ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Emergencies

A Proposal to the Physician-Focused Payment Model Technical Advisory Committee

Submitted by: The University of New Mexico Health Sciences Center

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Physician-Focused Payment Model Technical Advisory Committee
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Transmittal Letter – University of New Mexico, Health Sciences Center, ACCESS Telemedicine: An Alternative Model for Healthcare Deliver Model for Rural Cerebral Emergencies

Dear Committee Members,

On behalf of the University of New Mexico, Health Sciences Center (UNMHSC), I am happy to submit this proposal for a Physician-Focused Payment Model (PFPM), entitled "ACCESS Telemedicine: An Alternative Healthcare Delivery Model for Rural Cerebral Emergencies" for review by the Preliminary Review Team (PRT) and the Physician Technical Advisory Committee (PTAC).The ACCESS Telemedicine program was established with funding from CMS and after four years of full operation across New Mexico, the preliminary analyzed data demonstrated improved emergency care for patients presenting with cerebral conditions. With the support of the PRT, the PTAC, and the Secretary we aim to expand this model to other specialties, (emergent cardiology and child trauma are at various stages of implementation) and to other institutions and systems by implementing a bundled payment system that can cover all required costs for hospitals to establish and support this model. ACCESS Telemedicine aims to positively impact those patients who are located in geographic and economically disparate areas and who need emergent care. We expect to continue our preliminary success of improving patient care, healthcare delivery, and a reduced overall cost and burden to all stakeholders including patients, physicians, and payers by continuing to implement all aspects of the ACCESS Telemedicine program.

UNMHSC and the ACCESS Telemedicine Program looks forward to the opportunity to have this application reviewed by the PRT as well as the PTAC. Even though we are dedicated to the proposed model we are also open and prepared to have transparent conversations about the PFPM with the PRT. We can also be flexible in rolling out the model by region or state as appropriate. We are prepared to respond to any questions, suggestions, or comments from the PRT. UNMHSC is strongly committed to this program and maintaining our high standards of success and innovation.

Sincerely,

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ABSTRACT

There is a significant unmet need for cerebral emergent care in rural/underserved America. This is due to paucity of providers nationally and lack of financial resources in rural hospitals to support current telemedicine models of payment. Our preliminary work addressing this growing healthcare challenge has focused on New Mexico (NM), a state with a third of the population living in rural or underserved areas without immediate geographic access to cerebral specialists. Critical care and rapid decision making for emergency cerebral conditions are imperative and time-sensitive to maximize patient outcomes in these populations. Rural and underserved community hospitals cannot employ full time neuro specialists. In the current care model, emergency room physicians are often ill prepared to diagnose and treat these patients. As a result, most patients with this spectrum of disorders are transferred to a tertiary care facility for further evaluation and treatment. This current model driven by geographic healthcare disparity negatively impacts patient outcomes driven by timely treatments, healthcare economics, and care delivery experience.

During the last four years our team designed, developed and implemented an efficient and successful rural hospital neuro-emergent telemedicine platform and payment model (ACCESS) under a Centers for Medicare and Medicaid Innovation (CMMI) award. We successfully implemented telemedicine in rural NM to greatly enhance local care, achieving the Triple Aim of improved care, decreased costs, and improved experience. This highly successful program has met and exceeded clinical and financial savings outcomes. However, the team discovered inadequate reimbursement options at any level through private and public insurers to sustain this program for enrolled hospitals or to expand and scale the program to other specialties. Therefore, the team began working with NM State Medicaid and Managed Care Organizations to develop a bundled payment methodology that would work with public and private insurers. On January 1, 2019 the NM Medicaid Office included ACCESS Telemedicine in their Physician Health Fee Schedule for a bundled payment using modifiers to distinguish between Neurology and Neurosurgery consults. The next, critical step toward complete sustainability of the program is a new, alternative physician focused payment model for Medicare patients.

An innovative, alternative payment model (APM) that only charges for consulting services when needed is ideal for rural hospitals that may only have an emergent need a few times per week/month. As demonstrated in our ongoing model deployment in the NM ACCESS program, these consulting services can be effectively provided remotely through telemedicine. Cloud based technology has removed the need for geographic proximity and increased the pool of specialists that can rapidly provide neuro emergent care and triage. All stakeholders effectively engaged with the technology to maximize patient care and reduce costs, and all provided high levels of user satisfaction with the technology and program model. While our model initially focused on small, rural spoke hospitals, we quickly discovered that the model also applied to hospitals that were not typically classified as rural, but similarly experience shortages of neurological specialists.

Several elements are essential for the ACCESS model to be effective including physician specialist consulting time, telemedicine technology, infrastructure, and education/training of spoke hospital providers. A single bundled payment code with modifiers as prescribed by NM Medicaid in its guidance document is sufficient to cover all essential elements, i.e professional services, training and technology that significantly simplifies billing for spoke hospitals and reduces administrative overhead. The contents of this submission address ACCESS Telemedicine model specifics and data to date in support of the proposed APM, which would have significant continued benefit in NM, and has the potential to be scaled to underserved communities across the U.S.

I. MODEL DESCRIPTION

1. Background and Model Overview

Rapid decision making for emergency cerebral neurological conditions is critical and time-sensitive to maximize patient outcomes. As one important example, cerebral vascular accidents or strokes require rapid assessment and characterization (ischemic or hemorrhagic) and administration of a therapeutic agent within a short time window to maximize patient outcome. Geographic, social and economic disparities exist across the United States to care for these emergency neurological conditions. Most rural and underserved communities and resource-challenged hospitals cannot employ full time neurological staff to consult and assess these conditions when they present at the hospital emergency department [1]. This situation presents a healthcare disparity that is antithetical to the health care delivery mission.

In the current healthcare delivery model, physicians at the rural emergency room (ER) may be uncomfortable diagnosing patients with neurological presentations, and in our experience are even less comfortable providing care for these conditions. Many are locum tenens and rotate frequently through rural hospital systems, or frequency of these presentations is such that maintaining competency is challenging. As a result, patients are often transferred by ambulance or air to an expert facility for further evaluation and treatment by a neurology/neurosurgical expert. Patients that actually suffer severe cerebral events may be negatively impacted by treatment time delay created by a delayed decision to transfer. Patients ultimately diagnosed with more benign conditions, and their caregivers, are burdened with unnecessary transfers, costs, and increased stress.

The unavailability of neurological consultation also has negative economic impacts on insurers and rural hospitals. Payers, such as Medicare, Medicaid and commercial private payers, cover the costs of a significant number of emergency transfers by air transport or ambulance each year. Many of these transfers are unwarranted due to what are commonly determined to be benign conditions by expert specialists that do not benefit from transfer to a tertiary care facility. Even in cases in which a true neurological emergency is detected such as an ischemic stroke, the rural hospital may be able to provide the required therapy once a proper diagnosis is rendered. Thus the financial health of rural hospitals is also impacted, as they are otherwise transferring sources of revenue that could be retained and generated by patient care services provided at the rural location.

In the medically underserved setting, a barrier to optimizing clinical workflow is the lack of an evaluation and clinical diagnosis of the patient by a neurological specialist. Once an expert diagnosis is made, the rural hospital can often continue care and treatment at their own facility. This is particularly so if neurological experts are available to provide both initial and ongoing education to both physicians and hospital staff in the local setting. If the patient presentation truly requires direct expert neurological or neurosurgical care, the transfer can then be completed expeditiously. Many types of neurological diagnoses of cerebral events, such as ischemic stroke, have been proven to benefit from telemedicine. The required components are assessment of medical imaging (which can be digitally transferred to a neurology consultant) and a verbal/visual assessment (which can be completed using audio/visual conferencing). A telemedicine model that allows expert neurological consultations to occur remotely when a patient presents at a rural ER with a neuro-emergent condition can significantly improve workflow, patient care, and healthcare costs. (Reference)

The preliminary work demonstrating feasibility in this program has focused on New Mexico. New Mexico (NM) spans nearly 122,000 square miles and averages 17 residents per square mile. Out of 2,085,538 residents, 19.3% live in rural areas [2]. NM's population density is ranked 45th in the U.S. and has the 49th highest percent of uninsured patients. New Mexico had 372,685 Medicare beneficiaries in 2015 and 766,732 Medicaid/CHIP enrollees in August 2016 [3]. The Health Resources & Services Administration (HRSA) has designated nearly the entire state as a medically underserved area (MUA), with only Santa Fe and Bernalillo counties containing census tracts not designated as MUAs (HRSA Data Warehouse, 2018). As one example, consider the neuro-emergent condition of traumatic brain injury in this underserved rural population. Approximately 80% of traumatic brain injury (TBI) patients have mild TBI (mTBI), 10% have evidence of intracranial bleeding (complicated mTBI), but few actually require surgical intervention [4]. However, most often in U.S. hospitals, mTBI patients are transferred to hospitals that provide neurosurgical care. Studies show of the 1.3 million TBI emergency department visits that occur annually, neurosurgical intervention was needed in only 0.13% to 0.3% of these patients [5]. Therefore, the practice of transferring all complicated mTBI patients consumes valuable resources with unproven efficacy. In some cases, patients are transported long distances by air only to be discharged soon after arrival, often due to the earlier misinterpretation of radiographs by the rural ER site [6]. In the context of limited neurosurgical resources and escalating healthcare costs, the negative impact of this practice on health care costs and patient satisfaction needs to be fully addressed [7]. Non-operative management of mild injury could be equally well managed by providers outside the discipline of neurosurgery. Our proposed telehealth infrastructure and alternative payment model (APM) represents an innovative first step in this direction. An aggressive education program for rural hospital physicians and nurses that increases their understanding and "comfort" caring for most neuro emergent patients is a key element of this program.

