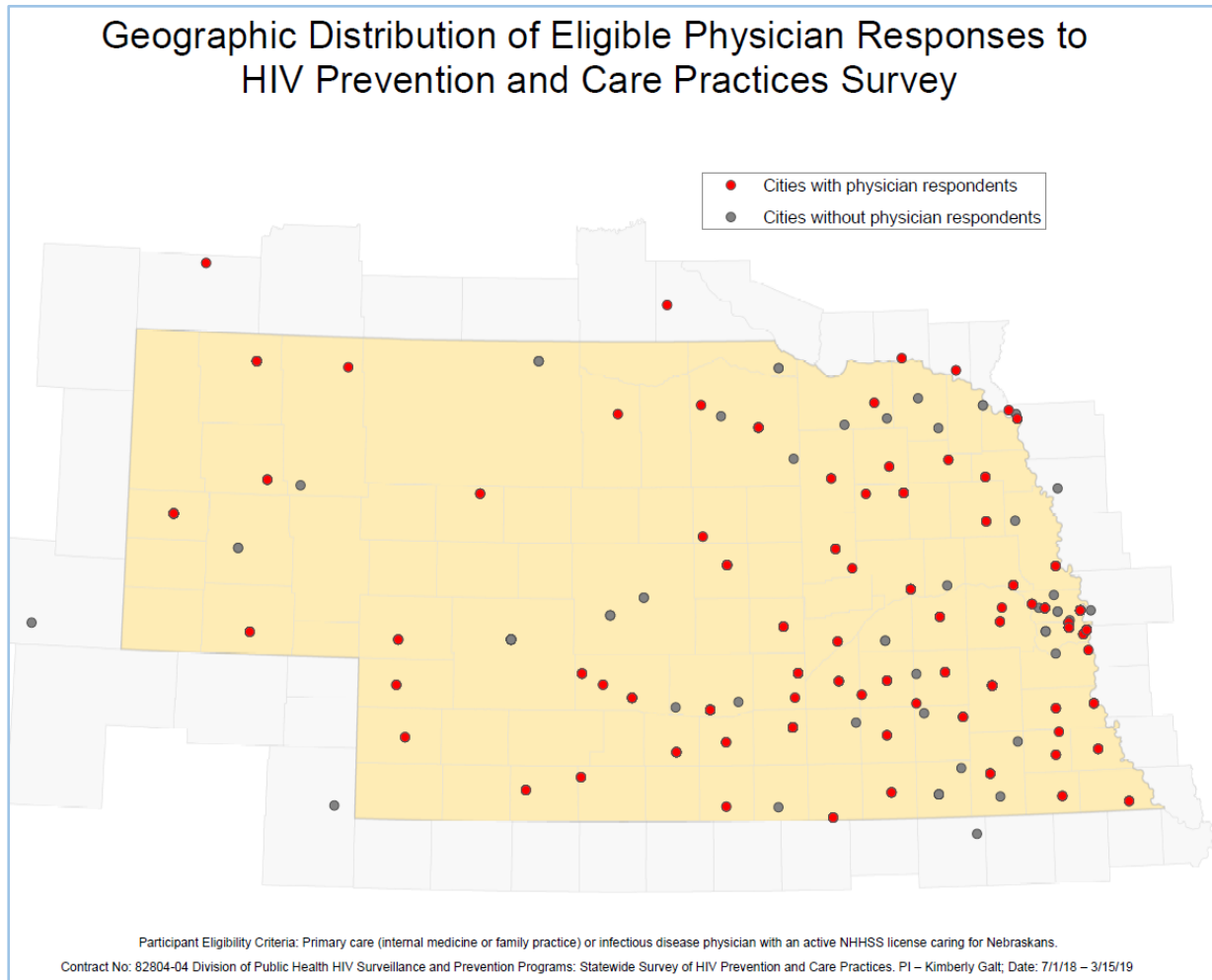


Figure 3. Geographic distribution of respondents as clusters of  $\geq 10$  responses when adjacent communities were combined; combining done to maintain the anonymity of respondents.

## Primary care provider experience with HIV-positive patients

### Disclosure

*Patient disclosure about HIV.* Many primary care physicians (75%; n= 241) report having had a patient at some point in their career, disclose being HIV positive. However, 1 in 4 have not ever had a patient disclose this. All infectious disease specialists have had this disclosed to them.

### HIV testing

*Providers who have ordered an HIV test.* Nearly all primary care physicians (99%; n=318) and all infectious disease specialists have ordered an HIV test for a patient.

*Circumstances under which providers perform HIV testing.* Most (82%) of primary care physicians offer HIV testing if either the patient requests it or if the patient has risk factors for HIV. All of the infectious disease specialists offer testing if the patient has risk factors for HIV. Some of the primary care providers (48%) and infectious disease specialists (60%) offer testing during pregnancy.

*Barriers to prevent providers from performing HIV testing.* One-third (n=106) of the providers identified barriers that prevent them from performing HIV testing. Most of the primary care physicians identify that patients denying the offer to test is the most frequent (84%; n=89). Other common reasons are patients' fears (31%; n=33) and patient's lack of resources to pay for the test (21%; n=22). Providers did not identify access to laboratories to do testing, nor that this was too time consuming in their workday as barriers.

*Providers who have communicated an HIV test result.* Many primary care physicians (70%; n=226) have communicated an HIV test result to a patient. Nearly a third, or 1 in 3, have not. All infectious disease specialists have communicated an HIV test result to a patient (Martin, JE, 2000).

*Provider comfort when communicating an HIV test result to a patient.* When asked about comfort with communicating an HIV test results, 89% (n=288) of primary care providers and all the infectious disease specialists indicating they were comfortable. Six per cent were not comfortable and the remaining 5% did not respond (Myers, 2007; 2003).



## Provider management of care approach when HIV positive is disclosed

*Primary care provider management of care when patients disclose they are HIV positive.*

When patients have disclosed to the primary care physician, there are several management options to chosen from. Table 3 shows approaches taken by primary care physicians across Nebraska.

Table 3. Management Approach to Care

Management Approach to Care	Primary Care Physician n (%)
Referred patient to HIV specialty care	184 (76.3 %)
Continue to see patient for general medical care	184 (76.3 %)
Co-managed HIV care with HIV/infectious disease specialist	61 (25.3 %)
Managed the patient's HIV care myself	12 (5 %)
Refer patient to another primary care provider	1 (0.4 %)
Facilitate access to telemedicine services	2 (0.9 %)

Most (76.3%; n=184) refer the patients to HIV specialty care and continue to see the patient for general medical care (76.3%; n=184). One-quarter (25.3%; n=61) of these primary care physicians report co-managing the HIV along with the specialist while continuing to provide general medical care as well. A small proportion (16%; n=38) refer to specialty care and report not continuing to see the patient in their practice.

