NEBRASKA

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DEPT. OF HEALTH AND HUMAN SERVICES

State Medicaid Health Information Technology Plan

March 14, 2022

Contents

Change Control Log

Previous Submission Section	Current Submission Update Description
Section A	Updated *Section A As Is HIT Landscape*- updated based upon 2021 Environmental Scan. Additional minor changes to ensure accuracy and updated project information
Section B	Updated *Section B To Be HIT Landscape*- minor changes to ensure accuracy and updated project information
Section C	Updated *Section C Activities Necessary to Administer and Oversee the EHR Program*- minor changes to ensure accuracy
Section D	Updated *Section D The State's HIT Audit Strategy*- minor changes to ensure accuracy
Section E	Updated Section E *The State's HIT Roadmap*- updated to reflect post-HITECH

Summary

The State of Nebraska's Department of Health and Human Services (DHHS) recognizes that the future vision for Health Information Technology (HIT) involves the effective exchange and use of information to track and improve health outcomes while reducing long-term spending on healthcare. Specifically, this vision includes the sharing of necessary patient information at the point of care through standardized health information exchanges between providers to offer enhanced information for diagnosis and treatment decisions. Achieving this long-term goal requires a cultural change within the healthcare community. This change requires the participation of various stakeholders including providers, health insurers, public health, and other government agencies.

The Centers for Medicare and Medicaid Services' (CMS) Medicaid Promoting Interoperability Program, formerly known as, and herein known as the Electronic Health Record (EHR) Incentive Program, was implemented to more rapidly increase the adoption rate by providers for the meaningful use of Health Information Technology (HIT) as required by the American Recovery and Reinvestment Act of 2009 (ARRA). DHHS, in furtherance of these goals, views its role as supporting the following activities:

- Administer the Medicaid EHR Incentive Program for Nebraska, hereafter referred to as MIP, pursuant to the program rules;
- Provide MIP oversight;
- Promote meaningful use of HIT and exchange of health information.

During the inception of MIP, DHHS undertook a rigorous planning process designed to consider and incorporate all of the requirements for a successful implementation of its HIT initiatives that included payment of the incentives for adopting, implementing, or upgrading to certified EHR systems and Meaningful Use (MU) of EHR technology for Nebraska Medicaid providers. Since that time, DHHS has continued to carefully consider the current technology, business and operational environment, and continued planning for the necessary changes to administer MIP, conduct oversight activities, and promote adoption within Nebraska. DHHS implemented an electronic system to help support the administration and oversight of MIP in October 2014.

Throughout this document, Eligible Professionals and Eligible Hospitals will be called 'providers' collectively, unless otherwise noted.

1 Section A As-Is HIT Landscape

Overview

DHHS first conducted an environmental assessment to evaluate Nebraska's Health Information Technology (HIT) landscape between October 2010 and March 2011. An environmental assessment was conducted between August and November 2017 in order to evaluate Nebraska's current HIT/Health Information Exchange (HIE) landscape. With the submission of the 2021 SMHP, an updated environmental assessment was conducted between May and October 2021. Some updates to the 2017 environmental assessment have been made to reflect changes since that assessment and ensure accuracy. The 2017 and 2021 assessment included the following sections:

- Health Care Provider Environmental Scan;
- EHR/HIE Adoption;
    - Eligible Professional (EP) EHR Adoption
    - Eligible Hospital (EH) EHR Adoption
- Stakeholder Assessment (providers, health insurance exchange, state, etc.);
- Legal and Regulatory Support for EHR Adoption;
- State Borders;
- State of Nebraska Systems; and
- Consumer View and Acceptance.

The Statewide Health IT Coordinator for Nebraska, Lieutenant Governor Mike Foley, coordinates HIE efforts within the State of Nebraska, fostering an environment of joint participation and collaboration among HIT stakeholders. The Lieutenant Governor works with the eHealth Council to facilitate HIE efforts across the state. The eHealth Council assists in developing and updating the statewide technology plan and healthcare information technology adoption through the healthcare delivery system in Nebraska. The council also evaluates the cost of interoperable healthcare information technology and identifies resources to fund those efforts. The status and activities related to the various stakeholders are contained within this section.

Health Care Provider Environmental Scan

A health care provider environmental scan helps DHHS better understand the landscape, critical issues, and emerging trends that the State and providers will likely face in the

foreseeable future. Assessing the level of adoption of an EHR for each provider, the participation with a state designated HIE organization and level of interoperability of that health information is paramount in knowing the providers' coordination of care capability at the point of care for patients. The most recent Environmental Scan was completed in 2021.

1.1.1 Provider EHR Adoption

Prior to the initial environmental assessment in 2011, DHHS worked with provider associations and Wide River TEC, Nebraska's Regional Extension Center (REC), to understand the status of EHR provider readiness and adoption. DHHS reviewed results of existing surveys conducted by HIT stakeholders. The dates of these surveys ranged between 2007 and 2011 and provided historical context on EHR adoption.

EPs who attested to Adopt, Implement, Upgrade (AIU) and had not yet attested to MU showed barriers, including a lack of availability of vendors and systems that were not yet certified. In 2011, Nebraska had anticipated 600 providers would qualify during the life of the program. In the first program year, 484 EPs qualified for a Medicaid incentive payment.

2011 Eligible Professional (EP) Survey

The survey was distributed on February 16, 2011 with a follow-up email sent on March 1, 2011. The survey consisted of 33 multi-part questions, both in multiple choice and text entry format, concerning the present and planned use of HIT among EPs in the State of Nebraska. The follow-up email included a letter from the Director of Medicaid requesting participation in the survey. The survey included a web link which was sent to 3,652 EPs in Nebraska, of which 406 emails bounced back. The maximum number of respondents to an individual question in the survey was 478.

DHHS designed the survey to collect information regarding the level of EHR adoption, provider education/training needs, and barriers to adoption. In the survey from 2011, 63% of enrolled Medicaid EPs utilized an EHR system and more than half of those EPs stated their EHR was certified in MU.

When comparing EHR adoption, HIE participation, and MIP participation, minimum variances across provider types existed. Physicians appeared to have a lower 'unsure' response when asked about these topics. About 65% of EPs were unsure about future EHR purchases.

Half of all respondents had an EHR system in place. EP's practicing in an urban setting had an adoption rate of 52%, which was slightly higher than the adoption rate of providers with rural practices (42%). About half of the providers with an EHR system, 18% of 553 respondents, indicated their EHR was certified. Thirty-seven percent of all EPs that responded anticipated having a certified EHR system in place by 2015.

2011 Survey EHR Certification Results

EHR Certification Status	Total #	Total %
Certified EHR in Place Currently	100	18.0%
Certified EHR in 2011	47	8.5%
Certified EHR in 2012	46	8.3%
Certified EHR in 2013	7	1.3%
Certified EHR in 2014	2	.4%
Certified EHR in 2015	1	.2%
Do Not Plan	31	5.6%
Unsure	85	15.4%
Skipped Question	234	42.3%
Total	553	100%

The top barriers to EHR adoption, as indicated by 111 respondents in the 2011 survey, were related to cost, lack of knowledge, and satisfaction with current paper medical record systems.

2017 Provider Survey

This provider survey opened on September 12, 2017 and was completed September 29, 2017. The survey consisted of 26 questions in several categories including EHR usage, MU, MIP, and HIE. Eight questions were identical on both the 2011 and 2017 surveys and provided a baseline trend. A total of 3,822 email survey invitations were sent with 1,849 opened, 1,622 unopened, 267 bounced, and 84 opted out. The maximum number of respondents to an individual question in this survey was 578.

In this survey, the majority (94%) of survey respondents were Medicaid enrolled providers. The largest group responding to the survey was mental health providers at 26%. Provider respondents primarily specialized in general family practice and worked in a group or partnership medical or dental practice facility.

2021 Provider and Hospital Survey

The provider and hospital survey invitation was emailed to providers on May 24, 2021, and the survey was closed October 14, 2021. There were 32 questions with the survey being the same for both providers and hospitals. The survey results stayed consistent with past survey trends, which included categories of EHR usage, MU, MIP, and HIE. There were 4,221 total survey invitations emailed, 1,532 were opened, 1,671 unopened, 906 bounced, and 112 opted out. There were 221 total responses.

In this survey, 79% of survey respondents were Medicaid providers. The largest group responding to the survey was behavioral health providers at 23%, followed by long-term care providers at 18.5%. Provider respondents primarily specialized in mental health and long-term care, with the other top categories being chiropractors, general practice, and family practice.

Outside of a hospital setting, respondents were largely solo practitioners, followed by group or partnership practice, and long-term care facilities.

Survey Participant Description

- In the 2011 survey, most responding participants were physicians or dentists. In the 2017 and 2021 surveys, the findings were more mixed. The 2017 survey was sent to all Medicaid providers whether the provider participated in MIP or not. This allowed Medicaid providers such as behavioral health, long-term care, and pharmacists to respond to the survey. This was repeated for the 2021 survey. In the below analysis, the comparison of responses is as follows: 2011 vs 2017 vs 2021 comparisons
    - The comparison of the 2011 responses to the 2017 and then compared to the 2021 responses on identical questions in both surveys allow for a review of the changes that occurred during the years between the three surveys.
- 2017 and 2021 urban vs rural
    - The comparison between urban and rural responses allows for a comparison of HIE and HIT activities between two distinct demographic areas. The zip code of the provider was used to distinguish between urban and rural.
- 2017 and 2021 behavioral health providers vs all providers
    - The comparison between behavioral health providers versus all non-behavioral health providers helps determine the differences between the providers who did not participate in the EHR incentives program and those that did.
- 2017 and 2021 long term care providers vs all providers
    - The comparison between long term care providers versus all non-long term care providers helps determine the differences between the providers who did not participate in the EHR incentives program and those that did.

The majority (66.5%) of providers who responded to the 2017 survey were located in an urban setting. The largest professional category of the respondents were behavioral health providers (26%), physicians (15%), chiropractors (13%), and dentists (12%). This is a change from the 2011 survey where physicians and dentists had the largest representation. This is likely due to a larger email survey request that included all eligible Medicaid providers regardless of their participation in MIP.

In 2021, the majority (72.2%) of providers were located in an urban setting. The largest professional categories of respondents were behavioral health providers (23%), long-term care (19%), chiropractors (11%), dentists (8%), and physicians (8%).

EHR Adoption

A strong increase, from 48% to 63%, in EHR adoption was seen between the 2011 and 2017 surveys, with an additional increase of 10% between 2017 and 2021. This increase may benefit future HIT initiatives that require an EHR system. There was a 15% growth of EHRs

certified in MU from 2011 to 2017. By 2021, the EHR vendors being utilized was not dominated by any one EHR and a large variety of EHR systems were being used. Additionally, of the providers who responded to participating in the MIP program, 52% of providers responded to achieving MU stage 3.

Adoption of EHR System	2011		2017		% Change from 2011-2017	2021		% Change from 2017-2021
Yes	220	48%	362	63%	15%	153	73%	10%
No	206	45%	214	37%	-8%	56	27%	-10%
Unsure	35	8%	NA		NA			
Respondents	461		576			209		

In 2017, of the responding providers with an EHR system, almost half did not share clinical data electronically with other providers or agencies outside of their EHR system. The most used EHR functions were shown to be clinical documentation, medical history, and clinical/quality reporting measures.

In 2021, 72% of providers with an EHR system shared clinical data electronically with other providers or agencies outside of their EHR system. However, almost half of these providers still used paper records to augment their EHR. The most used EHR functions were shown to be clinical documentation, billing, and medical history. 39% of responding providers access/update Nebraska registries via their EHR, with 31% of responding providers utilizing their EHR to access/update the Nebraska Immunization Registry. Additionally, of the responding providers with an EHR system, half of them offer an online patient portal.

With increased EHR adoption between 2011 and 2017, many of the barriers to purchasing an EHR were reduced between 2011 and 2017. The 2021 survey posed this question not in terms of barriers of purchasing and EHR, but rather barriers to utilizing an EHR system. The answer options were mostly the same and those who answered “other” mentioned the size of their practice or not being medical providers, such as working in a school district or a pharmacy. Many of the barriers present in 2011 were still prevalent in 2021; however, there were significantly fewer providers who had not adopted EHR and had barriers to doing so.

Barriers in purchasing a certified EHR	2011		2017		% Change	2021		% Change 2017-2021
Cost of implementation & staff training	64	58%	82	42%	**-16%**	31	55%	**13%**
Cost of maintenance & upkeep	61	55%	83	43%	**-12%**	N/A	N/A	**N/A**
Time for staff training & education	51	46%	71	36%	**-10%**	21	38%	**2%**

Lack of knowledge/understanding of EHR	35	32%	48	25%	**-7%**	16	29%	**4%**
Staff lacks expertise in EHR technology	23	21%	30	15%	**-4%**	19	34%	**19%**
Security/privacy concerns	17	15%	26	13%	**-2%**	10	18%	**5%**
Limited broadband availability	7	6%	10	5%	**-1%**	7	13%	**8%**
Insufficient staff resources	N/A	N/A	N/A	N/A	**N/A**	19	34%	**N/A**
Other	N/A	N/A	N/A	N/A	**N/A**	13	23%	**N/A**
Respondents	111		195			56		

HIE Adoption

In 2017, more than two thirds (68.7%) of providers who responded either did not plan or were unsure if they would join an HIE and 38% of the respondents stated that they found no value to services provided by an HIE. Many of the barriers to joining an HIE were as prevalent in 2021 as in 2017 and 2011. The chart below lists some of the barriers in joining an HIE in 2011, 2017, and 2021.

Barriers in joining an HIE	**2011**		**2017**		**% Change**	**2021**		**% Change 2017-2021**
Lack of knowledge	43	45%	44	37%	-8%	76	42%	5%
Cost associated with fees	39	41%	60	51%	10%	88	49%	-2%
Cost of implementation & staff training	37	39%	56	47%	8%	80	44%	-3%
Satisfied with process to obtain data	33	35%	26	22%	-13%	34	19%	-3%
Security/Privacy concerns	31	33%	29	25%	-8%	40	22%	-3%
Insufficient staff resources	30	32%	41	35%	3%	69	38%	3%
Current product does not support HIE	20	21%	23	19%	-2%	35	19%	0%
Lack of technical staff	20	21%	38	32%	11%	54	30%	-2%
Limited broadband availability	10	11%	9	8%	-3%	9	5%	-3%
Unsure	N/A	N/A	N/A	N/A	N/A	41	23%	N/A
Other	N/A	N/A	N/A	N/A	N/A	26	14%	N/A
Respondents	95		118			180		

There was a relatively small increase in responding providers who accessed an HIE between 2011 and 2017, a decrease of responding providers who planned to access an HIE in the future, and a small increase of responding providers who have no plans to join an HIE. By

2021, only 19% of providers who responded were participating with an HIE with the majority of respondents indicating a neutral level of importance for their organization to participate in an HIE. However, just under 10% of providers anticipated their organization investing further in HIE due to the COVID-19 pandemic. Additionally, in 2021 a Nebraska Legislative Bill 411 was passed and signed into law requiring a majority of providers to become connected to the statewide HIE.