The Access to Critical Cerebral Emergency Support Services (ACCESS) program was launched by the University Of New Mexico Health Sciences Center (UNMHSC) and the Department of Neurosurgery to provide connectivity between rural or underserved primary hospitals (spoke hospitals) and neurological clinical experts from an academic medical system, independent specialists located outside of New Mexico. The initial creation, deployment, and evaluation of the ACCESS program was funded by the U.S. Centers for Medicare and Medicaid Services Health Care Innovations Award Cooperative agreement 1C1CMS331351-01-00. The primary objective of ACCESS to date has been to partner with rural and underserved hospital ER physicians to provide neuro-emergent care, in order to accurately identify emergent, time-sensitive cerebral conditions, facilitating medical decision making to determine which patients require transfer, and which could continue in local care.

Our team has extensive experience in developing highly successful telemedicine programs. Our initial telemedicine experience involved a rural Indian Health Service hospital with a large volume of head trauma patients who were frequently transferred to the University of New Mexico Hospital by plane only to be found to not warrant even in patient observation on arrival to UNMH. Based on an IHS funded project that established a telemedicine capability with UNMH neurosurgery, 118 patients were triaged by telemedicine from January 2010 to January 2011 to decide on optimum care. We demonstrated that 20% of patients with a neurosurgical emergencies were retained at the rural site and 25% were discharged from the rural ER after tele-radiology enhanced phone consultation with a neurosurgeon. These were avoided unnecessary transfers to a hospital with limited bed capacity [8]. From this rural hospital, all transports were

by air with average cost of $30,300 per transport [9]. Cost savings for transport reduction alone totaled $1,484,700. Interestingly, 75% of patients transferred to UNMHSC underwent emergent surgical intervention. This shows more appropriate cases necessitating neurosurgical intervention were sent to UNMHSC for neurosurgical expertise and that non-operative or mTBI cases were treated in the rural setting. Our ACCESS experience also shows that telehealth can be successfully implemented in rural NM to greatly enhance local care, resulting in significant revenue source for the referring facility as well as improved patient outcomes. An added benefit was for the families of patients that did not have to travel extensive distances to be with their loved ones when they could have been cared for in their local hospital.

The ACCESS program builds upon that early work by adding an audio-visual component for the consult between patient and remote neurological specialist. The result has been a continued major decrease in the transfer rates to other in-state and out-of-state tertiary hospitals. ACCESS utilizes several components for success including a technology infrastructure that transfers hundreds of images at an incredibly fast rate, an extensive educational and training program, neurology/neurosurgical consulting services, quality control measures that include data collecting collaboration and reporting between hub and spoke entities. More specifically, the current ACCESS program model includes a strong collaboration of hospitals, clinicians and external stakeholders connected through key technology platforms. The Net Medical Express (NMXS) platform provides the audio-visual hardware, call center, and network infrastructure to connect remote hospitals to expert neurologists and neurosurgeons. Since consistent, reliable access to expert care is required, in addition to neurosurgical and neurology experts at UNMHSC, additional neurologists were contracted through NMXS to provide 24/7 response. NMXS and the ACCESS team executed the recruitment, credentialing, training, and quality control of the ACCESS program.

As part of the ACCESS model development, it was critical to build in features for operational and economic sustainability that could continue beyond the CMS funding period, and that could scale beyond New Mexico to areas across the U.S. impacted by geographical and economic disparities. Furthermore this model could be applied to other clinical presentations requiring clinician expertise generally not available in the local community. This critical sustainability factor required development of an alternative payment model in addition to operational, educational, and technology components. An effective and sustainable payment model should minimize the upfront cost burden for rural, underserved hospitals, while still fairly reimbursing expert neurologists/neurosurgeons at the hub for their key role diagnosis during the clinical workflow. These objectives were achieved using a payment model that only requires rural hospitals to pay for expert services on a per-episode basis, and reimbursing neurologists and neurosurgeons at the fair market value (FMV) for their services provided. Since the payment model is based on specialty FMV and is per-episode, rural and underserved hospitals can better afford the service versus traditional alternatives of employment or a common telemedicine program that required a maintenance charge that included a charge for physicians to be “on call”, a technology rental charge as well as a charge for each consult. . Additionally, the cost paid by the rural site on the per episode basis took into account all required costs bundled (technology, professional service, training, and admin) as one payment to simplify the process of payment for rural sites.

While there is a cost for the rural site to use the service when needed, there is a positive economic benefit. By keeping more patients at their own facility to continue and bill for treatment, the rural hospitals are able to experience economic gains that significantly outweigh

consulting service costs. The financial viability of the ACCESS model was greatly enhanced by securing NM Medicaid's support and the adoption of a bundled reimbursement methodology effective January 1, 2019 for ACCESS consults. Medicaid patients, however, only make up 30% of the patients who receive the consults so it is imperative for sustainability that there is a reimbursement option by Medicare Sustainability is also achieved by strong education and training programs. The presence of technology and consultative expertise alone is insufficient to realize the full benefits of the ACCESS model. For example, prior to ACCESS, three rural NM hospitals had NMXS equipment and access to neurology specialists using the equipment. However, it was never used due to lack of education and training. Part of the ACCESS consult fee covers the cost of providing both technical and clinical education and training to not only licensed independent providers, but nursing staff who must care for patients that stay at the local hospital. It is one thing to provide remote consultation to attending providers that gives them comfort prescribing therapies such as tPA for stroke, but it is also critical that the nurse caring for the patient be comfortable and competent to administer it. Finally, quality control processes ensure proper training and delivery of healthcare using the technology.

The initial ACCESS program goals included the triple aim to (1) provide better healthcare by overcoming disparities in access to care; (2) achieve better health for patients by providing timely access to neuro-emergent specialty care; and (3) reduce unnecessary transfers by enabling the local healthcare providers to render care locally, thereby reducing costs. Additionally, as a function of these improvements we aimed to improve the healthcare experience for patients and clinicians. Preliminary implementation of ACCESS has been incredibly successful through 2018 with 16 clinical sites recruited, trained, and implementing the program and 55055 neuro-telemedicine consultations successfully completed as of the end of December 2018. Consultations are continuing to rapidly grow, and have averaged at 200 consult per month from June through December 2018. As part of program implementation, we have collected significant data on costs, patient outcomes, patient and clinician satisfaction, and quality control metrics. Program metrics to date are detailed in targeted sections below. In general, the ACCESS program has demonstrated the Triple Aim by improving healthcare delivery, improved patient outcomes, cost savings to federal and private insurance payers, and improved economic viability for rural hospitals. Furthermore, the innovative model met the new guiding principles for the Center for Medicare and Medicaid Innovation Center, specifically keeping rural hospitals open and sustainability to positively impact the communities they serve.

2. Patient Perspective

The patient healthcare experience is an integral aspect of the ACCESS telemedicine model. The patient perspective, workflow, and benefits can best be described by understanding three different sub-populations that may present to the rural hospital with symptoms of a time sensitive neuro-emergent condition (Table 1). All patient groups still receive any diagnostic imaging at the rural site as would normally be completed. All patient groups would be subject to remote evaluation by neurological expert using audiovisual teleconferencing equipment, which is a significant change from their traditional in-person experience. However, a healthcare provider physically onsite at the rural ER is integrated in the process and present to communicate with and guide the patient during the neurologist consultant's evaluation.

Table 1. Unique Patient Groups Impacted by the ACCESS Healthcare Delivery Model

Group A	Group B	Group C
Neurology expert assists with diagnosis of non-neuro-emergent condition (rule-out).	Neurology expert assists with diagnosis of neuro-emergent condition that can be treated at local hospital.	Neurology expert assists with diagnosis of neuro-emergent condition requiring transfer to tertiary facility.

Group A will incur significant benefit through reduced burden and costs in the ACCESS healthcare model compared to traditional care. Traditionally, many of these patients would have been transferred to medical centers with expert neurology care to make a formal diagnosis. Through the ACCESS program, these patients will not incur unnecessary travel, time, cost, and psychological burdens associated with transfer to a tertiary care center, only to be discharged. Earlier preliminary studies have shown 45% of proposed transfers avoided with integration of tele-radiology alone [10, 11], and audio visual enhanced telemedicine -enhanced consultations in New Mexico as of August 2018 resulted in care management recommendations to not transfer the patients in similar categories of patients in up to 80% of cases [11].

Group B will incur significant benefit through more timely care that can improve outcomes, as well as reduced travel burden and costs. Most importantly, this group of patients will receive improved care and outcomes by the reduced time to diagnosis and treatment for time-sensitive conditions, such as ischemic stroke. In this condition, the efficacy and outcomes of treatment is highly dependent upon it being administered in a small-time window of 1 to 3 hours optimally but up to 4.5 hours post stroke onset in some patients. The time it takes to transfer the patient can add significant delays to receiving a time-dependent treatment. For example, patients who are suffering from acute ischemic strokes have a short window of time to be deemed a candidate for tissue plasminogen activator (tPA) from when the onset of symptoms occurred. Furthermore, in addition to this outcome benefit this patient group will minimize burden and costs of travel to tertiary care centers, as the rural hospitals can often administer these types of treatments after proper training and remote diagnosis by a team of neurology experts. Another small, but very important group of patients that falls into this category are those with extreme scenarios in which no intervention would save the patient life, even if transferred to an expert center. In these most extreme cases, families can spend quality time with the patient during these moments instead of increased stress, burden, and time lost due to unnecessary transfer.

Patients in Group C will not be significantly impacted by the ACCESS model, however nor will their outcomes be reduced. This group will still be transferred to a tertiary center for further treatment, such as a surgical intervention in the case of a hemorrhagic stroke, which the rural center is not equipped with resources or trained personnel to complete. One potential benefit is that the expert diagnosis may be made sooner, so that the referral center can be better prepared for the intervention when the patient arrives on site. However, the patient will still incur the same travel and cost requirements that occur in the traditional model, which is an expected outcome. What is important is that with the ACCESS model implemented, the quality of care for this group will not be reduced, nor the costs or burden increased, as compared to traditional care.