Table 4 provides the reasons why primary care providers make a referral to another provider for HIV positive patients. Overwhelmingly the reason is that the primary care provider believes other providers are more experienced and better suited to provide the patients HIV management needs. This is reinforced by the number of primary care providers who specifically indicated that they did not feel they saw enough of these patients to stay current and indicated they did not believe that their knowledge and experience was current, i.e., up to date.

Table 4. Reason for Referral of HIV Positive Patient

Reason for referral	Primary Care Physician n (%)
Another provider is more experienced	212 (65.8 %)
Do not see enough patients to stay competent on their behalf	5 (1.6 %)
My knowledge and experience is not up to date	14 (4.3 %)
Lack of specialist back up	9 (2.8 %)
Concern about exposure	1 (0.3 %)
Other patients in practice fear exposure	1 (0.3 %)
Inadequate reimbursement	1 (0.3 %)
Terminal nature of disease	1 (0.3 %)
Too time consuming	4 (1.3 %)
Organizational support in clinic not adequate for care provision	3 (0.9%)
Military requires referral to specialist	1 (0.3 %)

## Experience managing patients with HIV

### Willingness to treat

Most primary care professionals (78%; n=295) are willing to treat patients with HIV; with nearly one-quarter not willing. However, only one-quarter of primary care professionals (29%; n=108) have actually managed the treatment of HIV during their careers. This means that half of the willing physicians have never provided this care. When compared applying a Fisher's Exact Test, the group of physicians who have previously managed the treatment for an HIV patient are more willing to treat patients now than those that have not had the experience of treating a patient ( $p < 0.000$ ). Similarly, physicians trained in sexually transmitted diseases in the last two years are more willing to treat a patient who is HIV positive than those whose training was greater than two years ago ( $\chi^2$ ,  $df=1$ ,  $p=0.006$ ).

### Barriers to care

A strong majority of physicians self-identify as either not credentialed to provide HIV care (57%; n=68) or do not feel their own knowledge and experience is up to date (13%; n=16). Primary care physicians were also concerned that there was not adequate supply of HIV

specialists in the area (24%; n=28) or the clinic location where they saw patients was not convenient for providing this care (11%; n=13).

When asked if there are health system barriers that prevent providing care, those physicians who indicated a willingness to provide care identified were less likely to identify barriers compared to those who were not willing to provide care ( $\chi^2$ , df=1, p=0.00). Lack of adequate reimbursement for services, negative attitudes from colleagues of health system in general, workload and organizational lack of resource support were **not** identified as barriers or problems (Chen, 2008; Li, 2007; Chen, 2004).

### **Intake assessment of HIV positive patients**

A small proportion, only 1 in 7, primary care physicians perform intake assessments on those patients that are positive for HIV. Almost half of those surveyed indicated that performing such an assessment was not applicable in their practice. Table 5 indicates the assessment items that Nebraska physicians tend to include most frequently.

Table 5. Intake Assessment Items

<b>Included in the intake assessment</b>	<b>Primary Care Physician n(%)</b>
General Medical History	45 (97.8%)
Age and gender	44 (95.7%)
HIV status	41 (89.1%)
Sexual orientation	40 (87%)
Marital status	40 (87%)
HIV Medical History	36 (78.3%)
Laboratory services provided	36 (78.3%)
Pharmacy history	34 (73.9%)
Race/ethnicity	32 (69.6%)
Source of HIV infection	32 (69.6%)
Employment status	30 (65.2%)
Income/Insurance evaluation	22 (47.8%)
Housing status	18 (39.1%)
Case Manager History	13 (28.3%)

## **Provision of HIV prevention counseling**

### **Pre-Exposure Prophylaxis (PrEP) Treatment**

About 1 in 5 primary care physicians have prescribed PrEP for the prevention of transmission of HIV/reduction in HIV viral load. For the remainder who have not prescribed it, we explored the reasons (Karris, 2014; Scherer, 2014). The primary reason provided was that the physicians did not feel they had enough knowledge about proper PrEP use (40%) (Mimiaga, 2014). Physicians did not feel that use would lead to riskier behaviors, were not particularly concerned about the side effects or cost and did not have issues with believing in its use. When we compared physician willingness to treat HIV to those who were not, the results indicate that willing physicians were predominantly those who had expressed interest in learning about how to get their patients financial assistance with PrEP ( $\chi^2$ , d.f.=1, p=0.049).

### **Engagement with Pharmacies in care for patients with HIV**

About 10% of the primary care physicians say they work with patient's local pharmacies to provide care to patients with HIV or AIDS, and 80% indicated they do not. Similarly, only 2 of the 5 infectious disease specialists work with the patient's local pharmacy for care.

The ways in which primary care physicians work with local pharmacies were described by several respondents. Several describe the traditional role of prescribing medications and under the advisement of the infectious disease specialist they co-manage the patient with. One described working with the pharmacist to prescribe the PrEP regimen, another with securing medicines through the 340B program<sup>1</sup>, and a few who work with the Veterans Affairs to secure medicines. One specifically described working with a coordinator with the AIDS Project in Nebraska.

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<sup>1</sup> The 340B Drug Discount Program is a U.S. federal government program created in 1992 that requires drug manufacturers to provide outpatient drugs to eligible health care organizations and covered entities at significantly reduced prices. See: <https://www.hrsa.gov/opa/index.html>.

## Telemedicine access to HIV experts

Telemedicine is an alternative strategy to reach infectious disease specialists and other service providers for HIV positive patients who are at greater geographic distances and for primary care physicians with geographic limitations and access issues who need the collaboration and advice with specialists. At present, there are two primary care physicians who indicate they use telemedicine infectious disease specialty services of the 34 who indicate they have this form of access.

There are 37 primary care physicians who also indicate they are interested in using these services, but 27 of them are unsure if they have access and 10 do not have access despite their interest in using this (see Figure 4).