Participate in HIE	2011		2017		% Change	2021		% Change 2017-2021
Yes, CyncHealth	47	11%	50	17%	6%	34	19%	2%
No, but plan to join one later	67	16%	40	14%	-2%	N/A	N/A	N/A
No, do not plan to join one	91	21%	73	25%	4%	N/A	N/A	N/A
No	N/A	N/A	N/A	N/A	N/A	147	81%	N/A
Unsure	222	51%	126	44%	-8%	N/A	N/A	N/A
Other	6	1%	0	0%	-1%	N/A	N/A	N/A
Respondents	433		289			181		

For those responding providers who participated in HIE, half found discharge summaries to be the most valuable service provided by the HIE. Other valuable services included order/lab results, active care coordination, and longitudinal medical records. Additionally, 41.18% of providers were neither satisfied nor unsatisfied with the electronic data exchange via the HIE, with 41.17% of providers who were either satisfied or very satisfied.

Urban vs Rural

In the 2017 survey, rural provider respondents updated Nebraska's registries more frequently and had greater participation in MIP than urban provider respondents. These providers found admissions, discharge and transfers (ADT) alerts and Medication History from HIEs more valuable than their urban counterparts. Rural provider respondents found limited broadband availability was a barrier in joining an HIE and purchasing a certified EHR system. Telemedicine was reported more with rural provider respondents; however, more urban provider respondents intend to use telemedicine in the next 5 years

Similar to the 2017 survey, the 2021 survey found that rural providers and hospitals updated registries more frequently; however, participation in MIP was found to be equal for rural and urban providers and hospitals in this survey. Rural respondents were slightly higher in utilization of discharge summaries, patient portal, and historical lists. Rural respondents found broadband availability was a barrier in joining an HIE in 2021; however, less than half of the respondents found it a barrier when purchasing a certified EHR system. Additionally, the results of this survey found rural respondents were less interested in telemedicine than urban

providers and hospitals, though because of the COVID-19 pandemic, 44% of all respondents anticipated that their organization will invest further in, Telemedicine.

2017 Survey

Use Telemedicine	Rural(132)		Urban(315)		Total	
No, but plan to do so in future (0-5 years)	7	5.3%	35	11.1%	42	9.4%
Yes	21	15.9%	22	7.0%	43	9.6%

2021 Survey

Telemedicine of interest or on the future roadmap for your organization	Rural (15)		Urban (54)		Total	
No	11	78.57%	45	84.90%	56	81.16%
Yes	4	6 %	9	16.67%	13	18.84 %

Behavioral Health (BH) Providers

Responding BH providers utilized an EHR about half as much as all other responding providers combined in the 2017 survey. In 2021, BH providers utilized an EHR more than half of the time with non-BH providers more than three quarters of the time.

2017 Survey

Utilizing EHR's	Non-BH		BH		Total	
	n	*% N_B*	*n*	*% N_0*	*n*	*%*
Yes	230	67.8%	34	37.8%	264	61.5%
No	109	32.2%	56	62.2%	165	38.5%
Total	339	100%	90	100%	429	100%

2021 Survey

Utilizing EHR's	Non-BH		BH		Total	
	n	*% N_B*	*n*	*% N_0*	*n*	*%*
Yes	124	78.48%	29	56.86%	153	73.21%
No	34	21.52%	22	43.14%	56	26.79%
Total	158	100%	51	100%	209	100%

In 2017, barriers to purchasing certified EHR systems by BH providers were insufficient staff resources and security/privacy concerns. Forty-six percent of BH providers found it was important or very important to participate in an HIE which was higher than non-BH providers are. In 2021, barriers to utilizing an EHR system were implementation cost, time to learn, lack of knowledge, and lack of technology staff. Two percent of BH providers found it important to participate in an HIE which is lower than non-BH providers.

Long Term Care (LTC) Facilities

In 2017, only 30% of responding LTC facilities utilized an EHR system. More than half, 56% of LTC facilities used a discharge planning function in their EHR while only 35% of non-LTC respondents used that same function. Only seven LTC facilities that responded participated in an HIE. These seven facilities find discharge summaries, ADT alerts, continuity of care documents, medication history, and downloadable clinical summaries valuable at a greater rate than all other responding providers. Additionally, responding LTC facilities have a strong interest in the use of telemedicine in the future.

In 2021, 77% of responding LTC facilities utilized an EHR system. EHR systems were utilized by 72% of LTC facilities for discharge planning function while only 41% of non-LTC respondents used that same function. Additionally, 9 out of the 35 responding LTC facilities participated in an HIE and three facilities responded to interest in telemedicine for the future. However, 17 facilities anticipated investing in telemedicine as a result of the COVID-19 pandemic.

2017 Survey

Use Telemedicine	LTC(36)		Non-LTC(380)		Total	
No, but plan to do so in future (0-5 years)	9	25.0%	32	8.4%	41	9.9%
Yes	6	16.7%	30	7.9%	36	8.7%

2021 Survey

Use Telemedicine	LTC(36)		Non-LTC(380)		Total	
No	9	25.7%	60	28.3%	69	25.8%
No, but plan on future roadmap	3	8.5%	10	4.7%	13	4.9%
Anticipate due to COVID-19	17	48.6%	61	28.8%	78	29.2%
Yes	26	74.2%	81	38.2%	107	40.1%

1.1.2 Hospital EHR Adoption and Health Information Exchange Survey

2011 Eligible Hospital Survey

DHHS conducted a survey to determine eligible hospital readiness as part of the environmental assessment in 2011. Sixty-six out of the 90 hospitals in the State at the time of the survey completed most of the questions. Ninety-five and a half percent of the hospitals that responded to the survey were enrolled in Medicaid. Critical Access Hospitals (CAHs) accounted for the majority of the respondents (67.2%), with the second largest being

noncritical access hospitals (non-CAHs) (22.4%). Approximately 74% of the hospitals that participated in the survey were located in rural areas and 26% were urban.

Sixty percent of all hospitals that participated in the survey had an EHR system in place. Significant differences were noted between urban and rural adoption. The majority of urban hospital survey respondents (88%) had an EHR system in place compared to about half of the rural hospital respondents (47%). Thirty-three percent of respondents indicated that their EHR systems were certified, but nearly 90% of responding hospitals indicated that they expected to have a certified EHR by 2013.

EHR Certification Status	Total #	Total %
Certified EHR in currently	22	33%
Certified EHR in 2011	18	27%
Certified EHR in 2012	14	21%
Certified EHR in 2013	6	9%
Unsure	3	5%
Skipped question	3	5%
Total	66	100%

Effective September 30, 2015, 189 EH payments had been made and 80 unique EHs had participated in MIP with a total of $46,336,094.56 paid.

As of 2015, EHR adoption was increasing within the state of Nebraska. Of the 91 hospitals in Nebraska at the time, 79 were participating in MIP, 6 in Medicare's EHR Incentive Program only, and 6 were not participating in either program. About 89% of the hospitals that received a MIP payment in 2013 returned for a 2014 payment.

2017 Hospital Survey

The hospital survey was opened on September 12, 2017, the same day as the provider survey and with the same 3-week availability. This survey consisted of 29 questions with categories including EHR usage, MU, MIP, and the exchange of health information. Seven questions were identical on both the 2011 and 2017 surveys and provide a baseline trend. Of the 98 hospitals in Nebraska, 55 responded to the survey. The survey email contact list was provided by the Nebraska Hospital Association and consisted of CEOs, CIOs, and CFOs of individual hospitals.

In this analysis, the comparison of responses is as follows:

- 2017 responses
- 2011 vs 2017 comparisons

- The comparison of the 2011 responses to the 2017 responses on identical questions in both surveys allows for a review of the changes that occurred during the 6 years between the two surveys.

- 2017 urban vs rural

  - The comparison between rural and urban responses allows for a comparison of HIE and HIT activities between two distinct demographic areas. The zip code of the provider was used to distinguish between rural and urban.

The majority (78%) of the hospital survey respondents were Acute Care/Critical Access hospitals with more than 50% Medicare patients.

2021 Hospital Survey

The hospital survey was combined with the provider survey in 2021, asking both groups the same questions on EHR usage, MU, MIP, and HIE. Of the 32 questions in the survey, one was specific to hospitals, which asked for hospital type. The majority (71%) of hospitals were Critical Access Hospitals (CAHs). Of the 111 hospitals in Nebraska, 365 emails were sent, with 12 hospitals or hospital systems responding to the survey.

There was a significant adoption and utilization of EHRs by hospital respondents between 2011 and 2017. As of 2017, almost all (98%) of the hospital respondents utilized an EHR system. In 2021, of the 12 hospital respondents, all utilized an EHR. Of the 12 respondents, one is a health system that had multiple hospital locations.

Response	2011		2017		% Change	2021		% Change
Yes	38	58%	50	98%	40%	12	100%	2%
No	26	39%	0	0%	-39%	0	0%	-39%
Unsure	2	3%	1	2%	-1%	N/A	N/A	N/A
Respondents	66		51			12		

In 2017, the majority of EHR vendors used by hospital respondents were Heartland (13), Cerner (8), Meditech (6), Epic (4), Evident (4), McKesson (4), Medhost (3), Allscripts (2), and NextGen (2). In 2021, the breakdown of EHR vendors by hospital respondents was as follows: Cerner (3), Meditech (1), Epic (1), Allscripts (1), CSPI (3), Healthland/Centriq (2), and NextGen (1). In 2017, the majority (70%) of the hospital respondents were rural, whereas in 2021, 63.6% of the hospital respondents were rural.

In 2017, most (88%) of the hospital respondents updated the Nebraska Immunization registry. To a slightly lesser degree, these hospitals updated the Syndromic Surveillance and Electronic Lab Reporting registries. By 2021, all 12 responding hospitals accessed/updated via their

EHR the Nebraska Immunization registry, seven accessed/updated the ELR, and five accessed/updated the Syndromic Surveillance registry.

EHR Registry Access				
	2017		2021	
Immunization	42	87.50%	12	100%
Syndromic Surveillance	34	70.83%	5	41.7%
Electronic Lab Reporting	36	75.00%	7	58.3%
Cancer	8	16.67%	2	16.6%
Vital Records	5	10.42%	1	8.3%

In 2017, more than two thirds of the hospital respondents found that HIEs are important and more than half had access to an HIE. In 2021, of the 12 responding hospitals, seven participated with an HIE and 41% indicated that participating in a HIE was important. In 2017 about one quarter of the hospital respondents did not plan to join an HIE in the future and found the cost of the associated fees to be a major barrier to joining. In 2021, the costs associated with joining an HIE remained a significant barrier.

In 2017, rural hospital respondents found accessing a provider directory from their HIE more valuable than urban hospital respondents. Only half of the hospital respondents had access to a provider directory that allowed for secure messaging. Of the 12 responding hospitals in 2021, 10 utilized a provider directory.

HIE Importance				
		2017	2021	
Very Unimportant	7	13.46%	N/A	N/A
Unimportant	4	7.69%	3	25%
No Opinion	6	11.54%	4	33.33%
Important	25	48.08%	3	25%
Very Important	10	19.23%	2	16.67%

Stakeholder Assessment

1.1.3 Federally Qualified Health Centers (FQHCs)/ Rural Health Centers (RHCs)

There are 59 FQHCs and 188 RHCs in Nebraska enrolled with Nebraska Medicaid. FQHCs and RHCs are working together and exchanging health care information. On June 3, 2010, the

United States Department of Health and Human Services' Health Resources and Services Administration (HRSA) announced that $83.9 million in grant funds were available to assist health center networks to adopt and implement HIT. These funds were part of the $2 billion that were assigned to HRSA under ARRA. One World Health Centers, acting as the fiscal agent for the Heartland Community Health Network, and as a member of this network, was awarded $1,511,083 from the ARRA Health Information Technology Implementation grant. Heartland Community Health Network is a collaborative network of the following five FQHCs:

- One World Health Centers, NE;
- Charles Drew Health Center, NE;
- Bluestem Health, formerly known as People's Health Center, NE;
- Norfolk Community Health Clinic, NE;
- Council Bluffs Community Health Center, IA.

Health Center Computer Network (HCCN) served as a HIT team mentor. Heartland used this funding for staffing and technical support in the adoption of HIT and HIE for its five participating members.

1.1.4 HIT Regional Extension Center (REC) Status

As of August 24, 2012, 806 of the 1,065 primary care providers who worked with Wide River TEC, installed an EHR and used it to report quality measures and e-prescribing. Twenty-seven of the 54 CAHs working with Wide River TEC implemented an EHR. The REC grant funding ended in February 2014.

1.1.5 Indian Health Service (IHS)

Indian Health Service (IHS) is an agency within the United States Department of Health and Human Services and has responsibility to provide federal health services to American Indians. IHS is the health advocate for Indian people and a federal health care provider. Health care services are available to Nebraska Native Americans at IHS and tribal facilities. The tribal based facilities in Nebraska are: Carl T. Health Center, Fred LeRoy Health and Wellness Center/Ponca Hills Health and Wellness, Santee Sioux Tribal Health Clinic, and Winnebago Tribal Health Department. The IHS facility in Nebraska is Twelve Clans Unity Hospital (formerly known as Winnebago Indian Hospital). In addition, the Nebraska Urban Indian Coalition, which has implemented an EHR system, provides medical services to this tribal population. Locations can be found in Lincoln and Omaha, Nebraska and Sioux City, Iowa. These locations provide services to Native Americans that do not reside on a reservation.

IHS has implemented a suite of applications that provide management of health information and the Aberdeen Indian Health Service Area office provides HIT oversight. The Resource and Patient Management System (RPMS) is the IHS decentralized system for clinical and administrative health information. IHS provides a comprehensive health service delivery system for approximately 2.2 million American Indians and Alaska Natives who belong to 567 federally recognized tribes in 36 states. Both the Nebraska IHS and the tribal health facilities subscribe to the Aberdeen Indian Health Service Area Office and the national IHS RPMS.

1.1.6 Department of Defense/Veterans Administration

The only active military installation in Nebraska is Offutt Air Force Base. The 55th Medical Group, based at Offutt, has the ability to administer mass quantities of medicine in the event of a health emergency. In October 2017, they deployed a test medical group response to a health emergency to rapidly administer medicine to the base populous in the event of a pandemic or health emergency.

The Ehrling Bergquist Clinic is a small internal and family medicine office at Offutt. The Virtual Lifetime Electronic Record (VLER) Health Initiative and eHealth Exchange allows some of the information in a patient's military electronic health record to be securely shared between the Department of Defense, Department of Veterans Affairs, and participating federal and civilian health care partners. This clinic provides comprehensive outpatient care, as well as pharmacy, lab, and radiology services. Military personnel requiring services beyond the capability of this clinic are referred to the Bellevue Medical Center.

There are approximately 150,000 veterans in the State of Nebraska who receive health care services from the Veterans Administration Nebraska-Western Iowa Health Care System (VA NWIHCS). Provider members of the VA NWIHCS include the VA Medical Center in Omaha, the Community Living Center in Grand Island, and seven community-based outpatient clinics.