3. Provider Perspectives

The provider experience also plays an integral role in the success of the ACCESS and telemedicine healthcare delivery model. The two principal providers in each transaction are the emergency room (ER) team at the underserved rural hospital location and the neurological expert at the central hub (UNMHSC, NMXS Independent).

Physicians, advanced practice providers, and nurses at the local site are affected in multiple areas of their traditional clinical workflow, but with an overall positive impact. First, these providers must undergo training both on utilizing the technology and the equipment required for the telemedicine consult, as well as training for how to treat cerebral neurological conditions that can be handled at the local site once a diagnosis is established. While there may be initial training, the nature of the consultation service is ongoing education as well. In addition to

training, the workflow of the clinicians may be altered, as a significant number of patients they might have otherwise transferred now remain at the rural hospital. Staffing and supplies require adjustments to care for and treat these patients. Providers must also collect and report on metrics to ensure quality standards are met and track success metrics. Overall, the ability to care for and treat previously transferred patients should improve both economic viability and quality of care provided by the hospital, significantly outweighing any changes in clinical workflow.

Neurology and neurosurgical experts at the hub center including UNMHSC, NMXS- should not experience any changes to their current workflow. The staff at UNMHSC implemented the program and has previously been trained on the requirements, and the partnership of independent physicians provides a readily available source of certified neurologists already trained on the technical components and nuances of delivering care via telemedicine. Leveraging this partnership greatly simplifies the burden of recruiting, training and supporting additional expert neurologists to participate as the ACCESS program expands.

A major goal of the ACCESS program is to improve the education and comfort for physicians and providers in the ER settings to care for neuro-emergent conditions, with a strong focus on stroke care. For example, a recent study showed that in rural hospitals only 3% to 5% of acute stroke patients were treated with intravenous tPA even though 485 patients arrived at the ER within 2 hours of symptom onset [12]. Over 40% of ER physicians at rural sites did not feel comfortable administering tPA regardless of patient disposition. Therefore, tPA use is lowest in hospitals with less than 100 beds and rural hospitals are 10 times less likely to give tPA than urban counterparts. The ACCESS model has demonstrated in New Mexico an increased use of tPA from less than 2% of ischemic stroke patients to 20%, which approaches high normal use in medical centers throughout the US.

II. RESPONSE TO CRITERIA

1. Scope of Proposed PFPM

A. Targeted Physician Overview

The ACCESS healthcare delivery model can significantly expand the CMS advanced payment model (APM) portfolio by targeting a significant area of underserved need in rural neuro-emergent conditions, as well as engaging several physician stakeholders across multiple roles and institutions. First, attending physicians at emergency rooms in medically underserved areas are eligible to participate, as they are the first line of defense for patients presenting with cerebral neuro-emergent conditions in underserved regions. As part of the ACCESS model described above, these emergency room physicians are connected with neurologist and neurosurgical experts remotely available for consultation and assisting with diagnosis and disposition of the patient. Table 2 provides a spectrum of disorders that are currently being addressed by ACCESS physicians.

Table 2. Sample of neuro-emergent patient conditions served by ACCESS program.

Traumatic Subarachnoid Hemorrhage
Contusion
Subdural Hematoma
Epidural Hematoma
Intracerbral Hemorrhage
Skull Fracture
Non-Traumatic Subarachnoid Hemorrhage
Aneurysm
Arteriovenous Malformation
Cavernoma
Stroke
Tumor
Spine Injury
Edema
Large Vessel Occlusion
Seizures

Benefits provided to physician stakeholders in the ACCESS APM are significant. Physicians at the local (spoke) ER will benefit from being able to provide an expanded patient care program to patients that can remain at the local site for treatment. The local clinical care team, and rural hospital can financially benefit from treatment billings that normally would have accrued to the tertiary care facility to which a patient would have been transferred. The rural hospital only pays for the remote consults on a per episode as-needed basis, which significantly reduces costs. Neurologist and neurosurgical clinician experts at the hub center benefit through increased revenue generated by providing additional services, and are paid at the fair market value for this type of "on call" service. Furthermore, neurosurgical services benefit from an improved yield of appropriate surgical cases that maybe transferred for surgical care.

Table 3. Current hospitals contracted with ACCESS.

HOSPITAL NAME	CITY
ALTA VISTA REGIONAL HOSPITAL	LAS VEGAS
CIBOLA GENERAL HOSPITAL	GRANTS
EASTERN NEW MEXICO MEDICAL CENTER	ROSWELL
GERALD CHAMPION REGIONAL MEDICAL CENTER	ALAMOGORDO
GUADALUPE COUNTY HOSPITAL	SANTA ROSA
LEA REGIONAL MEDICAL CENTER	HOBBS
LOS ALAMOS MEDICAL CENTER	LOS ALAMOS
LOVELACE MEDICAL CENTER	ALBUQUERQUE
LOVELACE WESTSIDE HOSPITAL	ALBUQUERQUE
MEMORIAL MEDICAL CENTER INC	LAS CRUCES
MIMBRES MEMORIAL HOSPITAL	DEMING
MINERS' COLFAX MEDICAL CENTER	RATON
NOR-LEA HOSPITAL DISTRICT	LOVINGTON
REHOBOTH MCKINLEY CHRISTIAN HEALTH CARE SERVICES	GALLUP
ROOSEVELT GENERAL HOSPITAL	PORTALES
SAN JUAN REGIONAL MEDICAL CENTER	FARMINGTON
UNION COUNTY GENERAL HOSPITAL	CLAYTON

B. Physician Participation Interest Level

Physician and rural hospital interest in the ACCESS program has been significant and continues to grow in New Mexico, the initial target location to demonstrate feasibility. Since program inception we have successfully recruited, on-boarded and trained 17 hospitals (Table 3). Once trained and operational, these hospitals continue to expand use of the ACCESS program and have completed a total of 5055 consults as of the end of 2018. We are currently in the process of onboarding and training an additional 5 hospitals with 8 additional hospitals in contract discussions. Due to significant physician interest in this program, we expect additional spoke hospitals successfully running in the ACCESS APM model program by the end of Q2 2018.

In addition to successful onboarding, recruitment and continued patient consults generated from the physicians at rural hospitals, our survey findings indicate that their experience with the ACCESS program once implemented remains extremely positive, as indicated by the current results from 57 providers surveyed (Table 4). Physicians responded very favorably with respect to their experience using telemedicine, as well as the technical implementation of the platform itself. Providing a positive experience for clinicians through successful onboarding, training, and quality control measures is critical to sustainability of the program. Initial results in New Mexico successfully demonstrate that effort.

Table 4. Provider Questionnaire Responses

Question	YES
Trauma Care is Improving	77.9%
Telemedicine Helps Me Improve Care for My Patient	80.2%
Communicate Adequeately with Patient and Consulting Physician	84.9%
Overall Telehealth Effectively Assists Me to Deliver Healthcare	84.9%

C. Market Opportunity at Scale

While initial implementation of ACCESS has focused on New Mexico, the APM opportunity can be easily scaled across the U.S. to serve additional communities to improve patient care and healthcare delivery as well as reduce overall healthcare spending. As the population ages, neuro-emergent conditions represent an expanding disease burden and significant driver of healthcare costs. As an important example, consider the critical and extremely time-sensitive condition of stroke, the fifth leading cause of death in the U.S. and leading cause of adult disability with over 7 million stroke survivors [13]. More than 795,000 individuals suffer a stroke each year with 140,000 resulting in death. When a stroke event occurs, patients require immediate medical attention at an emergency room to optimize outcomes and chances of survival.

Populations with limited access to specialty neurology care have greater probability of disease burden. One study assessing patient functional status following TBI found that rural patients were more likely to be functionally dependent and report a lower health status than their urban counterparts [14]. Rural hospitals represent approximately one third of all hospitals in the U.S. or about 1,825 hospitals. These hospitals are essential for access to inpatient, outpatient, and emergency medical services in rural communities. However, these hospitals rarely have full-time neurological or neurosurgical expertise on staff. Furthermore, between 2010 and 2016, 80 rural hospitals closed, 27 of which were Critical Access Hospitals. These closures impact millions of rural residents in communities that are typically older and poorer, more dependent on public insurance programs, and in worse health than residents in urban communities [15]. There is significant geographic variation in the proportion of rural hospitals forecasted to be at high risk of distress.

The ACCESS program can scale across the U.S. to serve the existing 1,825 rural hospitals and expand their ability to care for patients and maintain revenues to reduce financial distress. Additionally, this program can provide increased opportunity for U.S. neurosurgeons, as there is currently a significant shortage of this highly skilled clinical resource. There are approximately 5,700 hospitals in the U.S. and the limited available 3,700 neurosurgeons tend to be clustered in areas of greater population density with facilities able to accommodate the highly technical aspects of the surgical discipline [16, 17]. This leaves many underserved areas without neurosurgical coverage. Utilizing the ACCESS program and proposed bundled APM, the expertise of these neurosurgeons can be scaled to the underserved communities described above.

D. Payment Model

The proposed payment model includes several different components. First, the remote consulting neurologist/neurosurgeon receives payment based on a fair market negotiated rate as per the contract, on a per episode basis. The payment is contingent upon delivering high quality care via telemedicine and recommendation of a diagnosis and disposition to the local ER provider based on discussion, audiovisual assessment of the patient and/or review of digital imaging. In the ACCESS model, costs to the local hospital are $850 per neurology consult and $1,200 per neurosurgical consult. Proceeds from these consults are distributed between NMXS, the consulting physician and the ACCESS program.

The second payment component is reimbursed to the local hospitals through traditional billing. The ACCESS delivery model enables a large subset of patients to remain in the local setting and the hospital can bill for these services. The increased revenues from additional services in the second component allow rural hospitals to make up for the cost of expert neurology assessments paid in the first component.