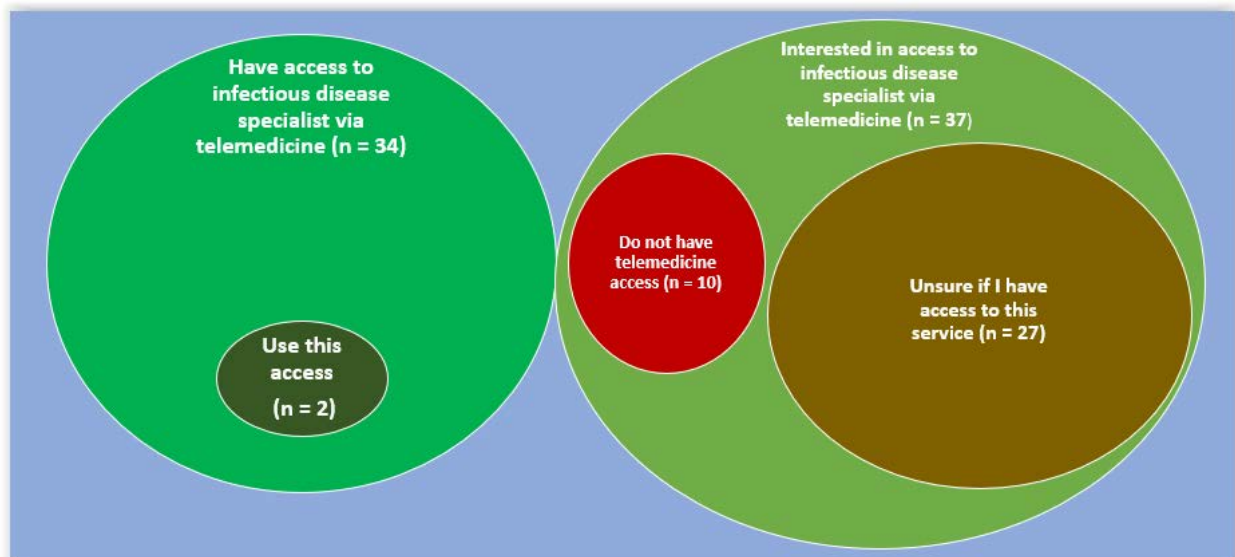


Figure 4. State of telehealth access and use of infectious disease specialists by primary care physicians.

## Knowledge, education and training in HIV prevention, care and treatment

### Recency of Provider Training

*Primary care physicians.* The average number of years that have passed since the most recent training received about sexually transmitted diseases, including management of HIV, is 18 years, with a range of 1 to 44 years. A little more than one-third (37%) have received their most

recent training within the last two years, with near two-thirds (61%) receiving this training more than two years ago. Two percent have not received training. Figure 5 displays the distribution of the number of providers by years since most recent training shown in five-year groupings.

*Infectious disease providers.* Most (80%) received training within the last two years.

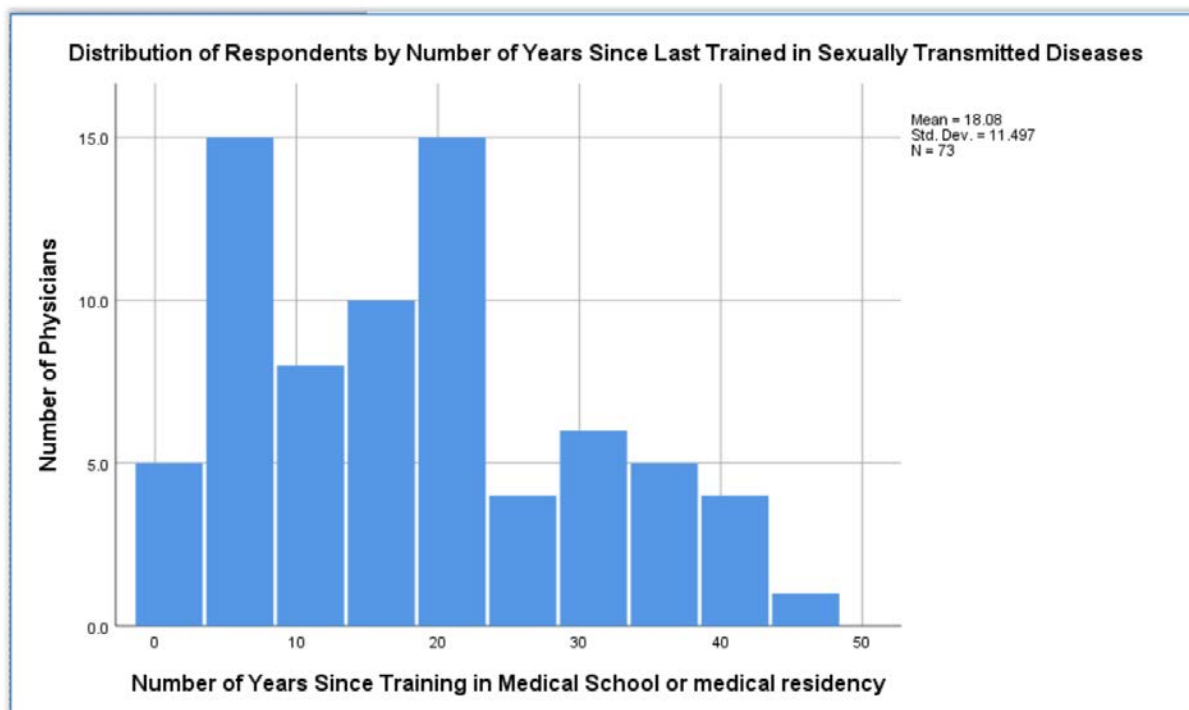


Figure 5. Frequency distribution of number of years since primary care physicians received training about STDS.

### Knowledge of Nebraska’s HIV case reporting policies

Positive HIV laboratory test results are a mandatory report to the department of public health in the state of Nebraska (Slabic, 2007).<sup>2</sup> If a clinical laboratory provides the report to the state, then physicians or other health professionals are not required to also report. However, the physician provider is required to report and should assure that the laboratory is reporting, otherwise must take the responsibility. In this survey, 32% (n=101) of primary care physicians and 40% (n=2) infectious disease physicians knew where to locate the case-reporting forms to meet the requirements in the state. Likely these results reflect the laboratory activity.

<sup>2</sup> Title 173 Nebraska Administrative Code § 1-005; “Reporting and Control of Communicable Diseases – Methods of Reporting”.

## **Taking sexual histories and providing sex education**

### **Sexual history taking practices**

Sexual history taking by primary care physicians is done routinely by 18% (n=57), not usually done by 8.9% (n=28) and done by 69.6% (n=220) when patients are either new to the practice or it is deemed clinically relevant. Near half of the primary care physicians (46.8%; n=148) obtain these histories from all of their patients, as do 40% (n=2) infectious disease specialists. Primary care providers selectively take these histories from patients who admit sexual activity (28.2%; n=89), adolescents (20.3%; n=64) and adult men or women (15%; n=48)(Webber, 2009; Bluespruce, 2000). Most physicians report being comfortable (92%; n=286) with taking a sexual history. Only 7.7% (n=24) reported being uncomfortable with this.