The VA NWIHCS uses the Veterans Health Information Systems and Technology Architecture (VistA) EHR system. This technology is used to share patient information among VA facilities only. VistA is a Web-based tool that allows providers to securely sign in and access patient health records from remote locations. While patient information is typically not electronically shared outside of the Nebraska VA system, there is the capability for patient information exchanges on a case-by-case basis with a signed Interconnection Security Agreement.

1.1.7 CyncHealth

Nebraska Health Information Initiative (NeHII) DBA CyncHealth is a 501c3 non-profit health information exchange organization that has a public/private governance model and includes health care providers, payers, and the State of Nebraska. CyncHealth began as a public/private collaborative between the Nebraska Chamber of Commerce and University of Nebraska in

2005. The goal of this joint effort was to create a common health record. In November 2008, CyncHealth contracted with Axolotl to provide the technology needed to establish an HIE and offer EHR functionality to physicians. CyncHealth was piloted March through June of 2009 and then was designated as the statewide integrator by the Governor.

Since 2010, funds have been available through the Health Information Technology for Economic and Clinical Health (HITECH) Act for the purpose of improving patient outcomes and reducing healthcare costs through the expansion of secure HIEs. CyncHealth is the designated statewide integrator for Nebraska. CyncHealth, the eHealth Council, and the State HIT Coordinator work together to facilitate HIE exchange initiatives throughout the State.

In 2021, NEHII completed a rebranding effort and is now doing business as CyncHealth. CyncHealth's board of 18 members is made up of a broad representation of Nebraska HIE stakeholders representing the healthcare spectrum including health systems, payers, critical access hospitals, local public health departments and state government. CyncHealth is operating the exchange with 65 full-time employees and a range of 7-21 contracted resources in 2021. Staff includes Executive and Senior Leadership, Population Health and Quality Advisors, Project Management Office, Interface Analysts, Policy Analyst, Computer and Data Science Analysts, Network Engineers, Developers, Data Architect, Prescription Drug Monitoring Program (PDMP) Director, Informatics Pharmacist and Staff, Marketing, Accounting, Legal and HR staff. CyncHealth corporate offices are located in La Vista, Nebraska.

During 2016, CyncHealth migrated to a new platform that provided cloud-based services. This platform provided enhanced patient lists, printing capabilities, patient summaries via secure electronic messaging, and ADT notification. Starting in 2019, CyncHealth began the process of transitioning from the Optum platform to the Intersystems platform which now provides more compliance capability for sensitive data display, as well as enhanced functionality not possible with Optum. In 2019 CyncHealth also migrated to a new PDMP platform allowing greater functionality. Capability now exists for enhanced workflow alerting and workflow integration into EMR and pharmacy systems through enablement of Application Programming Interfaces (APIs).

Also, LB411 was introduced on 1/14/2021 and passed and signed by Governor Ricketts on 05/24/2021. This legislation requires providers to onboard with CyncHealth, who is the designated Health Information Exchange.

The HITECH Act was part of the American Recovery and Reinvestment Act of 2009 (AARA). This Act was created to motivate the implementation of electronic health records (EHR) and supporting technology. This funding ended FFY 2021 (09-30-2021). Found below are projects that CyncHealth implemented through HITECH funding:

HIE Infrastructure, Interoperability and Onboarding

1. **Immunization Gateway:** CyncHealth sends the immunization information electronically through the Immunization Gateway allowing for the remaining vaccine count to be accurate and available in real time. Without CyncHealth, the tracking system for decreasing inventory at NESIIS for the Vaccines for Children program must manually be entered into NESIIS.
2. **Syndromic Surveillance:** CyncHealth collects syndromic surveillance data from hospitals and submits the information through an interface to DPH. DPH utilizes NEDSS to track disease patterns and coordinate responses to outbreaks in the State of Nebraska. Submission through CyncHealth streamlines the interface process, which results in an increase of data submission. Currently, only two provider groups in Nebraska interface this data directly to Public Health.
3. **Electronic Lab Reporting:** DPH connects to CyncHealth to collect lab data. DPH does not currently have the ability to accept electronic lab reporting directly from providers outside Critical access hospitals and hospitals. Once implemented, CyncHealth will have the ability to collect lab data and submit it through an interface to DPH.
4. **Medication History Data/PDMP Specialized Registry Support:** CyncHealth, in partnership with DPH, collects data on prescription drugs prescribed from pharmacies across the state of Nebraska. The goal is to reduce over-prescribing and enable safer prescribing of opioid medications, and enhance the medication reconciliation process.
5. **Facility and provider connectivity to** CyncHealth: CyncHealth enables hospitals to submit demographic data, lab results, radiology reports, and transcription reports to the HIE for exchange with care providers in the state. Providers have access to the patient data. Additionally, a LMS was implemented for providers to enable better access to HIE onboarding. The project also enables LTPACs to connect to the HIE and submit and view data available in the HIE. The inclusion of LTPACs broadens the scope of interoperability for better connectivity across the continuum of care. There will also be an effort to enhance clinician workflows by developing HIE platform enhancements, including event notification services and a unified landing page.
6. **Nebraska Parkinson's Disease Registry:** A database is being created to detect the incidence of and possible risk factors concerning Parkinson's Disease, plan health care requirements, educate health care providers, and provide the opportunity to collect data that could lead to a cure. Through a partnership between Public Health and CyncHealth more providers and pharmacies will be onboarded to report to and access the registry.

7. **Emergency Preparedness (PULSE):** Project focuses on developing a health IT disaster response platform know as PULSE (Patient Unified Lookup System for Emergencies). This platform, which will be integrated into the HIE, allows for disaster healthcare volunteer providers to be authenticated and access critical health information during disaster situation.
8. **Patient and Family Engagement (Platform for Patient/Consumer Access):** CyncHealth will develop a patient engagement platform aligned with MyHealthEdata that creates a singular place of information for patients and their representatives to view personal health information and to share with providers.
9. **Specialized Registries for Enhanced Care Coordination:** CyncHealth and DPH will develop specialized registries that providers will submit and have access to for care coordination and information sharing. This project will focus on the Electronic Case Reporting, Electronic Reporting for Cancer Registry, and Electronic Reporting for Traumatic Brain Injury Registry.
10. **Health Information Service Provider (HISP) Services:** Project develops an HIE service that allows for direct messaging of clinical information amongst HISP connected providers. Additionally, project will allow for direct messaging from providers to patients.
11. **Behavioral Health Integration:** Project focuses on inclusion of behavioral and mental health data and access to providers.
12. **Interstate Data Sharing:** Develops interstate data sharing agreements with the states that are contiguous to Nebraska, in accordance to state law and policy, in order to meet the requirements of a qualified PDMP under the SUPPORT Act. Interstate data sharing will support HIE enhancements for patient matching, ease of use, and interoperability between state hubs.
13. **Workflow Integration:** Supports the integration of the PDMP into the workflow of providers. This will be done through the development of programming, interfaces, APIs, and other means to integrate the PDMP into EHRs, EMS systems, and pharmacy dispensing software systems throughout Nebraska. Supports the development of a patient matching solution and the integration of this into the HIE and EHRs.
14. **Electronic Prescribing:** Supports the development of an electronic prescribing solution to be offered to prescribers at no cost. This will allow for prescriptions to be prescribed through the most recent industry standards, along with providing greater information to providers and making the process more efficient and timely. Additionally, the project supports the continuation of PDMP data integration into prescribing systems and connection of prescribers to the PDMP.

15. **Real-time PDMP Reporting:** Supports the reduction of barriers to timely reporting of dispensed prescription to the PDMP with the goal of getting reporting to as near to real-time as possible.

Analytics, Clinical Quality Measures and Population Health

16. **CQM and Population Health Support:** CyncHealth will be a hub for CQM data, and support CQM analysis, as well as support the electronic export of CQM data from providers to multiple programs. Data will be aggregated, normalized, and validated to be shared with providers. Additionally, HIE services will support the dual eligible critical access hospitals' (CAHs) participation in the Medicare Beneficiary Quality Improvement Project (MBQIP).
17. **Data Analytics:** Supports the development of a data analytics system in order to provide information on controlled substances prescribed to and filled for a covered individual. This system also supports the analysis of trends across states. There is significant reuse ability of a data analytic system outside of the PDMP as well.
18. **Neonatal Abstinence Syndrome (NAS) Identification and Notification:** Supports the utilization of the HIE and data analytics infrastructure to create a NAS registry for identification, notification, and predictive analysis. Information gathered through this project will then be available to be utilized for prevention and treatment programs.

HIE Governance, HIE Sustainability and EPMO

19. **HIE Maturity Assessment:** Project supports an assessment of the HIE landscape and maturity in accordance to CMS' standards of the HIE maturity Model and MITA.
20. **Infrastructure:** Provides for the necessary enhancement of the existing HIE infrastructure to support each project. This includes operationalizing the ability to provide limited access of PDMP data to Nebraska Medicaid and the managed care entities for Medicaid beneficiaries.
21. **Administrative Considerations:** Supports the other seven projects through the addition of personnel and related equipment. Additionally supports the coordination and planning efforts of all SUPPORT Act activities.

DHHS will continue to oversee this work done by CyncHealth through interdepartmental collaboration and steering meetings.

CyncHealth and Utah Health Information Network (UHIN) were collaborating to allow ADT broadcasts to cross state lines for care coordination. CyncHealth collaborated with border states such as: Iowa, Kansas, Colorado, South Dakota, and Wyoming for HIE activities. While CyncHealth encouraged participation from border state providers, participation was by choice. In addition to providing HIE services across state borders, CyncHealth provided business plan

development, helpdesk functions, and training services to out-of-state providers or state HIEs that can use CyncHealth's expertise.

Collaboration with border states regarding the PDMP was occurring along with other services relating to the PDMP under the SUPPORT Act. The SUPPORT Act was established in 2018 to provide federal funding to states to enhance their PDMP's and other services that work to eliminate the opioid crisis. This funding ended FFY 2020 (09-30-2020). The projects (12, 13, 14, 15, 17, 18, 20, 21), as seen above, that CyncHealth implemented through the Support Act funding were continued with the HITECH funding.

1.1.8 Electronic Behavioral Health Information Network (eBHIN) / Heartland Community Health Network (HCHN)

Electronic Behavioral Health Information Network (eBHIN) was a behavioral health specific HIE. eBHIN's goal was to provide HIE services, as well as EHR, billing, and practice management modules to contracted providers. eBHIN started in the State of Nebraska Division of Behavioral Health (DBH) Region V and was dissolved due to financial unsustainability. Effective September 1, 2014 eBHIN transitioned management of services to HCHN. HCHN is a HRSA funded HCCN entity for Nebraska FQHCs.

1.1.9 eHealth Council

In 2007, former Lieutenant Governor Rick Sheehy and the Nebraska Information Technology Committee (NITC) established the eHealth Council. NITC partnered with CyncHealth and the University of Nebraska Medical Center (UNMC) to seek funding in support of health information interoperability and the facilitation of health information into providers' workflows. In October 2015, this partnership received $2.7 million from the U.S. Department of Health and Human Services Office of the National Coordinator for Health Information Technology (ONC) for this purpose. NITC has developed a Nebraska Statewide Technology Plan which focuses on five goals:

- Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;
- Support the use of information technology to enhance community and economic development;
- Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;
- Ensure the security of the state's data and network resources and the continuity of business operations;

- Promote effective planning, management, and accountability regarding the State's investments in information technology.

In accordance with the Nebraska Revised Statute 86-516 requirement to annually update a statewide technology plan, NITC has created seven strategic initiatives:

- State Government IT Strategy;
- IT Security;
- Nebraska Spatial Data Infrastructure (NESDI);
- Network Nebraska;
- Digital Education;
- Rural Broadband and Community IT Development;
- eHealth.

Regarding this last initiative, the eHealth Council completed in 2017 a $2.7 million grant to increase CAHs, LTC facilities, and other providers' participation with CyncHealth. Grant activities included:

- Adopting of health information exchange through CyncHealth for 47 facilities and health systems;
- Adding 2 ambulatory clinics and a provider network to CyncHealth through C-CDA data sharing;
- Implementing direct secure messaging for 15 LTC and other facilities;
- Implementing a gateway with Missouri Health Exchange to enable the exchange of data across HIEs;
- Connecting 2 CAHs to the State's Syndromic Surveillance system through CyncHealth;
- Implementing population health analytics for 6 facilities;
- Providing assistance in workflow analysis and integration to facilities participating in integrated communities;
- Developing use-case based training modules;
- Developing demonstration projects that integrate HIE data for comparative research.

NITC completed a four year $6.8 million State Health Information Exchange project through a grant from the ONC (2010 - 2014). A 2014 report covering this four year time frame stated the number of CyncHealth users grew from 464 to 3,590 and Nebraska ranked 13th in the country in e-prescribing adoption, with 89% of physicians in Nebraska e-prescribing.

1.1.10 DHHS – Division of Public Health (DPH)

DPH is made up of 23 local health departments. They provide oversight of preventive and community health programs and services, and also maintain multiple health information registries including:

State Immunization Registry – The Nebraska State Immunization Information System (NESIIS)

NESIIS is a secure, statewide, web-based system developed to connect and share immunization information among public clinics, provider offices, local health departments, schools, hospitals, and other health care facilities that administer and track immunizations in the State of Nebraska. The primary function of NESIIS is to collect data so that providers may track and identify required immunizations. For facilities without an EHR system, NESIIS offers a user-friendly manual interface that allows a facility to enter, view, and track administered immunizations, manage vaccine inventory, forecast vaccinations needed and run reports and reminder-recall notices. For facilities with an EHR, NESIIS is capable of uni-directional and bi-directional electronic data exchange using the HL7 2.5.1 format to minimize the amount of manual data entry. This bi-directional exchange allows patient immunization data to be viewed in an EHR. Hospitals and providers are also able to submit Immunization registry data from the HIE. Currently six facilities submit immunization registry data and an additional 23 are in process of developing this connection.

The reporting of immunization data using a standardized HL7 v2 Center for Disease Control (CDC) approved format was a MU objective for EHs and EPs. NESIIS receives HL7 v2 data from EHR hospital systems, vital records, local health departments, private providers, clinics, and other health care facilities.

Immunization data can be sent electronically via the Public Health Information Network Messaging System (PHINMS). Data can be accepted in HL7 v2.4 or HL7 v2.5.2 format. DHHS also allows school medical staff to view and have print-only access to immunization data for their students. This access provides verification of student compliance to school required immunizations.

State Public Health Surveillance

DPH utilizes the National Electronic Disease Surveillance System (NEDSS) to track disease patterns and coordinate responses to outbreaks in the State of Nebraska. The

goal of this surveillance program is to identify trends in reportable diseases and support local health departments' outreach efforts. Data in the program has been retained since 2005. NEDSS, maintained by the CDC, is a secure web-based program that allows healthcare professionals and government agencies to communicate, plan, and respond to such events in a timely manner.