While general telemedicine codes currently exist and can be billed, they do not in sum cover the true cost of the neurological and neurosurgical consults. Nor do those codes include

components to cover education required for the spoke hospital staff to learn how to care for this patient population. Therefore, an APM should be established in which the rural site can bill for a bundled payment for all elements (consult, technology, education, quality assurance). This would add sustainability of the ACCESS model, while still reducing overall healthcare costs to payers.

E. Previous Model Deployments

Tele radiology and telemedicine are relatively new to the U.S., but they have been successfully deployed internationally, resulting in cost savings and improved resource management [18]. The validity, accuracy, and reliability of telemedicine for stroke specifically has been firmly established by rigorously designed studies [19-23]. Furthermore, these studies have shown that tele-stroke leading to increased tPA use significantly benefits patients. For example, in the TEMPiS study [24], patients treated with tPA at rural hospitals after recommendation by remote consult had similar mortality rates and functional outcomes. Additionally, patients in rural settings that were part of the tele-stroke network has a 38% lower odds ratio of a poor outcome defined as severe disability, institutional care, or death.

As discussed above, the NM based ACCESS model, which has a strong focus on stroke care and tPA administration, has been deployed and has been extremely successful in this initial feasibility evaluation covering metrics from participant interest, quality of care, benefits to healthcare providers and patients, and cost savings to payers.. Physician participant experience has also been extremely strong in the initial deployment (Table 4).

F. Small Practice Implementation and Feasibility

In the ACCESS telemedicine APM, the rural spoke hospitals can be considered small practices compared to the scale of the central hub hospital (UNMHSC). As part of program development, it was critical to take into account the resource and financial constraints of these smaller, rural entities to ensure that onboarding for the program could be accomplished with little upfront cost and burden, and the program was sustainable for these sites after launch.

There are several important parameters, which minimize the upfront burden. First, upfront cost is minimized for both human and technical resources. The human resources, expert neurological consultants, are paid on a per episode basis without charges for on call physicians. Net Medical Xpress Solutions (NMXS) provides the technological components, including audiovisual equipment, computers, and connectivity. The unique integration of Cloud connectivity lowered the cost of all technology for the consultant and ER. Bundling the payment with the neurological consult fee on an episodic basis minimizes these costs. These episodic payments also cover required training of rural staff on how to use the telemedicine technology and more importantly, care for neuro-emergent patients. Finally, there are additional administrative costs the rural hospitals need to take on to implement the ACCESS program. However, these do not require adding additional staff and the additional cost to administer the program is significantly less than the economic benefit the program produces. The ACCESS program itself handles credentialing of the expert clinical neurologists through partnership with NMXS and their independent physicians, which further minimizes upfront burden for spoke hospital implementation.

While much upfront burden is minimized with the ACCESS program, the rural hospital sites benefit from upfront and ongoing education, training, and continuous quality control measures. While this adds some burden during onboarding, the education and training make the rural sites more comfortable caring for specific cerebral neurological conditions at their site and is critical to program success. Continuing to report and comply with quality control measures, while adding minimal administrative burden, ensures the program is working effectively for all

stakeholders. A single, bundled payment structure would allow these small rural facilities to most effectively deal with billing for all aspects of neuro-emergent consultation and support.

As with implementation of any new program or APM, there are some financial risks assumed by the rural sites. For example, if all consultant recommendations lead to patient transfers, or the rural hospitals did not continue to have patients present with emergency cerebral conditions, they may not benefit financially from the initial program investment and time spent training on the system. However, that has not been our experience to date. When comparing PRE-ACCESS transfer rates at the rural hospitals to rates of ACCESS patients, there has been a dramatic shift. For example, PRE-ACCESS 20% of patients were kept versus 80% of patients that were transferred. Post-ACCESS 80% of patients were being kept versus 20% of patients that were transferred. (Fig 1), meaning rural hospitals are keeping more of their patients with neuro-emergent conditions locally for care. Furthermore, these financial risks will be further mitigated by the creation of the proposed APM to cover the cost of the remote neurology consult.

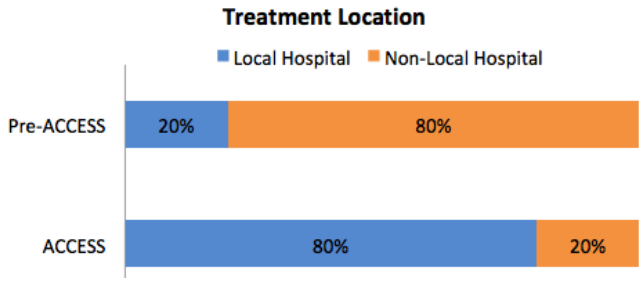

Figure 1. Transfer rates for Pre-ACCESS and ACCESS patients in rural hospitals.

While we have found the factors above critical for successful implementation and reducing burden on rural sites, overall adoption of the program highlights initial success (Tables 3 and 4). A significant number of rural hospitals have successfully implemented the program and continue to grow consults. Therefore, small rural hospitals can effectively implement this program.

G. Patient Market

The patient market includes individuals in geographic disparate regions suffering from potential emergent cerebral neurological conditions that require immediate medical attention. Conditions include stroke, hemorrhage, traumatic brain injury and others (Table 2). Stroke alone accounts for a significant number of all patients seen in the ACCESS program (Table 5), while other conditions significantly add to the pool of patients the program can benefit. Other patient conditions that can benefit from the current model include hematoma, skull fractures, tumors and spine injuries.

Table 5. Stroke diagnosis for all primary neurology consultations in the ED. May 2014 – May 2018.

Stroke diagnosis	Consultations	% of Consultations
Not a stroke	2224	72.42%
Stroke	844	27.48%
Total	**3071**	**100.00%**

H. Patient Benefits

The ACCESS program provides significant benefit to patients compared to control patients. Previously, it has been shown only 0.1-0.3% of patients presenting at rural hospitals with neuro emergent symptoms need

Table 6. Patient Questionnaire Responses

Question	YES
I Can Easily Talk to My Healthcare Provider	93.4%
I Can Hear My Provider Clearly	90.1%
My Provider Is Able to Understand My Condition	96.2%
I Can See My Provider As If We Met in Person	93.6%
I Do NOT Need Assistance Using the System	53.0%
I Feel Comfortable Communicating with My Provider	95.3%
I Think Healthcare Provided Via Telemed Is Consistent	96.0%
I Obtain Better Access to Healthcare Using Telemedicine	95.7%
Telemedicne Saves Me Time Traveling	96.0%
I Do Receive Adequate Attention	96.9%
Telemedicine Provides for My Healtchare Need	95.3%
I Find Telemed Acceptable to Receive Healthcare	97.2%
I Will Use Telemedicine Services Again	97.4%
Overall, I'm Satisfied with Quality of Telemed Service	97.4%

neurosurgical interventions with most remaining patients requiring at most observation and repeat imaging [5]. So, the practice of transferring all neurosurgical-emergent patients consumes valuable resources with unproven efficacy, takes money out of these communities, and is a disservice to many patients involved. With the addition of telemedicine specialty services, these small hospitals may retain these patients for observation, discharging the clear majority from the ER or after a brief admission.

Patients who are determined not to be experiencing any cerebral neurological event can be discharged more rapidly with no burdensome and costly transfer to a tertiary care center. Patients determined to be experiencing a neurological event but can be treated by the local center benefit from more rapid treatment, and reduced burden of travel. Patients determined to be experiencing a neurological event that requires transfer experience no decrease in care, and the team at the transfer hospital may be better prepared for arrival. Quantitative metrics for the ACCESS program to date on care delivery, outcomes, and cost are presented in "Quality and Cost" below. Patients have also demonstrated support for the current ACCESS program based on questionnaire responses from 423 individuals (Table 5).

I. Impact on Medicare and Commercial Medical Spend

The ACCESS alternative payment model allows significant cost savings to both CMS and commercial insurance payers, by limiting the amount of unnecessary and costly ground and air transfers of patients from the rural setting to an urban tertiary care center and by reducing billing and insurance related (BIR) and administrative costs. The impact on this can already be seen in the ACCESS program through reduction of inappropriate transfers from 80 to 20% (Fig 1). While the creation of a new bundled code for telemedicine consults would be an additional cost to CMS or commercial payers, the overall financial payer gain from reduced cost of highly expensive patient transfers should far outweigh the telemedicine consult costs.

2. Quality and Cost

A. Improvement in Care Delivery and Cost

The ACCESS program to date has successfully demonstrated improvement both in the cost of care and quality outcomes. We have shown with the ACCESS program that compared to controls a significant reduction in transfers has been achieved (Table 5). Considering average air transfer costs $30,000, and even the weighted average of ground and air transfer costs $5,125, this represents a substantial savings to the healthcare system. In the non-ACCESS, control group 66 patients that were transferred, approximately 50% were transferred unnecessarily as 18 were rapidly discharged and 14 discharged within 24 to 48 hours.

Furthermore, patients benefitted from significantly improved outcomes due to more timely delivery of therapy and interventions that can now be delivered in the rural setting compared to delays that occur during transfer. Consider an important example in the ischemic stroke population, when a tight time window is required to benefit from the administration of tPA. The average time to answer stroke

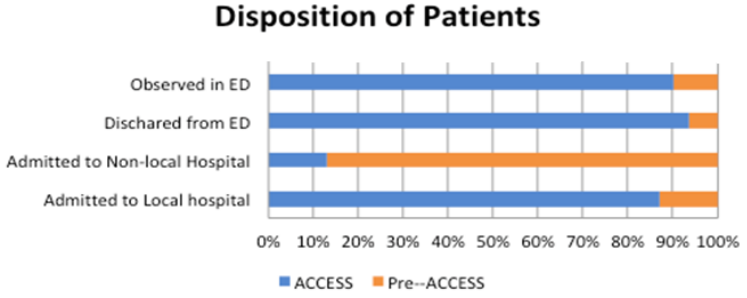

Figure 2. Disposition of patients are rural hospitals Pre-ACCESS and once ACCESS was implemented.

consults was 24 minutes and other tele neurology consults 30 minutes. In the ACCESS program to date 115/132 patients who could have benefits from tPA received is as part of the ACCESS program, and of those 44.4% were not transferred and instead properly cared for locally. In general, the current rate of tPA in New Mexico centers using the ACCESS program has increased from a baseline of <2% to nearly 20%, which is on par for U.S. academic medical centers. This indicates the remote ER providers have become more comfortable with timely care for these patients. The resulting increased health of the patient from appropriately administered tPA leads to fewer ED visits, re-hospitalizations, stays in inpatient rehab, skilled nursing facilities, and shorter ICU length of stays. Finally, the overall ability of the rural sites to care for all patients with neuro-emergent conditions has dramatically improved since implementation of the ACCESS educational programs.