### **Sex education practices**

Slightly more than half of the responding physicians (54.7%; n=176) indicate that they provide sexual health counseling to all of their patients. The remainder identified specific age groups including 22.4% (n=72) identified adolescents, and 12% (n=40) identified adult men and adult women. Others specifically indicated they provide sexual counseling when the patient admits to being sexually active (24.8%; n=80), tests positive for sexually transmitted diseases (27.3%; n=88), is suspected of being a sexual abuse victim/sex trafficking victim (11.5%; n=37) or suspected of being a domestic violence/rape victim (10.6%; n=34).

*HIV counseling.* About half (59%; n= 178) of primary care physicians report explicitly including HIV counseling for patients, whereas, 80% (n=4) of the infectious disease specialists explicitly include this. Physicians who indicate they are willing to treat HIV patients are more likely to explicitly include HIV counseling than those that are not ( $\chi^2$ , df=1, p=0.023).

### **Primary care physician familiarity with programs and desire to know more about them**

Understanding physician familiarity with programs available throughout the state provides us background information on where to focus outreach education. In addition, we identified topic areas of interest physicians self-identified (See table 6).

Table 6. Program familiarity and programs physicians desire to know more about

Programs	Primary Care Physicians Familiar with the Programs <i>n (%)</i>	Primary Care Physicians Who want to Know More <i>n (%)</i>
<b>RYAN WHITE PROGRAM</b>		
• AIDS drug assistance program	57 (17.7%)	68 (21.1%)
• Clinical quality management	30 ( 9.3%)	50 (15.5%)
• Emergency financial assistance	37 (11.5%)	57 (17.7%)
• Housing services	32 ( 9.9%)	56 (17.4%)
• Laboratory services and office visits	41 (12.7%)	52 (16.1%)
• Medical case management	35 (10.9%)	52 (16.1%)
• Mental health services	42 (13%)	54 (16.8%)
• Non-medical case management	26 ( 8.1%)	54 (16.8%)
• Outreach services	34 (10.6%)	59 (18.3%)
• Psychological services	37 (11.5%)	59 (18.3%)
<b>NEBRASKA HIV/AIDS PREVENTION AND SURVEILLANCE PROGRAM</b>		
• HIV counseling, testing and referral	39 (12.1%)	64 (19.9%)
• Data to Care	23 ( 7.1%)	53 (16.5%)
• HIV education and outreach	32 ( 9.9%)	57 (17.7%)
• Partner services	20 ( 6.2%)	56 (17.4%)
NEBRASKA AIDS PROJECT	89 (27.6%)	53 (16.5%)
NEBRASKA RED RIBBON COMMUNITY	22 ( 6.8%)	53 (16.5%)
NEBRASKA HIV CARE AND PREVENTION CONSORTIUM	27 ( 8.4%)	58 (18%)
<b>HOUSING OPPORTUNITIES FOR PEOPLE WITH AIDS (HOPWA)</b>		
• Emergency rent and mortgage assistance	15 ( 4.7%)	55 (17.1%)
• Housing information	16 ( 5%)	55 (17.1%)
• Permanent housing placement	15 ( 4.7%)	53 (16.5%)
• Resource development	15 ( 4.7%)	53 (16.5%)
• Supportive services	15 ( 4.7%)	53 (16.5%)
HEPATITIS PREVENTION AND CARE PROGRAM	32 ( 9.9%)	67 (20.8%)
TUBERCULOSIS	49 (15.2%)	56 (17.4%)
<b>SEXUALLY TRANSMITTED DISEASE PREVENTION PROGRAM</b>		
• Nebraska Infertility Prevention Plus Project (NIPPP)	25 ( 7.8%)	62 (19.3%)
• Partner services	19 ( 5.9%)	61 (18.9%)
ADDICTION AND PAIN MANAGEMENT SPECIALISTS (ECHO) <sup>3</sup>	27 ( 8.4%)	91 (28.3%)

<sup>3</sup> Extension for Community Healthcare Outcomes



### Topics where education is desired

Physicians were asked to identify all of the training areas of personal interest that they would like to have offered (Bernstein, 2013; Bluespruce, 2000; Windsor, 2013) Additional areas of training beyond the available programs were identified and are shown in Table 7.

Table 7. Training topics

Training Topic	Primary Care Physician n (%)
How to help patients access HIV related community resources	82 (25.9%)
Get financial assistance for patients to receive PrEP	81 (25.6%)
Management/treatment of HIV and AIDS	78 (24.7%)
How to report HIV cases in the mandatory reporting program	76 (24.1%)
HIV prevention counseling for patients at high risk	68 (21.5%)
Sexual health counseling in general practice	66 (20.9%)
Healthy living when HIV positive	62 (19.6%)
HIV AIDS testing and diagnosing	54 (17.1%)
Management/treatment and prevention syphilis	46 (14.6%)
Tailored sexual health counseling responsive to the patient's culture	45 (14.2%)
How to talk to patients about HIV risk reduction	40 (12.7%)
Counseling sensitive to spirituality considerations	40 (12.7%)

### Limitations

These findings are limited to those in primary care who manage adults. The scope of this survey did not include pediatrics or obstetrics and gynecology practitioners.

Non – response bias is possible with 60% of potential participants not responding to survey. We anticipated this and worked to optimize the appeal of survey, reduce respondent burden, distributed using a reminder system. We also contacted several non-responders who indicated “they did not believe survey was relevant to their practice”.

## IMPLICATIONS

The results of this survey suggest areas where strategies to improve primary care provider involvement with HIV/AIDS prevention and treatment across all geographic areas of the state would yield the greatest benefit. Respondents adequately represent the geographic access needs of the residents of the state.

A large proportion (nearly half) of primary care physicians have or have had a patient who is HIV positive. This is compelling, supporting the need to strengthen physician knowledge and community engagement of the public health programs to our communities state-wide.

Most primary care physicians both refer the patients to HIV specialty care *and* continue to see the patient for general medical care. This supports the priorities of establishing and improving on-going communication and efforts to coordinate care between the infectious disease specialist and the primary care provider in the locale where patients who are HIV positive reside.