Data in the program consists of laboratory reports of reportable diseases for ongoing surveillance. Physicians and laboratories are required to report any patient reportable conditions to this registry. Data includes name, address, age, date of birth, laboratory performing the lab test, physician information, and lab test results for each patient. Data submission is required to be in both HL7 v2.3.1 and v2.5.1 formats. The State of Nebraska currently requires labs to report on approximately 70 diseases. In addition, seven facilities use CyncHealth to send Electronic Lab Reporting information through the HIE to Public Health and an additional 14 are in process of developing this data connection.

Syndromic Surveillance Event Detection of Nebraska (SSEDON)

SSEDON was created to expand the scope of syndromic surveillance, strengthen current surveillance capabilities, and improve the effective practice of public health in Nebraska. The objective of the syndromic surveillance program is to detect, track, and analyze disease events to establish at-risk populations, develop effective prevention plans, monitor trends in morbidity, and ultimately improve population health through better, timelier, disease surveillance. SSEDON accepts HL7 v2.5.1 formatted health information electronically through PHINMS. With the continued partnership with CyncHealth, providers and hospitals are able to submit syndromic surveillance data to the SSEDON system through CyncHealth. Currently eight facilities submit syndromic surveillance data and an additional 14 are in process of developing this data connection.

Reporting syndromic surveillance information was a public health objective for EHs and a Stage 2 and Stage 3 MU objective for EPs. The SSEDON system is used to collect and analyze syndromic data from healthcare facilities in Nebraska and uses de-identified patient information.

Other Public Health Data Inventory

The Nebraska Behavioral Risk Factor Surveillance System (BRFSS) has been conducting surveys annually since 1986. This system targets health education and risk reduction activities to lower rates of premature death and disability. The data is collected through landline and cell phones with randomly selected Nebraskans.

Cancer Registry Data

Cancer Registry data is required to be collected monthly from hospitals, clinics, and physicians. Data has been collected since 1986 and includes personal identifiable information. Currently, there are no electronic interoperability capabilities with this database.

Emergency Medical Services (EMS)

The Nebraska EMS provides the data standard for the data elements contained in the Nebraska EMS database and are maintained by DHHS. All basic and life support services provided require collection of a patient care record for every emergency response. EMS services are required to report data to DHHS quarterly. This data, collected since 2000, helps to determine how services can be improved when a quality improvement process is utilized.

Parkinson's Disease Registry

Data on Parkinson's Disease has been collected since 1997, with a short period where the registry was terminated. To enhance the registry, a web based registry as a separate application within the WIR-based NESIIS platform was developed recently. Supporting and building this web based system, a data exchange that collects prescription information and expands use of the registry to authorized physicians will continue to occur. Additionally, better analysis tools will support coverage and simplification.

PDMP

Data on drug prescriptions is collected to identify and monitor opioid prescriptions in alignment with the national goal of reducing the effects of the opioid crisis. This registry exists through a partnership between DPH and CyncHealth, with CyncHealth supporting the functionality of the PDMP. Through data sharing and an integrated workflow solution that connects to EHRs, the medication reconciliation process will be enhanced and provider burden will be limited.

In April of 2019, the Nebraska State Legislature passed a bill to improve the state's PDMP. This legislation allowed for the Nebraska PDMP to share data with other states' PDMPs, regulated data sharing for research purposes, gave flexibility to DHHS to alter data collection provisions, and provided access to the PDMP for the Nebraska Medicaid officials and managed care organizations. The changes associated with this bill will support increased functionality of the PDMP into the future.

Additionally, in August of 2020, the Nebraska State Legislature passed a bill to improve the data governance coordination between DHHS, the Legislature, CyncHealth, and providers.

1.1.11 DHHS –Division of Medicaid & Long-Term Care (MLTC)

The Division of Medicaid and Long Term Care (MLTC) encompasses the Medicaid Program which provides health care services. Nebraska's State HIT Coordinator is the Lieutenant Governor. The eHealth Council facilitates eHealth initiative discussions in the state. The HIT Coordinator works closely with the eHealth Council in facilitating HIE activities across the State. Participation by both the State HIT Coordinator and DHHS promotes statewide meaningful use of EHRs, ensuring ongoing coordination of State resources.

Participation in the EHR Incentives Program since the last SMHP submission has seen 30 eligible providers achieve meaningful use and receive an incentive payment for Program Year 2020 and 7 eligible providers do the same in Program Year 2021.

Since the last full SMHP submission in November 2020, MLTC, DPH, and CyncHealth have worked to implement or plan more projects that will increase interoperability and the functionality of CyncHealth. Please refer to subsections 1.1.7 and 1.1.10 for more information related to CyncHealth and Public Health.

The Medicaid Information Technology Architecture (MITA) 3.0 State Self-Assessment (SS-A) was performed in March 2015. An update to the Roadmap was submitted December 2020. The SS-A and the Roadmap provide direction for Medicaid transformation for a 5 year time period. An updated SS-A will be completed this year, with a fully revised SS-A being completed at a later date in alignment with future updated federal rules. This assessment is meant to align business and information technology processes to improve the administration of the Medicaid program.

1.1.12 DHHS – Division of Behavioral Health (DBH)

DBH consists of Community-Based Services and the Regional System.

Community-Based Services is organized into six local behavioral health regions that receive funding, oversight, and technical support from DBH. The regions contract with local providers to provide the public inpatient, outpatient, emergency, and community mental health and substance abuse services. These contracted providers maintain their own medical records, whether they are in paper or electronic format.

The DBH Regional System is comprised of three Regional Centers, located in Lincoln, Norfolk, and Hastings. The Regional Centers are responsible for providing services to patients committed by mental health boards or court systems. All three Regional Centers currently use Netsmart's Avatar EHR system. Each Regional Center has its own server, and therefore, does not share patient data across entities. There is no external exchange of patient information or immediate plans to join CyncHealth.

1.1.13 DHHS Application Environment

Applications that support Medicaid programs include the following:

- Medicaid Management Information Systems (MMIS) – Eligibility and claims system (described below).
- N-FOCUS – Nebraska's integrated eligibility and case management system (described below).
- Nebraska Medicaid Case Mix System –Nursing home resident level of care assessment information that uses information from the Minimum Data Set database that supports the federally-required interdisciplinary assessments for nursing facility residents.
- Coordinating Options in Nebraska's Network through Effective Communications & Technology (CONNECT) – Application that assists Service Coordinators in work with children and adults. The Early Development Network, Aged & Disabled Waiver, Early Intervention Waiver, Medically Handicapped Children's Program, Respite Subsidy, and the Disabled Persons and Family Support programs are included in the system. CONNECT tracks referrals, verifications, diagnoses, and services being provided and services needed but unavailable. CONNECT collects data and gives service coordinators access to information on other services the child, or individual is receiving enabling easier coordination. This application supports service authorizations for assisted living services.
- Nebraska Aging Management Information System (NAMIS II) –Application supports activities for the State Unit on Aging and developed to enter, edit, monitor, and report services provided by Area Agencies on Aging in Nebraska. It tracks services required by the U.S. Administration on Aging (AoA) and compiles information required by the AoA for the National Aging Program Information System. It is also used to manage programs, track costs of certain services and program usage, and analyze client demographics.

1.1.14 Medicaid Management Information Systems (MMIS)

MMIS has been operational since 1977 and became HIPAA compliant in 2003. MMIS currently consists of the following subsystems:

Data Management –The DMA project implemented Deloitte's HealthInteractive Analytics (HIA) which is a Data Warehouse (IDS) and analytics/reporting tool (ADS). The Medicaid Enterprise data warehouse has several subsystems for reporting: Management and Reporting Subsystem (MARS), Decision Support System (DSS), Ad-hoc queries and reporting and Federal reporting (CMS 64, 37, ect.); MCO quality and MCO encounter data processing

including MCO data (e.g. claims, authorizations, ect.). Also, the Program Integrity system has several subsystems such as Surveillance, Utilization and Review Systems (SURS); and Fraud and Abuse Detection System (FADS). CMS certified this project on January 3, 2022.

Drug Claims Processing – DHHS contracts with Magellan Health for point of sale (POS) payment of claims via MMIS. Magellan is also responsible for all drug claims and rebate processing, prospective drug utilization review (Pro-DUR) and support of the retrospective DUR (Retro-DUR), which is currently being managed internally while we procure a new contractor. The POS system supports National Council for Prescription Drug Programs (NCPDP) standards.

Medicaid Drug Rebate (MDR) – DHHS uses a PC-based extract from MMIS claims history to prepare quarterly invoices for drug rebates from manufacturers. Magellan is responsible for the preparation and distribution of these invoices.

Medical Claims Processing (MCP) – The MCP subsystem edits and calculates reimbursement amounts for medical goods and services provided to Medicaid clients by approved providers.

Medical Non-Federal (MNF) – This subsystem ensures that Medicaid Federal matching funds are not used to pay for health care services payable by Medicare.

Medical Provider Subsystem (MPS) – The MPS maintains demographic, eligibility, and licensing data for all enrolled Medicaid providers. MMIS houses provider files utilized for claims processing. DHHS contracts with Maximus for provider screening and enrollment. The Maximus system interfaces with the provider subsystem within MMIS.

Nebraska Disability Program (NDP) – This subsystem accounts for the separate funding of health care services for disabled persons who do not meet the Supplemental Security Income (SSI) disability duration requirements, but are eligible for the same medical services as Medicaid.

Nebraska Medicaid Eligibility System (NMES) – NMES is an automated voice response system used to verify Medicaid or managed care eligibility for Nebraska Medicaid clients.

Recipient File Subsystem (RFS) – RFS uses and maintains data obtained from N-FOCUS that pertains to the medical eligibility of each person enrolled in one or more DHHS programs.

Reference File Subsystem (RSS) – This is a database of reference information, including but not limited to procedure, diagnosis, drug codes, and fee schedules.

Screening Eligible Children (SEC) – This subsystem facilitates comprehensive, preventive health care, and the early detection and treatment of health problems in Medicaid eligible children by producing Early and Periodic Screening Diagnostic and Treatment (EPSDT) program screening, treatment tracking, and client outreach reports.

SURS – DHHS included the capability for SURS in the Data Management module, the DMA. The DMA provides reports and tools to support the investigation of potential fraud, waste, or abuse (FWA), by Medicaid providers and clients, by analyzing historical data and developing profiles of health care delivery and service utilization patterns.

Third Party Liability (TPL) – This subsystem stores private insurance information for Medicaid clients and their family members, to prevent payment of claims that should be the responsibility of another insurer or to recover payments that were another insurer's responsibility.

1.1.15 Nebraska Family Online Client User System (N-FOCUS)

N-FOCUS is an integrated client/server system used to automate benefit-server delivery and case management for DHHS. N-FOCUS supports the majority of social service programs in Nebraska and has held data since 1998. N-FOCUS processes include:

- Client/case intake;
- Eligibility determination;
- Case Management;
- Service authorization;
- Benefit payment;
- Claims processing and payment;
- Provider contract management;
- Government and management reporting.

The data in N-FOCUS is specific to children and families who have applied for assistance such as Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and Medicaid. The system is the Statewide Automated Child Welfare Information System for DHHS. N-FOCUS and other MMIS eligibility modules will be updated to accommodate Nebraska Medicaid Expansion populations by October 2020.

N-FOCUS Web applications consist of public applications, dashboards, and applications launched directly from N-FOCUS. Eclipse is the integrated development environment (IDE) used to generate the Java Server Faces and Facelets code. These Java applications run on Tomcat application servers on the Linux Operating System. The Java applications call on stored procedures to access DB2 data and Sequential Query Language (SQL) to access SQL Server data.

1.1.16 DHHS Information Systems and Technology (IS&T)

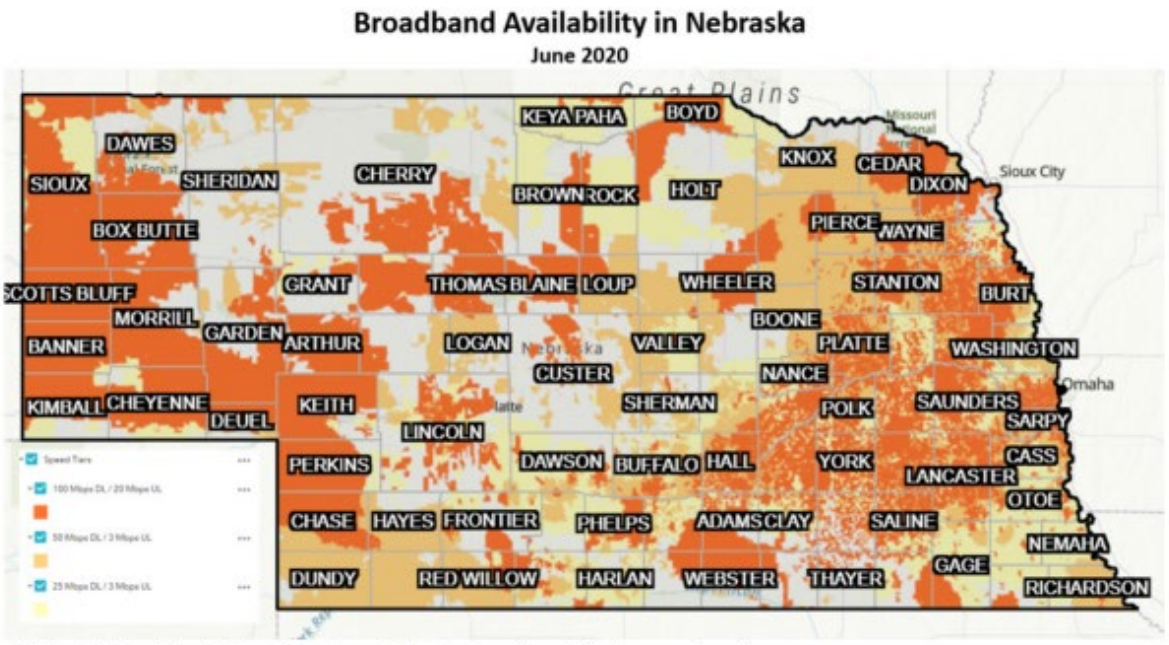
IS&T is the technology agency within DHHS that supports the majority of the critical solutions supporting DHHS. The two systems predominantly supporting the majority of functions are N-FOCUS and MMIS. N-FOCUS supports eligibility and intake for Nebraska Medicaid as well as other programs. MMIS supports claim payments along with the required ancillary functions. While the systems internally exchange necessary administrative information, neither of these systems is connected to a health information exchange at this time. There is significant planning and work taking place to modernize Nebraska Medicaid's technology footprint, such as modernizing MMIS (described in section 2.1.2).

1.1.17 Broadband Internet Access

As found in many states, Nebraska has greater broadband penetration in urban areas than in rural areas. According to the 2017 survey results, broadband connectivity was not an issue for providers. The 2021 survey results continued to show that broadband connectivity is not a significant issue for providers, with only 12% of respondents stating broadband availability as a barrier to EHR utilization.

Response	2011		2017		% Change
Cable	165	38%	199	42%	**5%**
Digital Subscriber Line	131	30%	159	34%	**4%**
Unsure	96	22%	67	14%	**-8%**
T1	53	12%	33	7%	**-5%**
Other	13	3%	18	4%	**1%**
None	6	1%	7	1%	**0%**
Satellite	1	0%	8	2%	**2%**
Dial-up	1	0%	1	0%	**0%**
Respondents	437		469		

The following map details the current status of broadband availability in Nebraska.