B. Barriers and Risks

There are some barriers and risks of the ACCESS program, which can be mitigated to ensure successful implementation. First, there may be initial reluctance of rural physicians to care for neuro-emergencies due to fear of poor outcomes. Our experience has shown that rural health care providers feel inadequate to monitor and treat patients with neurological disorders due to lack of knowledge. To overcome this barrier, we provide intensive hands-on education to providers and nursing staff. Because the UNMHSC provides 24/7 access to specialty consultation, it is also important to reassure local physicians that should they later request patient transfer after deciding to observe a patient in a local hospital, there will be a place for that patient in UNMHSC without delay. Using modern audiovisual consultation with the specialist providing care, we expect that local physicians and their patients and families will feel more comfortable with local care management.

Secondly, there are medical-legal barriers to implementation. All providers involved in the ACCESS network will be credentialed with each hospital where they provide patient care. Each hospital signs a contract with the UNM ACCESS program to clarify medical-legal responsibilities and concerns. Additionally, ACCESS physicians will provide a written report of the recommendation to the referring hospital via the telehealth system within minutes of completing the consults providing back up for the spoke HCP acting on the hub HCP recommendation. The statewide External Scientific Community Advisory Committee (ESCAC) creates standards for using telehealth statewide. This will result in greater comfort for providers participating in ACCESS.

Limited resources of rural hospitals also create a barrier to entry in telemedicine programs. Standard of care demands that patients with many acute neurological disorders be admitted to monitored beds. The number of telemetric beds in small rural hospitals is limited. Even at the tertiary referral center, it is often difficult to find a monitored bed for every patient needing truly emergent care. This is why we pioneered the observation unit in the UNMHSC ER, which has been shown to be safe and effective. Transforming ER beds to temporary observation units is one way to overcome the barrier to limited hospital resources. In addition, timely discharge and triage of patients with neurosurgical emergent conditions will free up beds and use limited resources more efficiently and effectively.

An additional barrier to anticipate as the model scales, is to ensure availability of enough neurology and neurosurgical experts licensed in the state where the rural hospital is in need of the consult. Licensing issues have been one constraint on widespread adoption of telemedicine. By obtaining licensure in states needing consultations and integrating Cloud based technology,

providers can be anywhere internet access is available, resulting in a greatly enhanced number of potential providers.

Finally, with approval of a bundled payment model by Medicaid of New Mexico a major hurdle to sustainability of our telemedicine program has been achieved. Insurance companies have agreed to follow the Medicaid directive. Our goal for full sustainability will be the agreement of Medicare to support ACCESS in a similar manner as Medicaid.

C. Performance Metrics and Data Collection

As part of the ACCESS program several metrics are being collected in controls and telemedicine patients covering four main categories including costs, patient outcomes, patient experience satisfaction, and clinician experience satisfaction. A full list of performance metrics that are being captured are further detailed in section 6 below.

One full-time ACCESS staff member is dedicated to data entry and to lend support to the rural hospital nursing staff on data entry provisioning questions. Quality measure data is abstracted from the patients' medical records and entered into the ACCESS operations database (Telemedicine Information and Billing System or TIBS).

D. Electronic Reporting

Quality metrics, health measures, and cost-effectiveness metrics are calculated and reported from the TIBS operations database developed by ACCESS.

E. Monitoring and Auditing

Implementing a quality control system has been critical to success of the ACCESS program. This includes training and education of the rural site as part of onboarding, but also continuing to collect quality control data as the program grows at the rural site. ACCESS employs several quality control measures to ensure patient safety including 1) monthly clinical consult reviews with neurology and neurosurgery medical experts to assess the quality and outcomes of a representative monthly sample of consults; 2) Consulting provider technical issues reporting questions are integrated in the NMXS patient clinical reporting software for quick and efficient identification of any IT problems; 3) Patient satisfaction/experience specifically with telemedicine in the ER and generally with the care they received in the hospital. If deviations from ACCESS standards are found then corrective actions are requested to be implemented by the rural site or at NMXS.

F. Statistical Analysis

While the ACCESS program serves a number of emergency cerebral neurological conditions, stroke represents one of the largest markets and most time critical for patient outcomes. Therefore, originally much of our statistical model and analysis of the data targeted stroke costs and outcomes and projected out early program results over the lifetime

Table 7. Cost Savings Breakdown

	First Year	Lifetime
Average Cost Savings Per Patient	$13,617	$35,761
From Transportation	$11,757	$21,197[a]
From Improved Health	$1,860[b]	$14,564[b]

a Cost savings when all health cost set to zero, **b** Cost savings when transport costs set to zero.

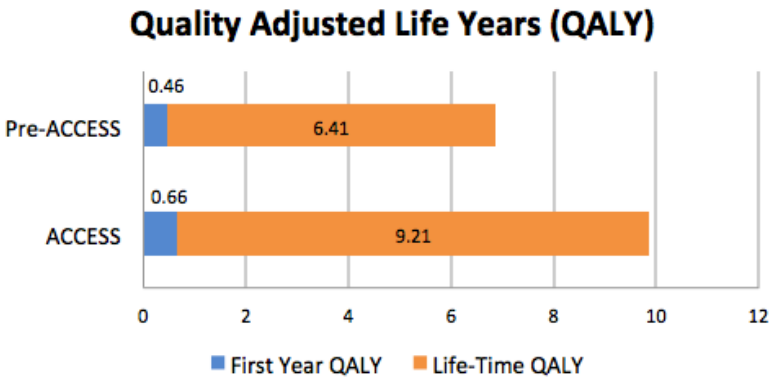

Figure 3. Quality adjusted life years for Pre-ACCESS and ACCESS patients at rural hospitals.

of the patient and across a significant number of patients. A Markov model was developed for both first year and lifetime horizons, for the evaluation of the cost-effectiveness of the ACCESS program in the management of acute ischemic stroke. Costs were estimated and include initial and recurrent stroke treatments, consultations, patient transports, rehabilitation, long-term care, and caregiver costs. Effectiveness was measured by quality-adjusted life years (QALYs). Incremental cost-effectiveness ratios (ICERs) were calculated using QALYs gained combined with costs incurred. Costs and QALYs were discounted at 3% annually in the lifetime horizon model. Model inputs were taken from findings from the ACCESS program for emergency room patients in rural New Mexico and existing literature.

Compared to Pre-ACCESS patients at rural hospitals, ACCESS telemedicine patients had a cost savings of $13,617 for the first-year horizon and $35,761 in the lifetime horizon (Table 7). Incremental QALYs increased from 0.2 for the first year to 2.8 over a lifetime (Fig 3). Additionally, 10,000 Monte Carlo simulations for both first year and lifetime horizons yielded ICERs <$50,000 /QALY, a ratio commonly considered acceptable in the United States. Cost savings ranged from $4,960 to $146,000 and QALYs gained from .08 to 3.73. Therefore, the ACCESS model demonstrates significant savings and improved quality of life. Unlike other telemedicine programs, ACCESS is cost-effective in both first year and lifetime horizons.

We will continue to assess the ongoing ACCESS implementation in NM to evaluate the effect of telemedicine intervention on the time it takes to obtain specialist-based treatment recommendations; the probability of patients with neuro-emergent condition being transported, and the inpatient admission rates for patients with neuro-emergent conditions. Other quality, outcome, cost measures will be analyzed similarly.

3. Payment Methodology

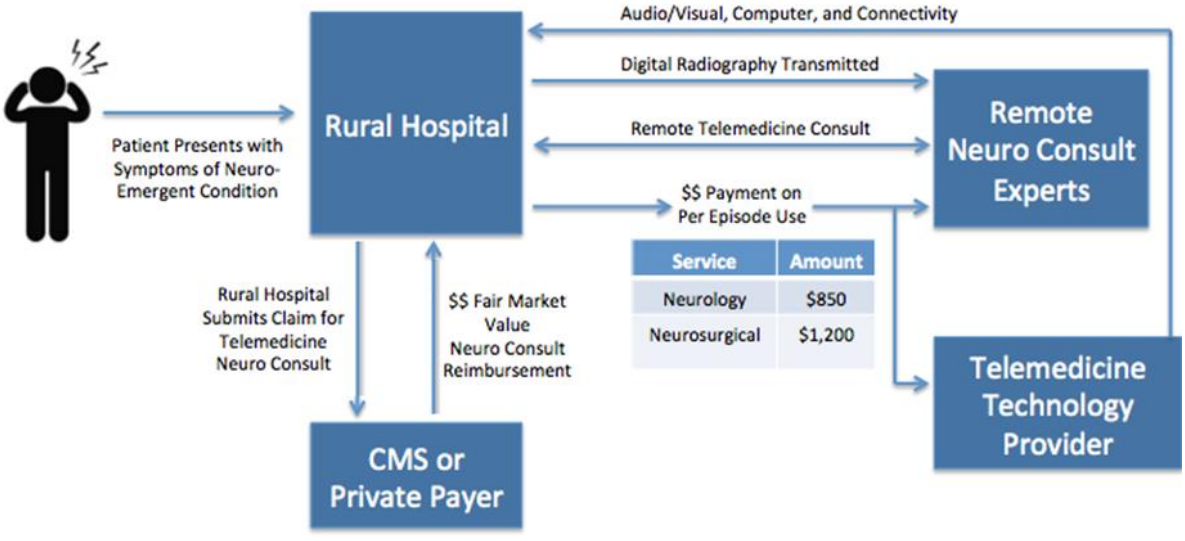

Figure 4. Service and Payment Flow Diagram

A. ACCESS Payment Methodology

In the ACCESS APM, the remote hospital where a telemedicine consult is conducted remits a value for service payment to the organization/physician performing the consultation for each encounter (Fig 4). In the case of our New Mexico based service, based on fair market value,

neurology consults are $850, and neurosurgical consults are $1200. Included in this price point is the continuous education, training and surveillance/networking to each rural hospital regardless of the number of consults each hospital does while being part of the ACCESS program. Each hospital could submit a claim to the patient's payer, however, the reimbursement from payers for such telemedicine services are currently extremely low at approximately $200. For de-risking and sustainability of a neuro emergent consultative system, there needs to be a reasonable reimbursement from CMS and private payers to the remote hospitals for coverage of the use of a telemedicine specialist consultation. This should be a billable code which includes the bundled costs of professional service, technology and education at the amount discussed above for a simple and sustainable method for small rural hospitals to receive fair coverage for this service.