Willingness to treat a patient with HIV is the single most important indicator of physician responses in support of improving engagement with HIV testing, HIV related counseling, receptivity to other outreach such as engaging with pharmacists/local pharmacies, engaging with telehealth as an alternative, and completing training opportunities. While most primary care physicians are willing to treat patients with HIV, several have identified barriers to care related to themselves and their concerns about ongoing competency and being up to date on behalf of their patients. They care first and foremost about their patients getting competent and optimal care. Achieving and maintaining competency to assure proper patient care is the dominant barrier of all; these providers did not identify structural or health system barriers. Physicians are making referral and care decisions by responding to the guiding question, “what is best for my patient?”

Almost all physicians are comfortable managing and discussing HIV testing and disclosure. Yet, many providers do not routinely screen for HIV. Since there may be an additional 15% of residents who are infected but do not know it, promoting HIV screening for anyone who is possibly at risk or who is receptive to the suggestion may be a strategy to consider.

The geographic disparity between infectious disease specialists primarily being located on the eastern portion of the state and the patients and primary care providers distributed across the state suggests that health information exchange and telehealth alternatives could be facilitators to access specialists' expertise. Telehealth may be a facilitator for more direct, on-going interaction between patients and infectious disease specialists.

Most primary care physicians and the patient's local pharmacist are not connecting to provide care to patients with HIV or AIDS. Local access to medications, facilitation of reduced pricing through 340B programs and Ryan White, facilitation of PrEP use within the community, and pharmacists who can monitor, and problem solve for patients about their medications are but a few examples of ways that local outreach can be developed further across the state.

Opportunities are apparent for improving the initiation and use of PrEP. While 1 in 5 physicians indicate they prescribe PrEP, the remainder indicate that the reason they do not is lack of adequate knowledge about the therapy. This is a particular area where educational intervention and outreach involving primary care physicians and pharmacists in local communities could make a difference.

Education about mandatory reporting procedures is needed. The majority of physicians do not know how to do this for HIV positive test results. While much of the reporting may be coming from the laboratory, it appears that most physicians depend upon this and do not know how to participate or assure that the reporting is happening.

Most physicians are not aware of the various programs available in the state of Nebraska for HIV positive patients. More physicians want training than indicated they did not have the knowledge – a great sign. In order to have successful engagement with physicians when the strategies are developed, it would seem wise to make sure the content of the messaging for training and education responds to this question: "Why should I learn to do this when the best choice for the patient is sending them to an expert provider for this problem?" Bringing primary care providers up to date should involve explicitly providing context that answers this question.

Most physicians were last trained about management, treatment, prevention and care of HIV positive patients at a time historically when the outcomes of care were less successful. The concept of undetectable = untransmittable (U = U) changes the world, and directly reinforces the

need for local physician engagement and participation in the prevention and counseling practices important to HIV (Fauci, 2019). If primary care physicians knew that they have a key role in ending the HIV epidemic in the United States, this survey suggests they are willing and would participate in the activities required to achieve this.

Figure 1. Cover letter and comprehensive survey

Code Number: -3\_C

**NEBRASKA**  
Good Life. Great Mission.  
DEPT. OF HEALTH AND HUMAN SERVICES

**Creighton**  
UNIVERSITY  
Center for  
Health Services Research  
and Patient Safety  
2500 California Plaza  
Boyne 123  
Omaha, NE 68178

**Our third request - your response is needed.**

November 28, 2018

Marci Athey-Graham  
Nebraska Dept. Health & Human Services  
P.O. Box 95026  
Lincoln, NE 68509-5026

Dear Marci Athey-Graham ,

The State of Nebraska Department of Health and Human Services is gathering information about ways to improve HIV-related patient care in Nebraska. Your reply is important to us.

This survey is confidential. Only a summary report will be published. No individual respondent information will be released. Thank you in advance for your participation.

### Provider Care Survey

1. Have you ever managed treatment of HIV for a patient?  
<sub>1</sub> Yes  
<sub>2</sub> No
2. Are you willing to treat a patient who is HIV positive?  
<sub>1</sub> Yes  
<sub>2</sub> No
3. Do you care for patients from the state of Nebraska?  
<sub>1</sub> Yes  
<sub>2</sub> No
4. Are you a primary care provider or an infectious disease specialist?  
<sub>1</sub> Yes - if yes, which one? <sub>1</sub> Primary care provider <sub>2</sub> Infectious disease specialist  
<sub>2</sub> No

If you answered Yes to questions 3 and 4      ► Please complete the attached survey and return it and this cover page in the enclosed prepaid envelope.

If you answered No to either question 3 or 4      ► You are done. Please return this cover page in the enclosed prepaid envelope and discard the survey.

Regards,  
Marci Athey-Graham, B.S., HIV Surveillance Program, Marci.Athey-Graham@nebraska.gov  
Danielle Wing, M.P.H., Ryan White Program, Danielle.Wing@nebraska.gov  
Kimberly Galt, PharmD, Ph.D, Creighton University, kgalt@creighton.edu

Creighton University, 2500 California Plaza, Boyne 123, Omaha, NE 68178, Phone: 402.280.5660

## Provider HIV/AIDS Comprehensive Care Survey

**1. Which of the following health problems do you see in your patient population? (check all that apply)**

- a Alcohol, tobacco, or legal drug (prescription drug) abuse  
 b HIV infection  
 c Illegal substance use/abuse  
 d Pregnant women at risk of HIV infection or sexually transmitted diseases  
 e Risk behaviors (see box to right) →  
 f Sexually transmitted disease(s)

### RISK BEHAVIORS

- Sex without condoms (anal, vaginal, oral)
- Sex with same sex partner
- Heterosexual sex
- Sex while under the influence of drugs/alcohol
- Injected non-prescription drugs
- Transfusion recipient
- Organ transplant recipient
- Artificial insemination
- Worked in a health care or clinical laboratory
- Sexual relations/contact with:
  - intravenous/injection drug user
  - bisexual male
  - person with hemophilia /coagulation disorder
  - person with HIV

**2. Have you ever had a patient disclose to you that they are HIV-positive?**

- 1 Yes  2 No

*If yes, what roles do you play in their care? (check all that apply)*

- a Manage the patient's HIV care myself  
 b Refer to HIV specialty care  
 c Co-manage HIV care with HIV/infectious disease specialist  
 d Continue to see patient for general medical care  
 e I refer patient to another primary care provider for medical care  
 f Facilitate access to telemedicine services for HIV care locally

**3. If you refer patients with HIV to another provider, why? (check all that apply)**

- a Not applicable  
 b Another provider is more experienced  
 c Concern about exposure  
 d Fears of other patients I serve in the office  
 e Inadequate reimbursement  
 f Lack of specialist backup  
 g Terminal nature of disease  
 h Too time-consuming  
 i Other (please describe): \_\_\_\_\_