Nebraska Broadband Map using June 2020 data from broadbandmap.nebraska.gov

There have been no further broadband grants since what is detailed in section 1.1.9 eHealth Council. There however has been an initiative at the state legislative level to examine broadband connectivity across Nebraska. This initiative is the Rural Broadband Taskforce, which works to research broadband availability, adoption, and affordability and present these findings to the state legislature for their consideration.

1.1.18 Consumer View

In November 2008, the University of Nebraska Public Policy Center conducted a project titled "Sharing Electronic Health Records: The Views of Nebraskans" to research the views of the State of Nebraska's citizens on HIT and electronic sharing of health information. The findings suggest that consumers are generally receptive toward HIT and the exchange of patient health information. While perceptions of health technology were positive, some consumers expressed concerns regarding privacy and security.

The results of this research indicate that all participants believed that State government should play a role in ensuring the privacy and security of health information and provide information to consumers about health information security and privacy. The results of this research also indicated that the State government should regulate health information networks (91%), and facilitate public-private partnerships to exchange health information (88%). Findings also revealed that consumers would like to see State government play a role in consumer education and 72% of the participants said it was "very important" for State government to educate Nebraskans about electronic HIE.

Additionally, Nebraska residents reported that they regularly use the Internet to access health or insurance information. At the time of this survey, consumers were not using the internet to communicate directly with their providers through email.

2 Section B To-Be HIT Landscape

A public/private stakeholder model is essential for driving and executing Nebraska's future vision, especially where the private sector is propelling the advancement and sustainability of HIE. This vision involves widespread effective exchange and use of information to improve the quality of health outcomes while reducing long-term spending on healthcare. However, achieving the long-term vision requires an investment for sustainability and a renewed persistence in the governance of initiative projects. DHHS' reasonable expectation is to progress steadily toward the long-term vision.

Future Vision for DHHS

DHHS is made up of five divisions. This section addresses the efforts of the Division of Medicaid and Long Term Care and Division of Public Health. Both divisions under DHHS have been and will continue to work in a collaborative manner regarding the advancement of HIT-HIE. The long-term vision for DHHS includes electronic submission of necessary information utilizing standardized interfaces to better enable the ability to:

- Monitor the quality of care being provided;
- Provide actionable relevant information to DHHS and managed care entities to enable the identification of at-risk patients who would benefit from care management;
- Monitor adherence to plans of care developed by care management entities;
- Inform public health officials as expediently as possible of potential health out-breaks impacting specific demographic regions or populations in the state.

DHHS participates with partners such as the NITC eHealth Council's Public Health Work Group to identify ways to utilize HIE to enhance disease surveillance and other public health efforts. DHHS' focus for the next five years is primarily on HIT adoption, improved HIE capabilities, and improved Medicaid Enterprise Systems as these are all necessary to enable DHHS to fulfill its long-term vision.

Future Vision for Providers

DHHS' long-term vision is to work with CyncHealth, the designated statewide integrator and PDMP to foster increased interoperability and data standardization ensuring the coordination of care for all patients in Nebraska and neighboring states. While some of the rural counties in Nebraska are designated as frontier areas, broadband internet access is generally available throughout the state. Nebraska's relatively small population is spread over 77,358 square miles, giving Nebraska an average population density of 24 persons per square mile. Delivering information exchange capabilities necessary to support this vision in an affordable

manner in rural areas has required a strategic approach. Nebraskans have responded to the challenges of providing services to a relatively small population over a large geographic area by leveraging existing resources, facilitating cooperation among various entities in the state, and carefully allocating financial resources. As DHHS and its providers move forward with the future vision, DHHS will continue to incorporate clinical quality data elements as part of program initiatives and evaluations.

While Nebraska has chosen a public/private sector model for HIE, DHHS recognizes that Medicaid needs to support its allocated share of the responsibility to ensure functionality is available to providers. These capabilities are central to DHHS' long-term vision. Therefore, DHHS has submitted Advanced Planning Documents (APD) to secure federal funding to offset the Medicaid portion of these capabilities.

Technical Vision

Currently, the individual systems being used by providers must connect to a HIE to promote interoperability. Nebraska has chosen CyncHealth as the statewide integrator to support these capabilities. The partnership with CyncHealth and DHHS has and will continue to gain and expand connectivity and the ability to exchange health information for the purposes of treatment, payment, and health plan operations. Interoperability of health information for individual providers will be more attainable and accelerated by providing continuity of care information through CyncHealth. This also provides secure HIE messaging for clinical information between health care providers, and, in turn, provides information to facilitate more efficient care coordination and point of care decision making.

Interoperability of managed care data as part of the Medicaid Enterprise provides Nebraska the opportunity to better understand statewide Medicaid service delivery. New CMS initiatives will provide better health outcomes and better cost management through the state's ability to analyze managed care data.

There are also many public health opportunities associated with a statewide HIE. In a partnership between the State and CyncHealth, activities are being implemented to enable hospitals to submit immunization, syndromic surveillance, and Parkinson's disease data. Clinicians will query this data to obtain updates. Additional public health opportunities to leverage HIE activities can provide more complete and accurate information, improve coordination of care, and improve readiness for communicable disease outbreaks. Modernization of existing public health registries by use of connectivity to a statewide HIE can help reduce the cost of storage and maintenance for each of the registries while introducing new efficiencies

2.1.1 Statewide Health Information Exchange and PDMP Systems

The ability to connect different provider systems throughout the State is key to accomplishing the long-term vision. Nebraska's strategic vision identifies an information exchange between DHHS and State-based programs using CyncHealth as a central point of integration. The vision for the Statewide Health Information Exchange (HIE) and integrated Prescription Drug Monitoring Program (PDMP) systems are to enable Event Notification services for improved care coordination. Nebraska has contracted with CyncHealth for the HIE and PDMP systems which were developed and implemented with HITECH and SUPPORT Act funds in prior fiscal years. These systems are operational and used by Nebraska Medicaid providers with the aim to improve care for beneficiaries.

DHHS has worked toward the advancement of interoperability by contracting with CyncHealth through Health Information Technology for Economic and Clinical Health (HITECH) funding for HIE activities that were completed on 09-30-2021. With the end of HITECH funding, DHHS submitted an HIE-PDMP OAPD that was approved by CMS on 3/8/2022.

The functionality and services included in the pending OAPD will assist with meeting the goals of Healthy People 2030, advance interoperability, provide access and meaningful information to aid in the improvement of priority areas including child and adolescent health, maternal health, preventive care needs for adults with disabilities, and other human service priorities. This functionality directly benefits the Medicaid program providers and participants through the transmission of clinical information between providers with the aim to improve health outcomes.

The HIE-PDMP OAPD will ensure sustainability of the operations and related costs for these systems. This OAPD also includes a request for new functionality related to API workflow integrations and enhanced master patient index capabilities. This sustainability and new functionality are described in the four projects below:

1. Event Notification Services (ENS)

   CyncHealth provides real-time event notification service across a variety of healthcare delivery facilities to improve care coordination and transitions of care that will assist Medicaid providers in improving the health outcomes of Medicaid beneficiaries. The CyncHealth event notification services can systematically generate notifications based on a variety of data sources, including ADTs, CCDs, claims data, care plans, visit history, risk scores, PDMP data, POLST/MOLST/Advanced Directives, etc. This service allows users to define rules to dynamically determine what data should be provided in each type

of notification and provides a comprehensive, synthesized history of patient utilization, including augmented data with out-of-state content. This not only allows providers to improve clinical care after hospitalization through effective and efficient transfer of information, but also provides insight into patients with patterns of high or medically unnecessary utilization; patients who travel between emergency departments; patients with security or safety events; prescription history; encounter/admission with behavioral health diagnosis; post-acute activity; population health targets; COVID-19 Positive Lab Result, etc.

2. Direct Care/Care Coordination Services

CyncHealth enables providers to leverage matched and enriched individual medical records and community-wide public health data to support healthier patients and healthier communities. CyncHealth is the designated statewide health information exchange and is legislatively authorized to collect and report public health data. CyncHealth can bi-directionally exchange, report and support registry reporting for an array of data feeds that include but are not limited to ADTs, laboratory results, medications, immunizations, imaging, clinical documents, demographics, social determinants of health and ED report feeds from all providers connected to the HIE that may have information related to a patient's care.

3. Enhanced Master Patient Index

The ability to locate and link patient records across disparate data sources is a foundational function of CyncHealth. Since HIEs consist of multiple data sources and high volumes of patient records, and since the U.S. does not yet have standard unique patient identifier, master patient indexes (MPIs) are one of the key components or services necessary for data exchange within an HIE infrastructure. CyncHealth partners with NextGate to provide a unified mechanism to check if data from different sources belong to the same patient, in order to craft a complete and accurate longitudinal record of the patient's medical history or care summary.

4. API Workflow Integrations

CyncHealth will support the existing application programming interfaces (APIs) and adopt additional APIs. APIs allow HIE and PDMP information to be embedded directly into the EHRs or Pharmacy systems which greatly increases utilization volume and reliance on the cross-community data by reducing

barriers to accessing the information. CycnHealth will provide technical assistance with the CyncHealth API/FHIR-based infrastructure through which PDMP and HIE data are accessed by the CyncHealth Portals and external systems.

CyncHealth staff will also manage the basic support, troubleshooting, issue resolution, bug fixes, and technical specifications of the underlying API/FHIR-based infrastructure leveraged by the CyncHealth Portals and external systems accessing data for integrations.

2.1.2 MMIS Modernization

DHHS will be modernizing MMIS to meet the future business needs of the Medicaid program.

The current DHHS MMIS system is approaching the end of its useful life. The foundation for the structure of the current MMIS technical architecture was developed in 1973 and became fully operational and certified in 1977. DHHS is currently working towards implementing a modern system that will meet the goals below:

- Provide timely and accurate adjudication of Medicaid claims;
- Improve the efficiency and cost effectiveness of the Medicaid program;
- Improve communication between information systems including interoperability of data extending to health information exchanges;
- Improve the quality of, and access to, information leading to improved and informed decision making;
- Raise the MITA Maturity Level and align with MITA standards and conditions;
- Improve information technology systems for increased flexibility and adaptability and increase responsiveness to needs within the DHHS business workflow.

DHHS is working to modernize the MMIS system through the implementation of different modular systems. The most recent MMIS Replacement Project System Integration IAPDU was approved by CMS on August 20th of 2020. This System Integration APD is currently focused on developing integration points with legacy systems using APIs for projects like iServe and EVV. It is also focused on leveraging Integration Services Hub (API Gateway and ESB) to support modern integration approaches. System Integration continues to maintain the

Life Cycle Management, MITA State Self-Assessment, EA Practice and Enterprise Shared Services and Data Governance.

The Pharmacy and Drug Rebate Services (PDRS) continues to be implemented. This project includes the procurement and implementation of a modular solution to replace Nebraska's existing legacy Medicaid Drug Rebate (MDR) system and contracted pharmacy point-of-sale (POS) and preferred drug list (PDL) solution and services. DHHS is working to complete a Request for Proposal for a Medicaid Drug Rebate (MDR) processor, pharmacy business operations, and a Point of Sale (POS) pharmacy prescription drug claims processor. The estimated implementation date will be at the end of 2022.

The DMA project implemented Deloitte's HealthInteractive Analytics (HIA) which is a Data Warehouse (IDS) and analytics/reporting tool (ADS). With the certification of this project by CMS on January 3, 2022, DHHS will continue to meet reporting requirements as required by certification and an OAPD to support the operations and maintenance of the implemented DMA project will be submitted.

The Electronic Visit Verification (EVV) module was mandated through Section 12006 of the 21st Century CURES Act for personal care services and home health services. The personal care services component was implemented in December of 2020, while the home health services implementation deadline is January 1, 2023. The most current IAPD addresses the additional funding for state staff and contractor resources necessary to mitigate implementation defects and prepare for the CR event, which was delayed, from FFY2021 to FFY2022.

The HHA Expansion project moved Nebraska's adult expansion group from a multi-tiered alternative benefit plan (ABP) program to a single ABP program 10/1/2021. The proposed NFOCUS enhancement system activities such as User-Acceptance Testing and Pre-Production Activities are projected to be completed by 03-31-2022. The Go-Live date is estimated to take place on 04-01-2022.

The Interoperability and Patient Access (IPA) module will provide beneficiaries access to their claims data, in-network providers and the FFS formulary through a third-party application of their choosing. This will be done by leveraging Application Programming Interfaces (APIs) and Fast Healthcare Interoperability Resources (FHIR) technology. The contract with Edifecs, Inc. for work on the IPA module was fully signed and executed 11-18-2021. Nebraska is working internally to prepare for the vendor engagement in mid-March of 2022.

DHHS is also working to continue the Eligibility and Enrollment Solution that had been on hold. This solution will be a part of a larger DHHS initiative for Integrated Health and Human Services (IHHS), also known as iServe. The goal is to acquire an Integrated Eligibility & Enrollment / Benefits Management (IE&E/BM) System based on a framework of shared components (aka, "IHHS Platform"). Currently the iServe portal is being implemented with a CR event occurring in March 2022. Continued implementation of iServe modules will occur

in the future, with the next module implementation being the enrollment and benefits manager, known as iBEEM.

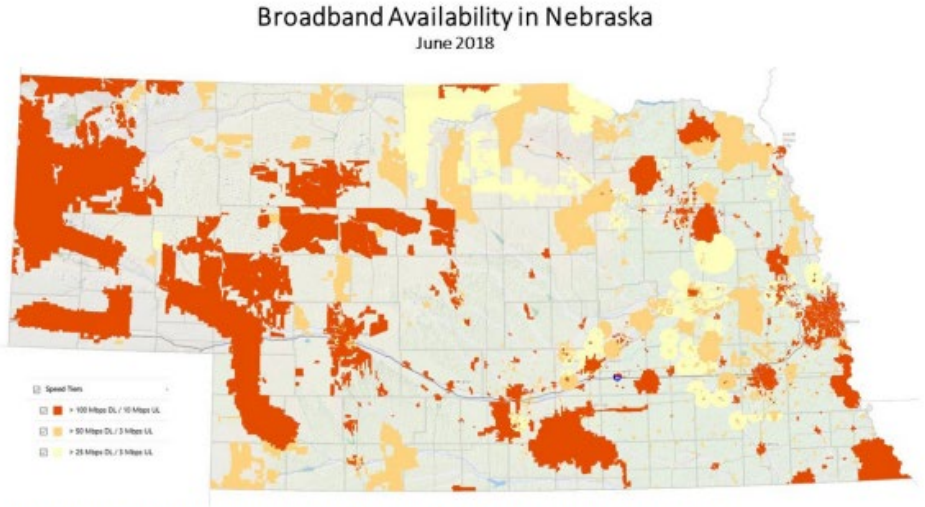
2.1.3 Broadband Initiatives

In the State of Nebraska, broadband internet access is generally available across the State, but coverage is lacking in some rural areas. The vision for Nebraska is that broadband access will be readily available to providers regardless of geographic location. DHHS is not actively involved in the governance or funding of these initiatives, but in the 2017 survey less than 10% of providers felt that limited broadband availability was a barrier in HIE participation or in purchasing an EHR. In 2018, a Rural Broadband Task Force was formed to review issues related to broadband services in rural areas and make recommendations to the State Legislature.