The dollar amounts for each discipline were established by a fair market value development process that considered the bundled costs necessary to provide such a telemedicine service originating from an academic medical organization (UNMHSC). These numbers have been validated by our client hospital's own reviews and validated by the fact that they have been willing to contract for these services for one third of patient care not covered by ACCESS funding. As the evaluation was done in New Mexico, it may be necessary to review and adjust these prices for other areas in the country where the market may vary. The payment received from the consult is divided among the physician and NMXS for providing the technology hardware and service.

This payment model, including billing the stated consultation fees directly to the hospital has been in use with 16 hospitals since June 1, 2018. This billing model was created to pay for the care of non-CMS patients that required the same level of care due to neuro-emergencies. Due to the benefits related to being able to retain a substantially higher percentage of these patients in rural hospitals, remote hospitals in this study have been willing to accept the financial burden, despite limited coverage of the costs by payers.

B. Incorporation of Performance Results

Program quality surveillance to prevent and/or address potential patient harm episodes are addressed in several approaches. These include 1) a telemedicine specific incident reporting process based on similar tools and methodology used in hospitals used to identify, trend and respond to adverse technical incidences with the telemedicine application; 2) monthly clinical consult reviews with neurology and neurosurgery medical experts to assess the quality and outcomes of a representative monthly sample of consults; 3) Utilization of the local hospital staff member who serves as the telemedicine champion for the rural site coordinates educational opportunities and helps to identify and investigate any issues with the delivery of telemedicine such as failure in connectivity and any impact on patient care. Rural sites that are not in compliance with the program will be required to take preventative action.

C. Degree of Financial Risk

While there is an overall positive net impact to a rural hospital system once established and running, smaller hospitals may be less likely to adopt the model upfront. While the only costs occur on an episodic basis, they may have concern about even these costs without positive reimbursement from CMS or private payers for the neurological consult itself. We will attempt to mitigate this risk in two ways. First, we will demonstrate the success in other programs both with respect to patient outcomes and cost in our initial pilot sites in New Mexico starting with cardiology which is currently in implementation. Second, we will be working with Medicare and the AMA to obtain a bundled payment avenue, which will formally cover the neurological telemedicine assessment and all other components of technology and education to remove this

risk from the sites. We have already successfully worked with the New Mexico Human Services Department which has recently issued a letter of direction to the state MCOs that mandates reimbursement for ACCESS program consultation, as well as provides a procedure and methodology.

D. Comparison to Current Payment Methods

Because the standard of care in neuro-emergent conditions requires emergency room decision-making where "time is brain", teleneuro-emergent consultations are the only way to meet this new standard in rural hospitals where neurologists and neurosurgical expertise does not exist around the clock. In the stroke population for example, current for-profit models provide telestroke consultations built upon billing structures that have significant initial and ongoing financial costs in addition to a charge for providing the consult. While this model does work for larger health care systems, a rural hospital does not have the financial reserves to be able to pay an ongoing charge in addition to a charge per consult. The ACCESS model places a charge for the consult episode rather than paying for the availability without the need. A "charge only for the consultation" is uniquely suited to rural America. Telemedicine allows the amortization of highly specialized physicians over multiple communities, providing their services where it would have been economically infeasible in person. In some communities, one neurologist can provide a sustainable clinical practice because the consultative service can "fill in" when the single community neurologist goes on vacation, attends an educational opportunity, gets sick, or retires, for example. The availability of this program has also been used as a recruiting tool as a quality of life benefit.

E. Barriers in Current Payment Methods

The current model for Medicare payments for telemedicine services proposes a payment equivalent to an office visit. This level of support does not, however, cover the true, fair market value costs of neuro emergent telemedicine. Neuro emergent consultations demand a specialist be available for consultation within minutes at any time. A central coordination staff is needed to connect the ER physician with the appropriate specialist who must also be sent the required imaging studies for integration into the consultation. These necessary steps are essential for a successful emergent consultation and are associated with costs that exceed a routine office visit. Requiring the administrative team at the rural site to bill separately for all the different components of the ACCESS program including professional service, technology, and education would require significant burden compared to an all-inclusive bundled payment model. Even though there is a financial benefit to a rural hospital to admit a patient and charge for the delivery of care, lack of adequate reimbursement from public and private payers for the tele-neuro consult can place some small healthcare facilities at risk. In New Mexico, there exists a parity law stating telemedicine encounters must be reimbursed at the same rate as an in-office visit. However, costs associated with neuro emergent telemedicine far exceed cost of an office visit.

Each potential consulting physician must acquire a state license and then extensive local hospital credentialing, as there is no national standard for telemedicine. A national standard for licensure for telemedicine is needed as well as an improved national standard for credentialing. We are making efforts to change this with the Medicaid MCOs, but while CMS limits payments for telemedicine to extremely low amounts (approximately $200) there is resistance to adoption. The current model is improving care while saving vital resources despite the fact they get little or no reimbursement for neuro-emergent telemedicine consult costs. Without a means of providing some of the benefits of reduced system-wide care costs back to rural hospitals adoption of the optimum stroke delivery system will be slowed due to the marginal financial status of many rural

hospitals. Without maintenance of an appropriate payment to incentivize the very limited pool of physicians capable of answering these emergent calls to take 24/7 calls, there will not be physicians willing to provide telemedicine consultations. Without regulatory improvements, the adaptation of this form of remote emergency care will be further slowed resulting in harm to many patients who will remain without access to the timely care they require and deserve.

4. Value over Volume

A. Financial Incentives

The payment model is fully sustainable with significant financial incentives. Our proposed payment model is individually rational from the view of UNMHSC, local hospitals in NM, and beneficiaries (patients) targeted by the program. The ER at UNMHSC, as with many safety-net trauma centers, experiences frequent overcrowding. Keeping patients in their local community helps to alleviate this overcrowding and assures that patients who are transported have a greater need for neurological and neurosurgical care and that an improved assessment of the patient occurs prior to arrival at the trauma center. Additionally, this service delivery and payment model innovation is incentive compatibility for UNMHSC because the consultation fee covers the fair-market value of the consulting neurosurgeons and neurologists. The neurology specialists that are made available for consultations with rural physicians in emergency rooms benefit by extending their normal office-based practice to a telemedicine-based practice. The financial incentive is an opportunity to increase their income while being able to help care for patients that normally could not benefit from their care. In some situations, patients may be referred to the consulting physician for follow up stroke care. This would directly expand the practice of the consulting physician. The ACCESS consultation service facilitates rural hospitals often keeping their patients, which is an opportunity to generate revenue that might otherwise be lost. The reimbursable charges for inpatient neurology are often in excess of $20,000. For patients and families, the model prevents a long, costly travel burden (up to >300 miles) that in many cases results in substantial out of pocket family costs, only for patients to be discharged shortly after arrival.

B. Non-Financial Incentives

The ACCESS program also provides a unique learning opportunity for health care professionals and patients alike. It focused on increasing providers' comfort levels in caring for patients who do not require emergent surgical intervention or higher level of care. This training is delivered via in-person lectures, hands-on training sessions, mini-internships in the tertiary referral center, web-based refresher courses, social media communities, quarterly webinars, and an annual telehealth conference. ER physicians that are typically not comfortable treating neurological patients will grow in expertise through collaboration with the neurology experts as part of the telemedicine consults, which is professionally rewarding and grows their confidence in treating this group of patients. Finally, by providing faster diagnosis and treatment of neuro-emergent conditions, hospitals can avoid possible lawsuits that may occur from lack of timely care impacting patient outcomes.

5. Flexibility

A. Adaptability for Different Clinical Settings and Patient Subgroups

The ACCESS model already currently targets a number of cerebral neurological patient subgroups (Table 1), and the overall patient care and patient model can be easily adapted to

different clinical settings and additional patient subgroups. Using much of the existing technology and human resources the model could easily scale to additional neurological conditions. Furthermore, the APM itself and technology infrastructure could also scale to support other types of emergency conditions in rural settings such as cardiac, orthopedic surgery, psychiatry, and pediatrics by changing the expertise of the hub consulting site. There would be little upfront cost for existing sites to expand to new emergency and specialty conditions requiring an expert consult.

B. Adaptability for Technology Changes

As technology providers continue to expand in the market, and platforms such as phones and tablets become standard of care for telemedicine, the ACCESS model can be platform agnostic. In other words, as the technology base for video and audio changes, new solutions can be updated that continue to provide the highest quality experience at the lowest cost. There is significant flexibility in IT solutions that fit the program requirements, although NMXS has proven to be a stellar platform due to low cost, scalability, robust software solutions, and image transfer speed and quality. The current implementation is using the solution from NMXS as described in section 10.