**4. Have you ever communicated an HIV test result to a patient?  1 Yes  2 No**

**5. Have you ever ordered an HIV test for a patient?  1 Yes  2 No**

**6. What is your comfort when communicating an HIV test result?  1 Not applicable  2 Comfortable  3 Uncomfortable**

**7. Under what circumstances do you perform HIV testing (check all that apply)?**

- a Not applicable  
 b I offer universal HIV testing, regardless of risk factors  
 c I offer HIV testing if requested by the patient  
 d I offer HIV testing if the patient has risk factors for HIV  
 e Pregnancy  
 f Barriers prevent me from testing patients for HIV (check all that apply)  
 f1 Patient denies the offer to test  
 f2 Patient is afraid  
 f3 Lack of resources to pay for the test  
 f4 Lack of access to laboratory testing  
 f5 Time-consuming work  
 f6 Competing priority  
 f7 Concerned that patients won't return for results  
 f8 Other (please describe): \_\_\_\_\_

8. Are you willing to treat a patient who is HIV Positive? <sub>1</sub> Yes <sub>2</sub> No

9. Have you ever managed treatment of HIV for a patient <sub>1</sub> Yes <sub>2</sub> No

10. Are there any health system barriers that prevent you from providing care to patients with HIV?

<sub>1</sub> Yes <sub>2</sub> No

*If yes, check all that apply.*

- <sub>a</sub> Clinic location  
<sub>b</sub> I am not credentialed to provide HIV care  
<sub>c</sub> Lack of adequate reimbursement for services  
<sub>d</sub> Lack of funding/ resources  
<sub>e</sub> Lack of HIV specialists  
<sub>f</sub> Negative colleague or health system attitudes toward patients with HIV or AIDS  
<sub>g</sub> Other (describe): \_\_\_\_\_

11. Do you have telemedicine access to HIV experts?

<sub>1</sub> Yes <sub>2</sub> No <sub>3</sub> Unsure

*If no or unsure, are you interested in using telemedicine to provide HIV care locally?* <sub>1</sub> Yes <sub>2</sub> No

12. How recently have you received training related to Sexually Transmitted Disease, including HIV or AIDS?

- <sub>1</sub> Within the last two years  
<sub>2</sub> Longer than two years ago  
<sub>3</sub> Last training received was in medical school (approximate year: \_\_\_\_\_)  
<sub>4</sub> Last training received was in medical residency (approximate year: \_\_\_\_\_)  
<sub>5</sub> I have not received any training related to Sexually Transmitted Diseases

13. Do you complete an intake or assessment with newly diagnosed patients with HIV?

<sub>1</sub> Yes <sub>2</sub> No <sub>3</sub> Not applicable

*If yes, what is covered? (check all that apply)*

- |   |  |
|---|--|
| <input type="checkbox"/> <sub>a</sub> Case manager history        | <input type="checkbox"/> <sub>j</sub> Patient gender   |
| <input type="checkbox"/> <sub>b</sub> Employment status           | <input type="checkbox"/> <sub>k</sub> Patient HIV status   |
| <input type="checkbox"/> <sub>c</sub> General medical history     | <input type="checkbox"/> <sub>l</sub> Patient race/ethnicity   |
| <input type="checkbox"/> <sub>d</sub> HIV medical history         | <input type="checkbox"/> <sub>m</sub> Pharmacy history (i.e., which pharmacy do they get medications from) |
| <input type="checkbox"/> <sub>e</sub> Housing status              | <input type="checkbox"/> <sub>n</sub> Sexual orientation   |
| <input type="checkbox"/> <sub>f</sub> Income/insurance evaluation | <input type="checkbox"/> <sub>o</sub> Source of HIV infection  |
| <input type="checkbox"/> <sub>g</sub> Laboratory service provided | <input type="checkbox"/> <sub>p</sub> Other (describe): _____  |
| <input type="checkbox"/> <sub>h</sub> Marital status              |  |
| <input type="checkbox"/> <sub>i</sub> Patient age                 |  |

*If yes, how often do you repeat this assessment?*

- <sub>1</sub> Every appointment <sub>2</sub> Yearly <sub>3</sub> Other (describe): \_\_\_\_\_

14. Where do your patients with HIV obtain their prescription medicines for treatment of HIV? (check all that apply)

- <sub>a</sub> Not applicable  
<sub>b</sub> Local pharmacy  
<sub>c</sub> Mail order pharmacy  
<sub>d</sub> Unsure  
<sub>e</sub> Other: \_\_\_\_\_

15. Do you work with local pharmacies to provide care to patients with HIV or AIDS?

<sub>1</sub> Yes <sub>2</sub> No *If yes, briefly describe how you work with them:* \_\_\_\_\_

16. Have you prescribed PrEP? (PrEP is Pre-exposure prophylaxis - a combination of two HIV medicines (tenofovir and emtricitabine) approved for daily use to help prevent very high-risk HIV-negative persons from getting HIV from infected individuals (CDC, 2017).

<sub>1</sub> Yes <sub>2</sub> No - If no, why not? (check all that apply)

- <sub>a</sub> I am concerned about the cost of PrEP  
<sub>b</sub> I am concerned about the potential side effects of PrEP  
<sub>c</sub> I do not believe in using PrEP for my patients  
<sub>d</sub> I do not have enough knowledge to prescribe PrEP  
<sub>e</sub> The use of PrEP will cause patients to engage in riskier behaviors  
<sub>f</sub> Other (please describe): \_\_\_\_\_

17. Do you know where to locate HIV/AIDS case-reporting forms to meet mandatory reporting requirements for the state?

<sub>1</sub> Yes <sub>2</sub> No

18. Do you explicitly include HIV counseling as part of your sexual health counseling for patients?

<sub>1</sub> Yes <sub>2</sub> No

19. When do you take a sexual history?

- <sub>1</sub> I do not routinely obtain a sexual history.  
<sub>2</sub> I do under certain circumstances, i.e., new patients, when clinically relevant.  
<sub>3</sub> I routinely obtain a sexual history.