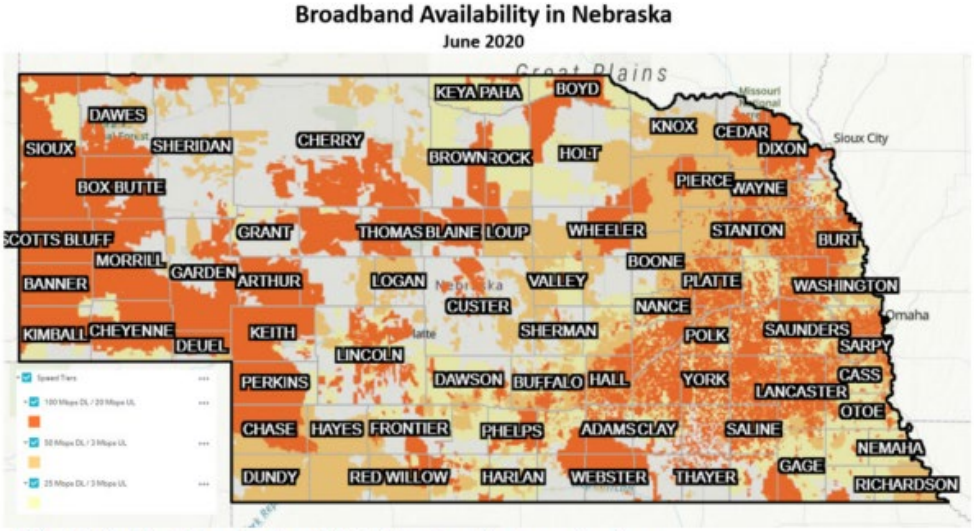
The Rural Broadband Task Force presented their most recent findings and recommendations on November 1, 2021.Some of the key findings from this report are as follows: (1) *Broadband Data and Mapping*: The State of Nebraska can no longer wait for the FCC to provide more accurate broadband availability data and mapping; (2) *Alternative Technologies and Providers*: SpaceX (Starlink) is a company that can provide broadband via low Earth satellites and is now offering its beta service to users at some locations in NE; (3) *Nebraska Universal Service Fund and Reverse Action (NUSF)*: NUSF provides support to price cap, rate of return, and mobile wireless carriers in Nebraska. A total of $36,545,562 is available for broadband projects in high cost areas through the NUSF in 2021. Since 2019, 19,583 households have been connected through broadband projects funded through the Nebraska Universal Fund. The Nebraska Public Service Commission is establishing rules and procedures for a reverse auction and is expected to move through the process of redirecting $3 million of support in 2022.; (4) *Public-Private Partnerships and Broadband Planning*: Grant programs such as the Remote Access Rural Broadband Grant Program and the Nebraska Broadband Bridge program which provide funding for broadband deployment projects in unserved and underserved areas are essentially a form of public-private partnerships. Governor Ricketts and the Legislature are expected to allocate any additional federal funding for broadband deployment projects in 2022; (5) *Agriculture*: Farmers and ranchers need upload speeds of at least 30 Mbps to transfer large amounts of generated data to the cloud. In the future, even greater upload speeds may be required. Rural areas of most Nebraska counties—including many of Nebraska's top-producing agricultural counties— lack broadband with upload speeds of greater than 25 Mbps or fiber connectivity; (6) *Digital Inclusion, Homework Gap and Leveraging E-Rate Funding*: Those without broadband connectivity at home struggled to learn, access health care and work remotely during the COVID-19 pandemic. Approximately 12% of Nebraskans or 215,000 individuals do not have a broadband subscription at home. This includes 32,000 Nebraskans under 18 years old. Just over half of Nebraska libraries serving communities with populations of less than 2,500 have internet access below 25 Mbps down and 3 Mbps up; (7) *Broadband Technician Workforce*: Nebraska, like the rest of the country, currently faces a shortfall of skilled workers needed to

deploy broadband. Additional investments in broadband will likely increase the demand for skilled workers.

The maps below show improvements in the availability of broadband of at least 25 Mbps down and 3 Mbps up in Nebraska from June 2018 to June 2020.



Nebraska Broadband Map using June 2018 FCC Form 477 data, broadbandmap.nebraska.gov



Nebraska Broadband Map using June 2020 data from broadbandmap.nebraska.gov

3 Section C Activities Necessary to Administer and Oversee the EHR Program

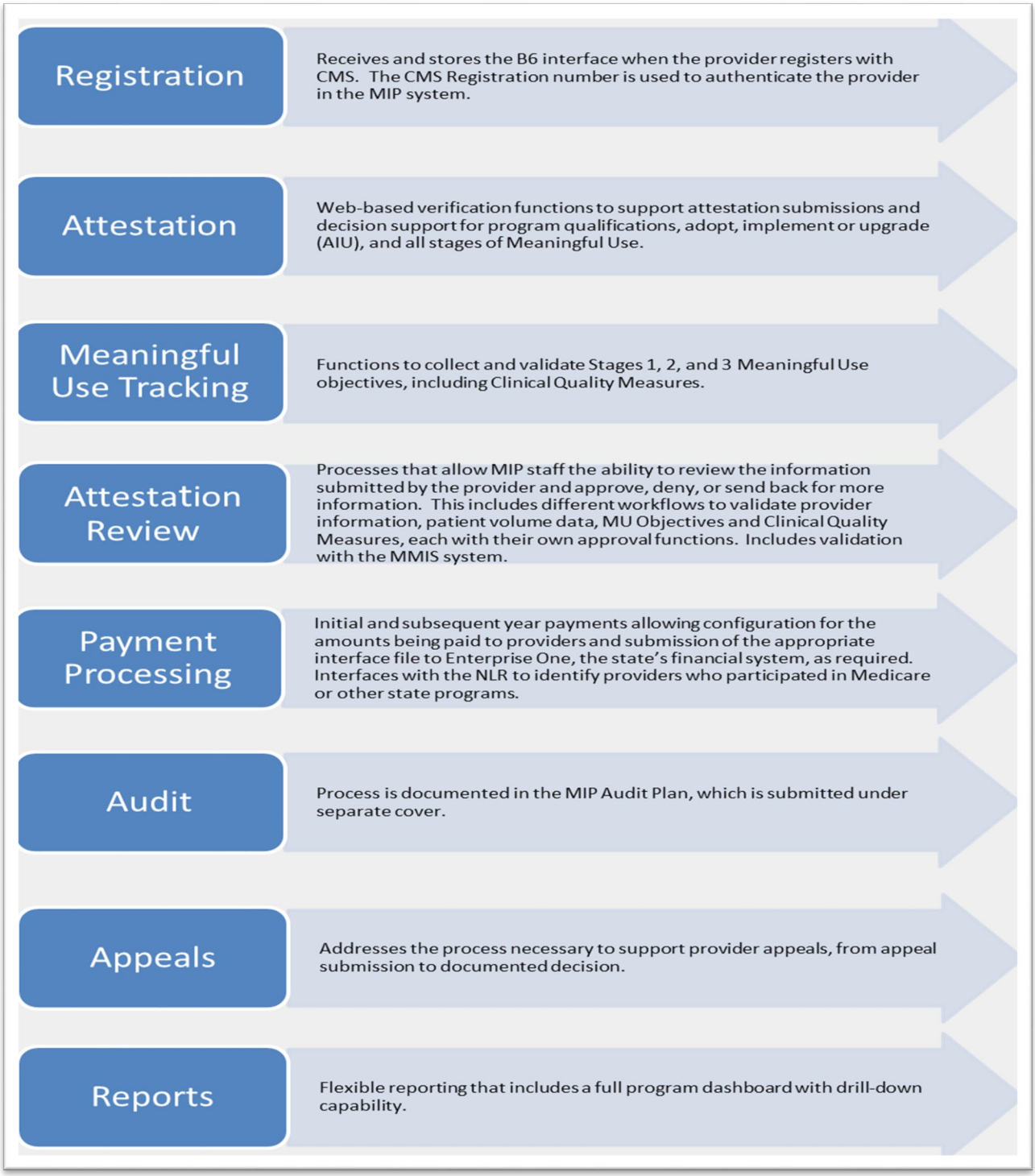
This section of the SMHP addresses how Nebraska administers the MIP (Medicaid Incentive Program). The goal of Nebraska's MIP is to provide incentive payments to eligible professionals and hospitals to advance the national goal of using EHR (Electronic Health Record) technology in a meaningful way to increase interoperability, provide better care, and decrease healthcare costs. Throughout this section of the SMHP, Eligible Professionals and Eligible Hospitals will be referred to collectively as 'providers' unless otherwise noted.

The Nebraska Medicaid EHR Incentive Program launched in 2012. A manual attestation review and payment system was utilized to support the MIP until October 2014. At that time, upon approval from CMS, Nebraska implemented an automated system. All paper attestation data received prior to October 2014 has been electronically converted to the MIP system.

MLTC (Medicaid and Long-Term Care) contracts with MAXIMUS Human Services, Inc. to implement and manage their custom-off-the-shelf (COTS) solution to support Nebraska's MIP system, which acts as the State Level Repository (SLR). The system is hosted by MAXIMUS Human Services, Inc., and the program is administered by Nebraska state staff (MIP staff).

MAXIMUS Human Services, Inc. supplies ongoing support of the MIP system to MIP staff through the Maintenance and Support Plan. This plan contains the details required to support the system, including making system changes, correcting defects, supporting the hosting environment, detailing aspects of the operational environment, and addressing how enhancements are handled. Functionality of the MIP system supports program implementation, including Stages 1 through 3 of Meaningful Use. MAXIMUS Human Services, Inc. ensures the MIP system receives any updates required to meet attestation needs for future stages of Meaningful Use or other changes required by CMS. Nebraska's MIP does not have a contractual relationship with a fiscal agent, a managed care contractor, Medicaid Management Information System (MMIS), or a Pharmacy Benefit Manager (PBM).

The MIP system is a web-based application that supports all functions necessary to administer the MIP. The graphic below illustrates the MIP system's process.



When a MIP system modification is needed, Nebraska's timeframe for making changes depends on a variety of factors including: the urgency of the need, the complexity of the changes, the amount of testing required, and if approval from CMS is needed before system

modifications can be done. If there is a Final Rule, Flexibility Rule, or any Meaningful Use (MU) change issued by CMS, the required adjustments are made to the MIP system. There have been no significant system changes to the MIP. The only changes have been changes to MU Objective and MU CQM language to ensure the language in the MIP is consistent with CMS language. Additionally, the timing of attestation submissions depends on CMS Final Rule releases and if CMS approval of MIP system changes is required. Nebraska's tail period (the ending of the time frame for when providers can attest to a Program Year) may change from year to year depending on a variety of factors such as a new CMS Final Rule requiring changes to the MIP system. Therefore, Nebraska requests annual CMS approval of the tail period. The previous tail period was February 28, 2021 allowing providers as much time as possible to attest to Program Year 2020. The tail period for Program Year 2021 was October 31, 2021, with a start date of July 1, 2021.

There is no current or planned interoperability between the MIP system, the Transformed Medical Statistical Information System (T-MSIS) or Children's Health Insurance Program (CHIP). The interoperability between the MIP system and the National Level Repository (NLR) is described in the table below. Nebraska accepts registration data for its Medicaid providers from mainframe to mainframe (NLR to Nebraska's SLR).

NLR File	Frequency	Description
B6	Daily	The purpose of this interface is to inform the States of new, updated, and inactivated Medicaid or Dually-Eligible registrations. The NLR will send the States a daily batch file containing zero (0) or more records of new EPs and EHs that signed up for the EHR Incentive Program and selected to participate in the Medicaid Incentive Program. Also included in the data are any updates/changes to the EP or hospital entries. This could include updated data or a switch from one State to another. Additionally, these could include registration inactivation events where a previously registered provider updates their information and is now determined ineligible by the NLR, cancels the registration at the NLR, or informs the NLR that they are switching their registration from Medicaid to Medicare.

NLR File	Frequency	Description
B7	Daily	The purpose of this interface is to update the NLR regarding the initial eligibility of Eligible Professionals (EPs) and Eligible Hospitals (EHs) that selected Medicaid. States will send the NLR the eligibility of new and updated registrations. There is no response expected back by NLR for inactive registrations.
C5	Daily	The purpose of this interface is to send States attestation information submitted by dually-eligible Hospitals via the CMS Registration and Attestation System. This will occur each time a dually-eligible hospital attests or updates their attestations for a specific payment year. Multiple C-5 datasets for a provider are possible for the same payment year. Each C-5 should overlay the previous C-5 for the same payment year.
D16 Request/Response	Daily	The purpose of this interface is to prevent duplicate payments for providers potentially switching between Medicare and Medicaid, prevent duplicate payments for providers from more than one State, and to recheck Federal exclusion data prior to payment. The D-16 is a two-way exchange with a file from the State to the NLR, and a response from NLR to the State. The D-16 request is sent by the State to the NLR each time a State is ready to make the initial payment to the provider for a given payment year. When the D-16 is received by the NLR, if the provider has no Federal exclusions and has not been paid previously for the payment year, the NLR "locks" the provider's NLR record and responds to the State with a D-16 response authorizing the State to pay the provider.
D17	Monthly	The purpose of this interface is to send States the cost report data elements utilized by CMS to determine Medicare hospital payments for dually-eligible hospitals. Multiple D-17 datasets for a provider are possible for the same payment year. Each D-17 should overlay the previous D-17 for the same payment year.

NLR File	Frequency	Description
D18	Daily	The purpose of this interface is to update NLR records indicating successful initial and adjustment incentive payments for Medicaid EPs and Medicaid or dually-eligible hospitals.

Providers attest to the Nebraska Medicaid EHR Incentive Program by entering required information (discussed below) into the MIP system. If the provider enters data that is not acceptable (such as patient volume dates that are outside of the required time frame or Meaningful Use numbers that do not reach a required threshold) the MIP system will not allow the attestation to be completed until the data is revised. Once the provider has completed the attestation questions correctly, a series of legal statements are provided. The provider agrees they are completing the attestation according to applicable state and federal regulations. Upon the provider's agreement with the legal statements, the MIP system allows for submission of the electronic attestation.

Once attestations are submitted for review, the MIP system displays each attestation as a work queue item. Upon MIP staff's selection of an attestation to review, the MIP system displays a review screen that identifies the provider and gives pertinent demographic information from the B6 interface file, along with links to review each of the attestation pages. There are two separate and complete pre-payment audit reviews performed on each attestation by different MIP staff so that one MIP staff does not process an attestation completely through to payment. This helps to ensure payment accuracy.