C. Operational Burden

Operational burden and reporting requirements can be mitigated in the ACCESS program through several strategies, and no additional staff should be required by the rural site to implement the program. First, sites are required to attend training and education on best practices for implementing the program. Second, the electronic databases maintained by the ACCESS program administrators and NMXS provide simple, easy to use, electronic formats for data capture and reporting. Finally, streamlining the equipment and infrastructure across sites utilizing a single source NMXS, minimizes operational burden. While there is a small increase in burden through administrative and billing aspects of the ACCESS program for the rural site, the financial benefits significantly outweigh the additional burden.

D. Infrastructure Requirements

The ACCESS model requires a small infrastructure footprint to meet the requirements of audio-visual assessment by the remote neurology expert. This includes a computer, monitor, speakers, microphone, webcam, and connectivity. These requirements are all provided by the single NMXS source in a simplified cart design to minimize burden of sourcing and training requirements for the rural hospital. The cost of the telemedicine carts is relatively low to minimize upfront capital infrastructure costs for the rural sites. There is also a nominal annual hardware maintenance fee to NMXS.

6. Ability to be evaluated

A. Evaluation Metrics

UNMHSC leads responsibility for program oversight and evaluation of metrics, including quarterly reports on cost, quality of care, outcome measures and operational measures. All monitoring reports include assessment of model implementation, lessons learned, patient experience, quality improvements, clinical outcomes, and estimates of cost savings. The achievement of key milestones, progress in operations, and implementation is reported as measured by programmatic and operational metrics including: number of sites with ready

telehealth systems (THS) in place; number of sites with trained telehealth administrator; number of sites with trained health care providers (HCPs); number of sites with trained radiology technicians; proportion of patients with neuro-emergent conditions enrolled per site; number of local follow-ups completed; at quarterly webinars; and number of consults completed within 60 minutes.

Cost is evaluated using the Total Cost of Care Population-based PMPM Index. The measure has been developed for primary care, but we adapt it to diagnostic codes for neuro-emergent conditions. The majority of our postulated savings come from decreasing the number of transfers. We record the portion of patients with neuro-emergent conditions transported to UNMHSC or other tertiary referral centers. Major quality measures include imaging results for acute stroke patients within 45 minutes, timeliness of Emergency Medicine Care, and Hospital-Wide-All-Cause Unplanned-Readmission measure, which is also an outcome and process measure.

B. Evaluation Goals

We selected the following individual validated measures to assess quality and outcome:

(1) Time to written and verbal treatment recommendation in the ER to evaluate timeliness of emergency medicine care and effectiveness of THS improved ER patient care quality. We define time to treatment as the first recommendation made by the neurological or neurosurgical specialist contacted by the referring physician. Please note – consulting neurologists and neurosurgeons make recommendations and not treatment decisions. This recommendation can be as simple as starting steroids for brain tumors, administering seizure medication, or as complex as flying a patient who needs emergency neurosurgical intervention to UNMHSC, or discharging a patient home for a follow-up clinic appointment. In some cases, the first recommendation by the neurosurgical specialist will not be carried out in the usual-care group until the patient is seen in clinic or transported to UNMHSC. The records at UNMHSC and the telehealth system store the exam time the consult report was generated. This is an important measure that may also lead to better outcome because timely treatment recommendations and triage decisions are especially important in neuro-emergent conditions where "time is brain."

(2) Proportion of patients transported from the spoke hospital to UNMHSC or other tertiary referral center. During the innovation award we demonstrated a reduction of neuro-emergent transports from 80% to 20%. Expected percentage of transports as a target metric should range below 25% for neuro emergent cases. Decreasing the number of unnecessary transports will contribute to major cost savings.

(3) Specifically for stroke patients, who are a significant subset of the patient population, we aim to increase the rate of tPA administration. The current average rate for academic medical centers is just over 20% and ACCESS statistics indicate a rate of near 18%. This would argue that such programs should have a tPA rate of 15% or greater for patients eligible to receive tPA. Decreasing time to administration, and increasing the use of tPA in general can significantly improve patient outcomes.

C. Evaluations Currently Underway

As described above and throughout this application, ACCESS is currently underway across New Mexico and being evaluated with several metrics to determine patient outcomes, healthcare costs, and user experience and satisfaction of both providers and patients. Results of those

evaluations to date have been presented throughout different sections of this application with significant positive results that justify an advanced payment model with bundled structure.

D. Additional Questions Beyond Core Metrics

Patient experience and satisfaction with telehealth are measures to assess the patient clinical encounter experience and patients' satisfaction with telehealth encounters. These two measures fall into the CMS domain category of general and population specific satisfaction. We selected two validated measures to assess: Patient experience questionnaire (PEQ) [26] and the Telemedicine Satisfaction Questionnaire (TSQ) [27]. Both questionnaires are available in Spanish and English. The limitation of any survey is low response rate. Following CHAPS® recommendation of mixed mode (mail, telephone, and email), we anticipate a 40% response rate. The feedback we gather from these surveys should help us to maintain or improve quality of care and make necessary changes to our procedures, and results to date have been presented above. We also assess, via self-assessment, the confidence of hub and spoke HCPs to make treatment decisions and care for neuro-emergent patients. This is a means to evaluate our education program and identify possible knowledge gaps, which can be covered in our ongoing webinars.

7. Integration and Care Coordination

A. Resources Required for Model

Types of physicians and non-physicians in the ACCESS model include: 1) Physicians providing care in the rural setting including at a minimum, Emergency Medicine, Hospitalists, Family Medicine, Primary Care and Internal Medicine; 2) Advanced Practice Providers including Nurse Practitioners and Physicians Assistants; 3) Telemedicine Physician Specialists (varied disciplines such as Neurosurgery, Neurology, Critical Care, Cardiology, etc.) who provide remote telemedicine consultations. 4) Clinical staff member from each partnered hospital who is the program champion and who assists with data collection, coordinating education and follow-up on any equipment, process, procedural issues; 5) Program clinical support: process and clinical education; 6) Program administrative support: financial, IT, project management, research.

B. Greater Integration of Care Coordination

The Institute for Healthcare Improvement Triple Aim addresses better care for individuals, better health for populations and lowering cost for the healthcare system (lower per capita cost). One of the greatest barriers in access to care is the challenge in providing specialty care in rural settings such as New Mexico. Rural communities (and many urban facilities) simply cannot support neurology and neurosurgery providers. The ACCESS Program addresses this critical need by connecting/coordinating the crucial missing link of specialty care in underserved areas.

For example, an elderly gentleman sustains a serious head injury after a fall at home and presents to his rural community hospital over 200 miles from an urban center. He is promptly connected to a neurosurgeon at University of New Mexico Hospital for telemedicine consultation. The consulting clinician can immediately review critical radiology images and pertinent patient data. The consulting clinician can have a visual and audio connection to the patient to meet the patient, perform exam and interact with the patient and family. The rural ED provider and nurse can participate with the consultation and understand the findings and recommendations provided by the specialist. Not only is a digital consultation provided immediately along with a written consultation report, but the important element of a direct handoff from provider to provider is inherent in this care delivery model. Clinical integration based on this telemedicine platform is crucial to support coordination of patient care across

conditions, providers, settings, and time providing care that is accessible, patient-centered, safe, timely, effective, efficient, accessible and fair [28].

C. Change in Workforce Requirements

The traditional healthcare delivery model for a hospital to meet the needs of a community is to employ physicians and midlevel providers with needed qualifications and training including those in general and specialty practice. This traditional method is extremely challenging in the rural setting due to several factors including location, compensation, education/training opportunities, personal time off, opportunity for growth, and community resources. The telemedicine model of care delivery is positioned uniquely to address many of these challenges. Instead of a rural hospital being required to hire a specialist ($243,000 average U.S. salary in 2015), they are now able to pay for a telemedicine consultation(s) (cost per consult) at a lower total cost. To accomplish this, changes in the program's hub facility provider workforce may needed to support the 7x24 on-call specialist coverage for telemedicine. The ACCESS telemedicine program has developed two ways to broaden telemedicine physician coverage. The first is the use of existing specialists from UNMHSC. The second is employing specialists who contract with Net Medical Xpress (program technology provider). None of the consultant providers are full-time with the ACCESS Program. They all continue to practice in their area of clinical specialty and take calls as permitted within the program schedule. The program payment model compensates the consultant specialist at fair market value. From the rural hospital perspective, while there is a minimal change in overhead burden required to support training, education, and documentation, their existing administrative staff can handle this and no additional hires have been required to implement the program. However, based on the success of the program and the additional patients that can be treated at the rural hospital, staffing resources may need to be increased to care for the increased patient census.

D. Coordination of Team Members Not Financially Vested

The ACCESS program is dependent on the participation of physicians in the rural hospitals such as Emergency Department physicians and Hospitalists who are not financially accountable and receive no direct compensation from ACCESS. They do, however, receive "soft" benefits from the program including education, clinical support and mentoring. The ACCESS program integrates educational opportunities such as a neuroscience foundational workshop and distance learning for additional common topics in neurological patient management. Both the workshop and distance learning modules have CME approval. In addition, to maximize the rural provider learning, the program has connected rural sites to weekly neuroscience grand rounds. These are weekly rounds presented by Neurology and Neurosurgery with CME's attached. Another innovative approach to reach educational needs of rural physicians is the development of a quarterly webinar hosted by ACCESS where a consulting specialist presents a neurological topic of concern along with case studies submitted by spoke rural hospital physicians. This is meant to be interactive where not only a critical exchange of information occurs, but also an opportunity exists to further develop relationships between the telemedicine consultant and rural provider.