20. From whom do you obtain a sexual history? (check all that apply)

- <sub>a</sub> All patients OR <sub>b</sub> Adolescents <sub>c</sub> Adult men <sub>d</sub> Adult women <sub>e</sub> Patients who admit sexually active  
<sub>f</sub> Patients who test positive for an STD <sub>g</sub> Suspected sexual abuse victims; trafficking  
<sub>h</sub> Suspected domestic violence/rape victims <sub>i</sub> Specific populations (i.e., associated with higher prevalence of HIV+) If so, please describe the population: \_\_\_\_\_

21. What is your comfort level with taking a sexual history from a patient?

<sub>1</sub> Not applicable <sub>2</sub> Comfortable <sub>3</sub> Uncomfortable

22. Who do you provide sexual health counseling to? (check all that apply)

- <sub>a</sub> All patients OR <sub>b</sub> Adolescents <sub>c</sub> Adult men <sub>d</sub> Adult women <sub>e</sub> Patients who admit sexually active  
<sub>f</sub> Patients who test positive for an STD <sub>g</sub> Suspected sexual abuse victims; trafficking  
<sub>h</sub> Suspected domestic violence/rape victims <sub>i</sub> Specific populations (i.e., associated with higher prevalence of HIV+) If so, please describe the population: \_\_\_\_\_

23. I would like training on the following: (check all that apply)

- <sub>a</sub> HIV prevention counseling for patients who are at high risk  
<sub>b</sub> Healthy living when HIV+  
<sub>c</sub> HIV/AIDS testing and diagnosing  
<sub>d</sub> How to get my patients financial assistance for PrEP  
<sub>e</sub> How to help patients access HIV-related community resources  
<sub>f</sub> How to report HIV cases in the mandatory reporting program  
<sub>g</sub> How to talk patients with HIV about reducing the risk of transmission to others  
<sub>h</sub> Management and treatment of HIV/AIDS  
<sub>i</sub> Management, treatment and prevention of syphilis  
<sub>j</sub> Sexual health counseling in general practice  
<sub>k</sub> Tailoring sexual health counseling and care to be more sensitive to my patient's culture and background  
<sub>l</sub> Taking spirituality or religion into consideration when planning treatment or counseling



## 24. For the following programs and services available in Nebraska: (check all that apply)

Program\Service	I am familiar with this program	I want more information
<b>Ryan White Program*</b>		
• AIDS Drug Assistance Program (ADAP)	<input type="checkbox"/> a1	<input type="checkbox"/> a2
• Clinical Quality Management/Quality Improvement Program	<input type="checkbox"/> b1	<input type="checkbox"/> b2
• Emergency Financial Assistance	<input type="checkbox"/> c1	<input type="checkbox"/> c2
• Housing Services	<input type="checkbox"/> d1	<input type="checkbox"/> d2
• Laboratory Services and Office Visits	<input type="checkbox"/> e1	<input type="checkbox"/> e2
• Medical Case Management (MCM)	<input type="checkbox"/> f1	<input type="checkbox"/> f2
• Mental Health Services	<input type="checkbox"/> g1	<input type="checkbox"/> g2
• Non-Medical Case Management (NMCM)	<input type="checkbox"/> h1	<input type="checkbox"/> h2
• Outreach Services	<input type="checkbox"/> i1	<input type="checkbox"/> i2
• Psychosocial Services	<input type="checkbox"/> j1	<input type="checkbox"/> j2
<b>Nebraska HIV/AIDS Prevention and Surveillance Program</b>		
• Data to Care Program	<input type="checkbox"/> k1	<input type="checkbox"/> k2
• HIV Counseling, Testing and Referral	<input type="checkbox"/> l1	<input type="checkbox"/> l2
• HIV Education and Outreach	<input type="checkbox"/> m1	<input type="checkbox"/> m2
• Partner Services	<input type="checkbox"/> n1	<input type="checkbox"/> n2
<b>Support Services</b>		
<b>Nebraska AIDS Project</b>	<input type="checkbox"/> o1	<input type="checkbox"/> o2
<b>Nebraska Red Ribbon Community</b>	<input type="checkbox"/> p1	<input type="checkbox"/> p2
<b>Nebraska HIV Care and Prevention Consortium</b>	<input type="checkbox"/> q1	<input type="checkbox"/> q2
<b>Housing Opportunities for People with AIDS (HOPWA)</b>		
• Emergency rent/mortgage assistance	<input type="checkbox"/> r1	<input type="checkbox"/> r2
• Housing information	<input type="checkbox"/> s1	<input type="checkbox"/> s2
• Permanent housing placement	<input type="checkbox"/> t1	<input type="checkbox"/> t2
• Resource development	<input type="checkbox"/> u1	<input type="checkbox"/> u2
• Supportive services	<input type="checkbox"/> v1	<input type="checkbox"/> v2
<b>Hepatitis Prevention &amp; Care Program</b>	<input type="checkbox"/> w1	<input type="checkbox"/> w2
<b>Tuberculosis Program</b>	<input type="checkbox"/> x1	<input type="checkbox"/> x2
<b>Sexually Transmitted Disease Prevention Program</b>		
• Nebraska Infertility Prevention Plus Project (NIPPP)	<input type="checkbox"/> y1	<input type="checkbox"/> y2
• Partner Services	<input type="checkbox"/> z1	<input type="checkbox"/> z2
<b>Addiction and Pain Management Specialists (Project ECHO)</b>	<input type="checkbox"/> aa1	<input type="checkbox"/> aa2

\* Services provided through "the Ryan White Program provide a comprehensive system of care that include primary medical care and essential support services for people living with HIV who are uninsured or underinsured" (HIV/AIDS Bureau, 2016).




**THANK YOU** for taking the time to complete this survey.

Danielle Wing, Ryan White Program at email: [Danielle.Wing@nebraska.gov](mailto:Danielle.Wing@nebraska.gov)

Marci Athey-Graham, Nebraska HIV Surveillance Program at email: [Marci.Athey-Graham@nebraska.gov](mailto:Marci.Athey-Graham@nebraska.gov)

Kimberly Galt, Creighton University at email: [kgalt@creighton.edu](mailto:kgalt@creighton.edu)

Figure 2. Abbreviated post card survey

<p align="center"><b>FINAL REMINDER:</b></p> <p>The State of Nebraska Department of Health and Human Services is gathering information about ways to improve HIV-related patient care in Nebraska. <u>Your reply is important to us.</u></p> <ul style="list-style-type: none"> <li>• If you have questions or need a replacement survey, please contact Kimberly Galt at <a href="mailto:kgalt@creighton.edu">kgalt@creighton.edu</a>.</li> </ul> <p align="center">Thank you for participating!</p>	<p align="center">   <small>Boyer Bldg 123 PO Box 3266 Phone: 402.280.5660</small> </p> <p align="center"><b>Final request - your response is needed.</b></p>
<p>   </p> <p align="center"><b>Abbreviated Provider HIV/AIDS Comprehensive Care Survey</b></p> <ol style="list-style-type: none"> <li>1. Have you ever managed treatment of HIV for a patient?  <input type="checkbox"/> Yes  <input type="checkbox"/> No         </li> <li>2. Are you willing to treat a patient who is HIV positive?  <input type="checkbox"/> Yes  <input type="checkbox"/> No         </li> <li>3. Do you care for patients from the state of Nebraska?  <input type="checkbox"/> Yes  <input type="checkbox"/> No         </li> <li>4. Are you a primary care provider or an infectious disease specialist?  <input type="checkbox"/> Yes - if yes, which one?  <input type="checkbox"/> Primary care provider    <input type="checkbox"/> Infectious disease specialist  <input type="checkbox"/> No         </li> </ol> <p align="center"><i>Tear off and mail this bottom half back. Postage has been prepaid.</i></p>	<p align="center"> <b>Reserved for Business Reply Address and Insignia...</b> </p>