Nebraska verifies the adoption, implementation, upgrade, and meaningful use of Certified Electronic Health Record Technology (CEHRT) by providers. Providers are required to enter their CEHRT number into the MIP system when attesting. The MIP system checks the number entered against the Certified Health IT Product List (CHPL) website (https://chpl.healthit.gov/#/search) to ensure the number is active. Active numbers have been approved by the Office of National Coordinator (ONC). If a provider is attesting for the first time in Nebraska or has changed their CEHRT from the last time they attested with the Nebraska Medicaid EHR Incentive Program, they are required to upload supporting documentation of their CEHRT with their attestation. Examples of supporting documentation include vendor contracts, vendor letters, and receipts. MIP staff reviews the documentation validating the attestation.

The MIP system is interfaced with MMIS Provider Enrollment ensuring MIP system updates occur with MMIS updates. This MMIS interface validates:

- The provider is enrolled in Medicaid as an eligible provider type (physician, nurse practitioner, certified nurse midwife, physician assistant, or dentist) or as an eligible hospital type (acute, critical access, or children's);
- The provider is actively enrolled with Nebraska Medicaid and not sanctioned or deceased;
- The provider's license number from the attestation matches the one validated by provider enrollment;
- If the attestation indicates the provider is a pediatrician, the provider's specialty and taxonomy are checked to confirm the provider is a pediatrician;
- If the provider has voluntarily reassigned their payment to a payee, the payee relationship will be validated by MMIS;
- If a provider claimed group or individual reporting, all members within that group used the same methodology.

The MIP system will identify any information the MMIS interface was not able to validate. Anything not validated by the MMIS interface will require MIP staff's manual confirmation.

While significant functionality is automated, manual processes also exist. MIP staff review attestations and validate the following information manually:

- Staff generate state claims data warehouse reports to validate allowable Medicaid encounter percentages were submitted (within 10% of what the state claims data warehouse shows) and to confirm that the provider meets the required Medicaid volume percentage thresholds (30% for Eligible Professionals, 20% for pediatricians, 10% for Eligible Hospitals). If the provider's Medicaid volume is outside of a 10% difference from what the state claims data warehouse shows, the provider is required to supply a detailed list of their Medicaid encounters that MIP staff can manually validate against MMIS. If the provider claims Medicaid patient encounters from another state, MIP staff obtains verification from the appropriate state's Medicaid agency. MIP staff work with providers to reconcile any matters concerning patient volume prior to final eligibility determination.

- The state claims data warehouse is also used to validate that providers working at a FQHC/RHC meet the requirements for practicing predominately if they are claiming needy (non-pay or sliding scale) patients. Practicing predominantly is defined in Nebraska as a provider having over 50% of their Medicaid encounters occurring at a FQHC/RHC during a six month period within the previous 12 months from attestation. When providers attest in the MIP system, they are asked if they practice

predominately, and if so, to indicate their six month timeframe. Staff generates a Medicaid paid claims report from the state claims data warehouse to validate the provider had more than 50% of their Medicaid encounters occurring at a FQHC/RHC during their attested timeframe. Once verified that a provider practiced predominantly, they can use their needy encounters to reach the required threshold for Medicaid patient volume. Providers also do not have to meet hospital based requirements if they practice predominately. Staff generates state claims data warehouse reports to ensure less than 90% of a provider's encounters were at a place of service 21 or 23 (to ensure the provider is not considered hospital based). If the 90% threshold is exceeded, MIP staff will require the provider to submit information supporting non-reimbursement from a hospital for the acquisition, implementation, and maintenance of the provider's CEHRT, including supporting hardware and interfaces necessary to meet Meaningful Use. The provider must use their own CEHRT in the inpatient or emergency department of a hospital (instead of the hospital's CEHRT).

- The average length of stay for patients at an EH must be 25 days or less and this is validated by MIP staff determining the total inpatient bed days divided by the total number of discharges. The CMS Certification Number (CCN) for EHs must be between 0001-0879 (acute care), 1300-1399 (critical access), and 3300-3399 (children's). Both children's hospitals in Nebraska have CCNs.

- If the provider is a Physician Assistant (PA), the MIP system requires the provider upload supporting documentation to verify that they or another PA 'lead' a FQHC/RHC. MIP staff validate the FQHC/RHC is 'led' by the PA by asking the following questions.
    - Is the PA's name on the relevant licenses, leases, etc.?
    - Does the PA sign off on the practice's policies and procedures?
    - Does the PA do performance reviews for the other employees?
    - Does the PA set quality goals for the practice?

  MIP staff asks for additional information from the provider as needed to support answers to these questions.

- Beginning with their second participation year, providers are required to submit confirmation from their CEHRT of Meaningful Use and Clinical Quality Measure (CQM) data with their attestation. MIP staff review and compare this documentation to the attestation. If there are any discrepancies, MIP staff obtains additional substantiation from the provider. Eligible Providers and children's hospitals are required to enter MU data and CQMs into the MIP system at the time of attestation. System edits prevent an attestation from being submitted unless it has the required number of CQMs. Acute care and critical access hospitals' MU data and CQMs

interface to the MIP system from the NLR. The attestation data and supporting documentation is stored in the MIP system.

The MIP system can run reports based off of stored data in the SLR. These reports use drill down capabilities to show payment information, MU and CQM data, and demographic information. Nebraska is not currently discussing different approaches for short term and long term changes to collecting this data. Nebraska has not proposed any changes to the MU definitions, as permissible per CMS rule-making, nor does Nebraska plan on making any proposed changes. Nebraska does not collect electronic submissions of Clinical Quality Measures (eCQMs) and at this time does not plan on collecting eCQMs via electronic submission in the future.
When there is a MU stage change, MIP staff works with MAXIMUS to ensure that the appropriate changes are made to the SLR. Significant testing of changes occurs in the MIP system's testing environment by both MAXIMUS and MIP staff. Once the system has been tested and corrections made, Nebraska obtains permission from CMS, if needed, to make the final modifications to the SLR. Meaningful Use stage changes can increase flexibility within the Medicaid EHR Incentive Program, therefore allowing more providers to be eligible. This can increase attestations and thus, the workload for MIP staff. However, adequate staffing hours are approved in the current Implementation Advanced Planning Document (IAPD) to handle an increase in workload. Since Nebraska's SLR interfaces with Nebraska's Enterprise One statewide financial system to issue payments to providers, this is not generally affected by an increase in provider attestation and works the same regardless of workload size.

The MIP system requires that providers report their payee NPI when attesting (this information interfaces from CMS's Registration site at https://ehrincentives.cms.gov/hitech/login.action). If the payee is new to the Nebraska Medicaid EHR Incentive Program, the provider is asked for required financial information (a completed payment enrollment form and W-9). An internal agency number is then assigned.

Once MIP staff approves a provider's attestation for payment, the MIP system automatically calculates the payment amount, based on federal requirements, so payment can be made to the provider without deduction or rebate. Eligible Professionals receive $21,250 for the first year and $8,500 for subsequent years up to a maximum of six years. Pediatrician payments are reduced to 2/3 of the payment if the Medicaid patient volume is between 20-29%. Nebraska makes the Eligible Hospital payments over a three year period at the following percentages: Year 1 = 50%, Year 2 = 40%, Year 3 = 10%. Hospitals that began participation in 2013 and later use the most recent continuous 12 month period for which data is available prior to the payment year. Hospitals that began participation prior to the Stage 2 rule did not have to adjust previous calculations. Previously, hospital payment calculations done by MIP staff were based on a 12 month period. This period needed to be in the FFY prior to the hospital fiscal year and was also the first payment year.

Program Year 2016 was the final year that providers could start to participate in the Nebraska Medicaid EHR Incentive program. Since Program Year 2016 is completed, first year payments are no longer being issued. An Eligible Hospital must have received a payment in 2016 in order to receive future payments, with Program Year 2019 being the last year hospitals could receive payment. The MIP system tracks providers in the appropriate program year and payment year, as well as the correct EHR stage. This ensures Eligible Professionals do not receive more than six payments and Eligible Hospitals do not receive more than three payments throughout the course of the program. The MIP system transmits the payment information to the NLR via the D16 Request interface, which checks for duplicate payments and federal sanctions before allowing a payment to be made. A D16 Response interface from the NLR identifies any processed or pending payments from other states, as well as any federal sanctions. Federal sanctions are noted on the payment record and the provider is notified if there is a problem with the payment. When a provider has been approved for payment, the MIP system sends an automated email to the provider's contact, notifying of the approval. Likewise, if a provider is denied payment, the MIP system sends an automated email to the provider's contact regarding the denial. Once a provider has been approved for payment, processing within the MIP system initiates payment to the Enterprise One statewide financial system. Payments can be processed daily if needed.

After the payment process has been initiated, the MIP system records the date the D16 interface was received. MIP staff monitors to ensure payments are processed timely. A response file is sent from the Enterprise One state financial system to the MIP system when the payment has been created. The MIP system generates the D18 interface to the NLR when the payment has been made. The majority of payments are made during the 6 month time frame following the attestation tail period. Nebraska does not disburse payments through Medicaid managed care plans.

Nebraska has a process to ensure all Federal funding, both for the 100% incentive payments, as well as the 90% HIT administrative match, are accounted for separately and not reported in a commingled manner with enhanced MMIS FFP. Each type of payment uses internal business units that indicate the match rate (90/10 or 100%) and each set of internal business units are reported separately to CMS. The Nebraska Medicaid EHR Incentive Program is not tied to MMIS federal funding.

Per CMS guidelines, providers have the right to appeal the State's decisions regarding incentive payments, incentive payment amounts, eligibility determination, and the demonstration of efforts to adopt, implement, upgrade, and meaningfully use CEHRT. Providers who are denied during the pre-payment review process have 90 days to appeal. Prior to invoking the formal EHR Incentive Program denial process, MIP staff work closely with the provider to determine simple data corrections, policy clarifications, incentive calculation clarifications, etc. Providers are notified of the right to file an appeal and provided an explanation of the appeal process on the denial notice they receive. The provider can file an

appeal through the online portal if the attestation is denied or there is a dispute over the amount of the EHR Incentive payment made.

The following is required to file an appeal:

• A written statement that he/she is appealing the state's action;

• Identification of the exact basis for the appeal;

• A written statement as to why the provider believes the State has made an error;

• Providers may optionally submit any additional documentation that supports the appeal for review by MIP staff.

The system will automatically send a confirmation email to the provider acknowledging receipt of the appeal. All communications will be logged in the provider's contact/note log. An internal email will be generated to alert the appropriate MIP staff that an appeal has been filed. The appeal will follow the formal process outlined in Nebraska Statute Title 471 Chapter 2 Section 2-003 and Nebraska Statute Title 465 Chapter 6. Upon receiving a request for an appeal, an E8 interface (an electronic transaction) is created by MIP staff to notify CMS of the appeal request. An E8 interface will also be created to inform CMS of the appeal results. Providers who have an adverse action taken due to a post payment audit will be requested to refund any overpayment and have 30 days to appeal.

Payment adjustment processing is a function included in the MIP system. This functionality allows payment adjustments to providers based on changing information, such as a negative post-pay audit or the result of a successful provider appeal. Nebraska Medicaid will recoup any payments made in error via Program Integrity sending appropriate notice to the provider regarding the overpayment. The recoupment/adjustment will be completed by Medicaid EHR Incentive Program Staff, which generates a negative D18 file (an electronic transaction) to CMS as well as coordinating with MLTC's finance department to record the overpayment. Providers can self-disclose if they want to refund an incentive payment that was issued in error as long as it was not the result of an adverse audit finding. Providers who self-disclose are considered as 'voluntarily' repaying the funds issued in error. The year for which payment was refunded will not count against their total years in the program. Providers having an adverse audit finding will be required to refund any overpaid amount and the overpaid year will count toward their total years in the program.

From the Nebraska Medicaid EHR Incentive Program's inception in 2012 through December 31, 2021, payments have been issued for 2,747 attestations. During this same time frame, 1,721 post payment audits have been completed (Note: each attestation can have multiple post payment audits done). Of those audits, negative findings have been discovered on 6 attestations. Regarding these 6 attestations, Nebraska's Medicaid Program Integrity unit asked the providers (all 6 were from the same group) to supply documentation supporting a

Meaningful Use measure from their attestation. The providers were unable to produce the required documentation, thus the incentive payments were recouped. As a result of these audit findings, Nebraska Medicaid EHR Incentive Program's Audit Plan was revised and approved by CMS, allowing MIP staff to require supporting documentation of Meaningful Use measures at the time of attestation. This supporting documentation is reviewed in pre-payment, assisting in the prevention of incorrect payments.

MIP staff regularly engages with providers and stakeholders regarding the Nebraska Medicaid EHR Incentive Program. This communication is done through the following methods:

- Provider bulletins
- Email blasts
- Twitter messages
- Phone calls
- Webinars
- Providing a dedicated email address for provider questions and correspondence (dhhs.ehrincentives@nebraska.gov)
- Managing a current website dedicated to the Nebraska Medicaid EHR Incentive Program (http://dhhs.ne.gov/Pages/Medicaid-Provider-Electronic-Health-Record-Incentive-Program.aspx)

The Nebraska Medicaid EHR Incentive Program website contains a multitude of information for providers, including a history of the program, any recent changes to the program, frequently asked questions, links to relevant material, a library of useful documents (such as recordings and slides of previously held webinars), as well as contact information to reach MIP staff. In addition, the website details how to attest to the Nebraska Medicaid EHR Incentive Program and provides a direct link to the MIP system's online portal (https://www.nebraskaehrincentives.com/Default.aspx). Providers can view the status of their attestations anytime through the online portal. Questions and communication from providers are handled by MIP staff through phone calls and emails.

3.1.1 Appeals

Providers have the right to appeal the State's decisions regarding incentive payments, incentive payment amounts, eligibility determination, and demonstration of AIU and/or MU.

The provider can file an appeal through the online portal if the attestation is denied or there is a dispute of the amount of the EHR Incentive payment made. The following is required to file an appeal:

- A statement that he/she is appealing the state's action;
- Identification of the exact basis for the appeal;
- A statement as to why the provider believes the State has made an error; and
- Providers may optionally submit any additional documentation that supports the appeal for review by MIP staff.

The system will automatically send a confirmation email to the provider acknowledging the receipt of the appeal. All communications will be logged in the provider's contact/note log. The system will place any appeal received into the Appeals work queue. An internal email will be generated to alert the appropriate MIP staff that an appeal has been filed so the appeal can be review and resolved, if possible.

The appeal will follow the formal process outlined in Nebraska Statute Title 471 Chapter 2 Section 2-003 and Nebraska Statute Title 465 Chapter 6. An E8 interface will be generated to the NLR for appeals.

4 Section D The State's HIT Audit Strategy

The Nebraska Medicaid EHR Incentive Program follows the Audit Plan for the Nebraska Medicaid Electronic Health Records Incentive Program (referred to in this section as the Audit Plan) to provide program oversight. The last update to the plan was approved by CMS on October 10, 2020. The Audit Plan details the methods used to avoid making improper payments and recover erroneous payments. This section of the SMHP provides a high level overview of Nebraska's audit strategy, as the Audit Plan is not a public document and is submitted to CMS under separate cover. Throughout this section, the term 'providers' refers to both Eligible Providers and Eligible Hospitals, unless otherwise noted.

Contractors are not used for pre or post-payment audit functions. MIP staff performs pre-payment audits and MLTC's Program Integrity staff performs post-payment audits.

As detailed in Section C of this document, *Activities Necessary to Administer and Oversee the EHR Program*, MIP staff conducts extensive pre-payment attestation reviews, which assists in reducing fraud/abuse and prevents incorrect payments. If potential fraud or abuse is discovered during the pre-payment attestation review, MLTC's Program Integrity department is notified. There are two separate and complete reviews done on each attestation by different MLTC staff during the pre-payment audit. Both reviewers assign audit flags based on identified risk factors and formal risk assessments. The risk assessment tools are reviewed by MIP staff on an annual basis so that appropriate risk categories are being used as program needs evolve.

Nebraska leverages existing data sources to verify providers meet MU objectives and measures. For example, MIP staff and Public Health have collaborated in creating a Public Health Reporting form. This is a verification sheet requested from and completed by Public Health validating a provider's submission of information to Public Health.

MLTC's Program Integrity staff is responsible for conducting post-payment audits on provider attestations, including investigating potential fraud and abuse. Post-payment audits are completed based on various risk factors (as detailed in the Audit Plan) and through random selection. Provider attestations receive a post-payment audit if the provider has been investigated by Program Integrity for fraud, waste, or abuse in the previous five years. Provider attestations that are flagged as either medium or high risk during the pre-payment audit and 10% of all low risk attestations also receive a post-payment audit. Program Integrity performs an eligibility and financial audit on each attestation selected, in addition to either an AIU or MU audit depending on the provider's attestation.

During post-payment desk audits, Program Integrity reviews all documentation associated with an attestation, requests additional documentation from the provider as needed, reviews additional documents to substantiate compliance with all program requirements, including high risk categories, and works with the provider to resolve any outstanding discrepancies.

Nebraska uses sampling as part of the post-payment audit strategy. For example, Program Integrity may review a random sampling of patient records for various MU objectives and measures. Findings from post payment audits can influence changes to sampling. Changes to sampling methods go into updates to the Audit Plan, with approval from CMS.

Field audits are conducted by Program Integrity as needed. For example, when further information is required from the provider, such as Program Integrity staff needing to view the CEHRT at the provider's place of business, or needing to view practice management systems that cannot be obtained with a desk audit, a field audit is performed. In addition, site visits will be conducted in cases of suspected fraud. Fraud allegations are also reported to the appropriate law enforcement entities. When a case has reached the threshold of fraud, it is referred to the Medicaid Fraud Control Unit (MFCU).

Post-payment audit results are stored in the MIP system and information is submitted to CMS via the MIP system. The audit report includes number of audits conducted, audit outcomes, instances of fraud/waste/abuse, and the number and amount of incentive payments recovered. Program Integrity also sends all post-payment audit findings to MIP staff so that post-payment audit statistics can be submitted to CMS. Nebraska tracks the amount of EHR Incentive Program overpayments through CMS reporting, reconciling of MIP system and CMS reports (such as the Quarterly Reporting Data Tool), and reviewing state general ledgers with MLTC's finance department on a quarterly basis.

Nebraska uses findings from pre and post-payment audits to improve program processes. For example, the Audit Plan was revised and approved by CMS in 2016, allowing MIP staff to require supporting documentation of MU objectives at the time of attestation. This came about as a result of negative audit findings where providers could not produce documentation supporting their attestations. Nebraska reduces provider burden by requesting documentation as part of the pre-payment audit and retaining it in the MIP system. This reduces the amount of documentation requests needed in post-payment audits.

MIP and Program Integrity staff meets on a monthly basis to go over audit findings and discuss areas for program improvement. Program Integrity and MIP staff review adverse findings together prior to finalization. MIP staff use audit findings to review potential changes to the program, determine areas that may require improvement, and make necessary updates to the SMHP, Audit Plan, and procedure manuals.

5 Section E The State's HIT Roadmap

This HIT Roadmap indicates Nebraska Medicaid's anticipated activities involving health IT systems and initiatives in Nebraska, including collaborative activities with CyncHealth. The successful implementation of the EHR Incentives Program and the support of HIE under HITECH funding has led to increased provider EHR adoption and HIE connectivity. This adoption and connectivity is critical to the ability of DHHS to utilize the information for quality measures and care management. The future roadmap for HIT/HIE will largely focus on the utilization of data to meet outcomes and objectives in order to improve healthcare across Nebraska.

With the end of HITECH funding at the end of 2021, Nebraska submitted an MES OAPD for HIE/PDMP that seeks to support the continued operation and maintenance of the HIE and PDMP. This OAPD is described in more detail in section 2.1.1. In addition to the continued operation and maintenance of the HIE and PDMP, Nebraska is actively engaged in working with CyncHealth to determine future capabilities of HIE that would be beneficial to Nebraska Medicaid.

Initiatives

Outlined in the table below are activities that can be performed to progress toward the long-term vision. The table lists initiatives with supporting goals as listed below and in section B. Several of the initiatives are dependent upon available funding. The goals are to:

- Promote MU of HIT, health care quality, and the exchange of health information;
- Support the operations and maintenance of health information exchange capabilities;
- Utilize the HIE to support efforts undertaken by other MES module projects that are integrated to support the goals and objectives of Nebraska Medicaid and Nebraska DHHS.

Supported Goal(s)	Initiative	Calendar Year(s)
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support Event Notification Services (ENS).	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support Direct Care/Care Coordination, including the continued development and implementation of an Enhanced Master Patient Index (EMPI) and API workflow integrations.	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support the HIE and PDMP infrastructure	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Certify the HIE and PDMP according to CMS requirements	2022

Supported Goal(s)	Initiative	Calendar Year(s)
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information. • Utilize the HIE to support efforts undertaken by other MES module projects that are integrated to support the goals and objectives of Nebraska Medicaid and Nebraska DHHS.	Determine capabilities of HIE, such as SDoH, that would be beneficial to Nebraska Medicaid. Implement these capabilities when appropriate and beneficial to Nebraska Medicaid.	2022-2027

Measures

DHHS has established measures for progress that are also critical to the long-term plan. DHHS' established objectives and metrics, found below, are in place to monitorprogress towards the ultimate goal of utilizing the statewide exchange to support and benefit Nebraska DHHS, and specifically Nebraska Medicaid.

Medicaid Program Goal	Outcome	Metric
Improve care coordination and health outcomes.	Event notifications and alerts are sent to providers to determine prevalent health issues, ED overuse, identify and reduce duplication of services.	Total monthly count of event notifications and alerts sent to providers via ISC DSM, Collective Medical, and EHR integration.
Improve care coordination and health outcomes.	CCDs, ADTs, Labs, Radiology Reports, and notes are shared in the HIE to provide access to real-time clinical and medication data.	Total monthly count of CCDs, ADTs, Labs, Radiology Reports, and notes.
Improve care coordination and health outcomes.	Providers can query the clinical and medication platforms and receive information.	Total monthly count of manual and API based provider queries to the HIE and PDMP platforms.
Improve care coordination and health outcomes.	Providers can exchange secure messages on the HIE platform.	Total monthly count of secure messages sent via the HIE platform.

These metrics will be drawn from CyncHealth, who currently has 7,150 users provisioned to CyncHealth's HIE clinical viewer, six hospitals and their associated provisioned users are live with single sign-on (SSO) functionality and 2 remain in progress of SSO connection, and 9117 users are provisioned to the PDMP which includes Medicaid providers. 30 of 212 LTPACs are live and 24 of 212 are in progress, 24 of 31 acute care hospitals with 5 in process, 37 of 64 Critical Access Hospitals are live and 21 of 64 remain in progress and 7 of 9 FQHCs are in progress to connecting.

Acronyms

Acronym	Phrase
AIU	Adoption, Implementation, or Upgrade
AHRQ	United States Department of Health and Human Services Agency for Healthcare Research and Quality
ARRA	American Recovery and Reinvestment Act of 2009
CAH	Critical Access Hospital
CCN	CMS Certification Number
CCD	Continuity of Care Document
CDC	Centers for Disease Control and Prevention
CEHRT	Certified Electronic Health Record Technology
CHPL	Certified Health IT Product List
CMS	Centers for Medicare and Medicaid Services
CQM	Clinical Quality Measures
DBH	State of Nebraska Division of Behavioral Health
DHHS	State of Nebraska Department of Health and Human Services
DPH	State of Nebraska Division of Public Health
eBHIN	Nebraska Electronic Behavioral Health Information Network
EDI	Electronic Data Interchange
EH	Eligible Hospital
EHR	Electronic Health Record
EMR	Electronic Medical Record
EP	Eligible Professional
FQHC	Federally Qualified Health Center
FY	Fiscal Year
HIE	Health Information Exchange
HIPAA	Health Information Portability and Accountability Act
HIT	Health Information Technology

Acronym	Phrase
HITECH	Health Information Technology for Economic and Clinical Health
HRSA	United States Department of Health and Human Services' Health Resources and Services Administration
IAPD	Implementation Advance Planning Document
IHS	Indian Health Service
MIP	Medicaid EHR Incentive Program
MITA	Medicaid Information Technology Architecture
MLTC	Nebraska DHHS Division of Medicaid & Long-Term Care
MMIS	Medicaid Management Information System
MU	Meaningful Use
NEDSS	Nebraska Electronic Disease Surveillance System
NeHII	Nebraska Health Information Initiative
NESIIS	Nebraska State Immunization Information System
N-FOCUS	Nebraska Family Online Client User System
NITC	Nebraska Information Technology Commission
NLR	CMS National Level Repository
NPI	National Provider Identification
ONC	Office of the National Coordinator for Health Information Technology
PHINMS	Public Health Information Network Messaging System
REC	Regional Extension Center
RHC	Rural Health Clinic
SENHIE	South East Nebraska Health Information Exchange
SLR	Nebraska State Level Repository
SMHP	State Medicaid Health Information Technology Plan
SSEDON	Syndromic Surveillance Event Detection of Nebraska
TCHS	Thayer County Health Services

Acronym	Phrase
TIN	Taxpayer Identification Number
UAT	User Acceptance Testing
VA	Veterans Administration
VA NWIHCS	Veterans Administration Nebraska-Western Iowa Health Care System
VistA	Veterans Health Information Systems and Technology Architecture
Wide River TEC	Wide River Technology Extension Center

Glossary

Term	Definition
Adoption, Implementation, or Upgrade (AIU)	These terms are used by CMS as part of the eligibility criteria for EHR incentives. These terms reference the provider's adoption, implementation or upgrade of a certified EHR system.
American Recovery and Reinvestment Act (ARRA)	An economic stimulus package enacted by the 111th Congress in February 2009, commonly referred to as the Stimulus or The Recovery Act.
Children's Health Insurance Program (CHIP)	CHIP program administered by the United States Department of Health and Human Services that provides matching funds to states for health insurance to families with children. The program was designed with the intent to cover uninsured children in families with incomes that are modest but too high to qualify for Medicaid.
Critical Access Hospital (CAH)	A hospital that is certified to receive cost-based reimbursement from Medicare. The reimbursement that CAHs receive is intended to improve their financial performance and thereby reduce hospital closures.
Electronic Health Record (EHR)	An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.
Electronic Medical Record (EMR)	An electronic record of health-related information for an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within one health care organization.
Enterprise One	Nebraska's accounting and payment system which is used to make all payments issued by the State, including MMIS claims payments. The system utilizes Oracle's JD Edwards application.
e-prescribing	Practice in which drug prescriptions are entered into an automated data entry system (handheld, PC, or other), rather than handwriting them on paper. The prescriptions can then be printed for the patient or sent to a pharmacy via the Internet or other electronic means.
Health Information Exchange (HIE)	The electronic movement of health-related information among organizations according to nationally recognized standards.
Health Information Technology (HIT)	The application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision-making.

Term	Definition
Indian Health Service	A part of the U.S. Public Health Service within the US Department of Health and Human Services, the Indian Health Service is responsible for providing federal health services to American Indians and Alaska Natives.
Interoperability	HIMSS' definition of interoperability is "ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of healthcare for individuals and communities."
Meaningful Use	As defined by CMS in 42 CFR Part 495.
Medicaid Information Technology Architecture (MITA)	A federal, business-driven initiative that affects the Medicaid enterprise in all states by improving Medicaid program administration, via the establishment of national guidelines for processes and technologies. MITA is a common business and technology vision for state Medicaid organizations that supports the unique needs of each state.
Medicaid Management Information System (MMIS)	The MMIS is one of the primary repositories of provider information. MMIS capabilities will be leveraged to fulfill a range of functions, including the provision of data necessary to enable payment administration.
National Level Repository (NLR)	The NLR is the federal database that stores Medicaid and Medicare EHR Incentive Program data. This database supports MEIPRAS.
Nebraska Information Technology Commission (NITC)	The NITC is a nine-member, governor-appointed commission. Its mission is The mission of the Nebraska Information Technology Commission is to make the State of Nebraska's information technology infrastructure more accessible and responsive to the needs of its citizens, regardless of location, while making investments in government, education, health care and other services more efficient and cost effective.
Office of the National Coordinator for Health Information Technology (ONC)	ONC provides leadership for the development and nationwide implementation of an interoperable health information technology infrastructure to improve the quality and efficiency of health care and the ability of consumers to manage their care and safety.
Portal	A website that offers a range of resources, such as email, chat boards, search engines, and content.

Term	Definition
Provider	A provider is an individual or group of individuals who directly (primary care physicians, psychiatrists, nurses, surgeons, etc.) or indirectly (laboratories, radiology clinics, etc.) provide health care to patients. In the case of this SMHP and the EHR Incentive Program, Provider refers to both eligible professionals (EPs) and eligible hospitals (EHs).
Regional Extension Center (REC)	An organization that has received funding under the Health Information Technology for Economic and Clinical Health Act to assist primary care health care providers with the selection and implementation of electronic health record technology.
Stakeholder	A stakeholder is any organization or individual that has a stake in the exchange of health information, including health care providers, health plans, health care clearinghouses, regulatory agencies, associations, consumers, and technology vendors.
State Level Repository (SLR)	The SLR is the database supporting the Medicaid EHR Incentive Program administration. The SLR will capture state-collected data elements as part of the intake. The SLR will contain basic data elements that have been transferred from the NLR (e.g., National Provider Identifier (NPI); CMS Certification Number (CCN) for an EH; EP type; affiliation, etc.). The SLR will capture other relevant information from the EP/EH (e.g., email address; EP affiliation with a managed care organization) to establish eligibility for the EHR incentive program, including patient volume and attestation information.
Telehealth	The remote care delivery or monitoring between a healthcare provider and patient. There are two types of telehealth: phone monitoring (scheduled encounters via the telephone) and telemonitoring (collection and transmission of clinical data through electronic information processing technologies.
Telemedicine	A rapidly developing application of clinical medicine where medical information is transferred through interactive audiovisual media for the purpose of consulting, and sometimes remote medical procedures or examinations.