## REFERENCES

- Bernstein, K., D'Angelo, L., & Lyon, M. (2013). An exploratory study of HIV+ adolescents' spirituality: Will you pray with me? *Journal of Religion & Health, 52*(4), 1253-1266. doi:10.1007/s10943-012-9565-1
- Bluespruce, J., Dodge, W. T., Grothaus, L., Wheeler, K., Rebolledo, V., Carey, J. W., . . . Thompson, R. S. (2000). HIV prevention in primary care: Impact of a clinical intervention. *AIDS Patient Care and STDs, 15*(5), 243-253. doi:10.1089/10872910152050766
- Chen, H. T., Grimley, D. M., Waithaka, Y., Aban, I. B., Hu, J., & Bachmann, L. H. (2008). A process evaluation of the implementation of a computer-based, health provider-delivered HIV-prevention intervention for HIV-positive men who have sex with men in the primary care setting. *AIDS Care, 20*(1), 51-60. doi:10.1080/09540120701449104
- Chen, W., & Holzemer, W. L. (2004). Nurses' knowledge, attitudes, and practice related to HIV transmission in northeastern China. *AIDS Patient Care & STDs, 18*(7), 417-422.
- Department of Health and Human Services, Centers for Disease Control and Prevention. HIV in the United States and dependent areas. <https://www.cdc.gov/hiv/statistics/overview/atagance.html>. Updated January 29, 2019. Accessed February 5, 2019.
- Fauci, A. S., Redfield, R.R., Sigounas, G., Weahkee, M.D., Giroir, B. P. (2019). Ending the HIV epidemic. A plan for the United States. *JAMA, 321*(9):844-845. doi:10.1001/jama.2019.1343.
- Jain, C. L., Wyatt, C. M., Burke, R., Sepkowitz, K., & Begier, E. M. (2009). Knowledge of the Centers for Disease Control and Prevention's 2006 routine HIV testing recommendations among New York city internal medicine residents. *AIDS Patient Care and STDs, 23*(3), 167-176. doi:10.1089/apc.2008.0130
- Kaiser Family Foundation (2019). U.S. Federal funding for HIV/AIDS: trends over time. Published online Mar 05. Accessed on Mar 25, 2019 at: <https://www.kff.org/hivaids/fact-sheet/u-s-federal-funding-for-hivaids-trends-over-time/>.

- Karris, M. Y., Beekmann, S. E., Mehta, S. R., Anderson, C. M., & Polgreen, P. M. (2014). Are we prepped for preexposure prophylaxis (PrEP)? provider opinions on the real-world use of PrEP in the United States and Canada. *Clinical Infectious Diseases*, *58*(5), 704-712.
- Li, L., Wu, Z., Wu, S., Zhaoc, Y., Jia, M., & Yan, Z. (2007). HIV-related stigma in health care settings: A survey of service providers in China. *AIDS Patient Care & STDs*, *21*(10), 753-762.
- Martin, J. E., & Bedimo, A. L. (2000). Nurse practitioner, nurse midwife and physician assistant attitudes and care practices related to persons with HIV/AIDS. *Journal of the American Academy of Nurse Practitioners*, *12*(2), 35-41. doi:10.1111/j.1745-7599.2000.tb00281.x
- Mimiaga, M. J., White, J. M., Krakower, D. S., Biello, K. B., & Mayer, K. H. (2014). Suboptimal awareness and comprehension of published preexposure prophylaxis efficacy results among physicians in Massachusetts. *AIDS Care*, *26*(6), 684-693.  
doi:10.1080/09540121.2013.845289
- Myers, J. J., Rose, C. D., Shade, S. B., Koester, K. A., Maiorana, A., Malitz, F., . . . Morin, S. F. (2007). Sex, risk and responsibility: Provider attitudes and beliefs predict HIV transmission risk prevention counseling in clinical care settings. *AIDS and Behavior*, *11*, S30-S38.  
doi:10.1007/s10461-007-9269-9
- Myers, T., Worthington, C., Haubrich, D. J., Ryder, K., & Calzavara, L. (2003). HIV testing and counseling: Test providers' experiences of best practices. *AIDS Education and Prevention*, *15*(4), 309-319. doi:10.1521/aeap.15.5.309.23821
- Scherer, M. L., Douglas, N. C., Churnet, B. H., Grossman, L. C., Kline, M., Yin, M. T., . . . Olender, S. A. (2014). Survey of HIV care providers on management of HIV serodiscordant couples – assessment of attitudes, knowledge, and practices. *AIDS Care*, *26*(11), 1435-1439.  
doi:10.1080/09540121.2014.920950
- Slabic, K., & McGuire, A. L. (2007). Breaching patient confidentiality: A study of physician assistants' awareness and attitudes. *Journal of Physician Assistant Education (Physician Assistant Education Association)*, *18*(2), 20-32.
- Webber, G., Edwards, N., Graham, I. D., Amaratunga, C., Gaboury, I., Keane, V., . . . McDowell, I. (2009). A survey of Cambodian health-care providers' HIV knowledge, attitudes and

intentions to take a sexual history. *International Journal of STD & AIDS*, 20(5), 346-350.  
doi:10.1258/ijsa.2008.008390

Williams, T.L., Martin, J., Wenzl, K.L., Krieger, H., Frank, C., Jackson, S., Leschinsky, D., Keyser-Metobo, A. (2016). Nebraska Integrated HIV Prevention and Care Plan, Nebraska Department of Health and Human Services, September 30, 2016.

Windsor, L. C., Benoit, E., Ream, G. L., & Forenza, B. (2013). The provider perception inventory: Psychometrics of a scale designed to measure provider stigma about HIV, substance abuse, and MSM behavior. *AIDS Care*, 25(5), 586-591. doi:10.1080/09540121.2012.726338