Another important driver of coordination of those not financially vested is direct support between ER physicians and the neurologist consultant during the patient experience. It is best practice to have the rural provider in the room during the consult so that they can directly interact with the specialists and patient, ask questions and thoroughly understand recommendations for the plan of care. This approach encourages professional and collegial collaboration between physicians. Additional benefits to the rural provider that vest them beyond financial gain include: 1) Decreased inappropriate admissions and transfers with the back-up of the telemedicine

consultation; 2) Potential decrease in Emergency Department wait times with telemedicine consultation assisting the ED provider in determining optimal plan of care; 3) Potential decrease in unnecessary admissions with immediate rule out of a neurological issue; 4) The opportunity of a 2nd consult within 24 hours that provides the rural physician with a follow-up consultation; 5) The opportunity for additional telemedicine consultations beyond 24 hours after the patient is allowed at additional cost.

8. Patient Choice

A. Preservation of Patient Choice

Prior to participating in an ACCESS consultation, patients are offered a choice to participate in the program or receive traditional care. They are currently required to complete an informed consent form if they choose the consult. A care coordinator at the rural site is available to clearly explain the program, potential benefits and risks, and how it differs from traditional care. Patients would be excluded from the program if it is determined the ACCESS program represents a risk to their safety or efficacy of care.

B. Impact on Disparities in Medicare

New Mexico had 372,685 Medicare beneficiaries in 2015 and 766,732 Medicaid/CHIP enrollees in August 2016 [3]. As NM includes a significant rural population, the CMS population includes a significant number of patients in rural areas. It should have a significant impact on these geographic and socioeconomic disparities in healthcare, improving accessibility of healthcare in rural communities, and improving the financial outlook of rural hospitals to impact those communities. Furthermore, the ACCESS model can have a significant impact on the large Native American population in New Mexico.

C. Impact on Disparities Beyond CMS

The ACCESS model expands the demographic, clinical and geographical diversity of participation by interacting with patients at their local hospitals. From the patient surveys, we have conducted, patients are more willing to seek early treatment for neuro-emergent issues if they can be seen at their local hospitals with the potential to be treated there instead of being transported elsewhere, making the current model of care more inclusive.

9. Patient Safety

A. Primary Patient Safety

The proposal will continue to maintain recognized standards of patient safety: physician licensing /credentialing, patient privacy, security and confidentiality (all data security and encryption protocols are in place and HIPAA, PCI, HITECH compliant), correct patient identification (use at least 2 ways to identify patient), patient written consent for telemedicine, and a valid patient-physician relationship accomplished at a minimum by a face-to-face examination through real-time audio and video technology. Furthermore, an additional measure of patient safety will occur in the model by providing increased access to specialty care for patients in rural settings to improve time sensitive clinical decision-making.

B. Necessary Care and Monitoring

The Institute of Medicine has advanced that healthcare practices be evidence-based. Evidence-based practice describes “a way of providing healthcare that is guided by thoughtful

integration of the best available scientific knowledge with clinical expertise. This approach allows the practitioner to critically assess research data, clinical guidelines, and other information resources to correctly identify the clinical problem, apply the highest-quality intervention, and re-evaluate the outcome for future improvement."

A key to patient safety is to address the confidence and competency of those providing patient care through education and clinical support. The ACCESS telemedicine program has created a blended educational approach for healthcare providers to gain knowledge and experience with their management of acute neurological and neurosurgical patients. The program developed a number of approaches to provide education (most with CMEs approved) and clinical support including 1) Foundational Neuroscience Workshop: Neurological Assessment, Stroke Management, tPA Administration, Management of Traumatic Brain Injury and Case Studies in Acute Head Injury; 2) Clinical Neurosciences Grand Rounds live stream to rural hospitals involved in the program; 3) Program and Technology Education: training staff on telemedicine procedures, equipment, data abstraction, and quality follow-up; 4) a systematic review of consults is performed by ACCESS clinical leaders to determine if clinical guidelines are being followed and if rural hospitals are following guidance provided by the consulting specialist. It is critical in this model that non-physician stakeholders such as nurses and administrative support at the rural sites are also educated and trained.

C. Integrity of Intended Benefits

The ACCESS model utilizes a database to collect information on patient demographics, payer source, diagnosis, treatment recommendations, disposition, timeliness of consult, duration of consults, for quality monitoring and statistical analysis. The program processes a monthly scorecard addressing clinical, financial and information technology performance and quality statistics. This helps address deficiencies in meeting performance targets in a continuous cycle of process improvement. The model's quality measures have been developed in line with the Accountable Care Organization (ACO) 2016 Program Quality Measure Narrative Specifications to embody the true intention of MACRA. The model provides data in all eight measures that are included in the CAHPS for ACOs survey:

- ACO-1: CAHPS: Getting Timely Care, Appointments, and Information
- ACO-2: CAHPS: How Well Your Providers Communicate
- ACO-3: CAHPS: Patients' Rating of Provider
- ACO-4: CAHPS: Access to Specialists
- ACO-5: CAHPS: Health Promotion and Education
- ACO-6: CAHPS: Shared Decision Making
- ACO-7: CAHPS: Health Status / Functional Status
- ACO-34: CAHPS: Stewardship of Patient Resources

10. Health Information Technology

A. Patient Privacy

The ACCESS program implements all required regulatory policies and procedures that apply to consulting physicians, telemedicine technology, and HIPAA compliance as would be standard policy for in person office or hospital assessments.

B. Transparency of Cost and Quality

In the ACCESS payment model, billings to payers and patients for telemedicine consultations come from the local, rural hospital, rather than the hub organization (UNMHSC or contracted neurologists) providing telemedicine services. The rural hospital pays the hub

organization directly and recoups costs through billings to payers and patients. All cost and quality outcome measures are tracked and available within the electronic database and are shared between providers, payers, and sites to ensure transparency of cost and quality.

C. Interoperability of Electronic Health Records

Interoperability of electronic health records would potentially improve this model from the respect that consulting physicians may find useful information in patient records that may not be conveyed by the local health care providers during the telemedicine consultation. However, this is not a requirement of this model and interoperability between the patient EHR at the rural site and the remote clinician is not currently implemented.

D. Information Technology Innovations

Currently, all the technology used for telemedicine delivery is provided by NMXS, as it provides a single consistent technology source across all sites and encompasses all required hardware, software, and connectivity. Providing all equipment from a single source allows cost savings and scalability with similar technical components and training required across all sites. As this type of technology continues to expand and more providers come on market, the technology used to support the application may continue to expand toward more readily available mobile phones or tablets. The ACCESS program will conduct yearly reviews of telemedicine technology providers to ensure system requirements are met at the lowest cost and burden to all stakeholders in the model.

E. Health IT Flexibility Requirements

As telemedicine providers continue to expand in the market, and different platforms such as phones and tablets become standard of care, the ACCESS model can implement the solution that provides the highest quality experience at the lowest cost. There is significant flexibility in IT solution that is used to fit the requirements. The current implementation is using the solution from NMXS as described above.

REFERENCES

1. Seabury S, Bognar K, Xu Y, Huber C, Commerford SR, Tayama D. Regional disparities in the quality of stroke care. *Am J Emerg Med.* Mar 19 2017.

2. U.S. Census Bureau, 2010 Census, Summary File 1, Table P2. http://www.census.gov/prod/cen2010/notes/errata.pdf

3. Henry J. Kaiser Family Foundation. Total number of medicare beneficiaries by state.

4. Stippler M, Smith C, McLean AR, Carlson A, Morley S, Murray-Krezan C, et al. Utility of routine follow-up head CT scanning after mild traumatic brain injury: A systematic review of the literature. Emerg Med J. 2012 Jul;29(7):528-32.

5. Center for Disease Control and Prevention. Traumatic brain injury in the United States: Emergency department visits, hospitalizations and deaths 2002-2006. . March 2010.

6. Carlson AP, Ramirez P, Kennedy G, McLean AR, Murray-Krezan C, Stippler M. Low rate of delayed deterioration requiring surgical treatment in patients transferred to a tertiary care center for mild traumatic brain injury. Neurosurg Focus. 2010 Nov;29(5):E3.

7. Kreutzer J, Akutsu H, Fahlbusch R, Buchfelder M, Nimsky C. Teleradiology in neurosurgery: Experience in 1024 cases. J Telemed Telecare. 2008;14(2):67-70.

8. Stippler, M., Yonas, H., Karlovitz, A. IHS-UNM regional teleradiology project. Albuquerque, NM: Univ. of NM Dept. of Neurosurgery; 2013.

9. Walcott BP, Coumans JV, Mian MK, Nahed BV, Kahle KT. Interfacility helicopter ambulance transport of neurosurgical patients: Observations, utilization, and outcomes from a quaternary level care hospital. PLoS One. 2011;6(10):e26216.

10. Holguin E, Stippler M, Yonas H, Boyd D. Management of acute head trauma in rural locations: University of New Mexico teleradiology initiative for mild traumatic brain injury. The IHS Provider. 2011;5:99-102.

11. Moya M, Valdez J, Yonas H, Alverson DC. The impact of a telehealth web-based solution on neurosurgery triage and consultation. Telemed J E Health. 2010 Nov;16(9):945-9.

12. Kleindorfer D, Xu Y, Moomaw CJ, Khatri P, Adeoye O, Hornung R. US geographic distribution of rt-PA utilization by hospital for acute ischemic stroke. Stroke. 2009;40:3580–3584. doi: 10.1161/ STROKEAHA.109.554626

13. Benjamin, Emelia J., et al. "Heart disease and stroke statistics-2017 update: a report from the American Heart Association." *Circulation* 135.10 (2017): e146-e603.

14. Bean JR. Neurosurgical emergency and trauma services: Legal, regulatory, and socioeconomic barriers. Clin Neurosurg. 2007;54:149-52.

15. Kaufman, Brystana G., et al. "The rising rate of rural hospital closures." *The Journal of Rural Health* 32.1 (2016): 35-43.

16. Warden, G., Griffin, R.B., Erickson, S.M., Mchugh, M., Wheatley, B., Dharsi, A.S., … & Trenum, C. (2006). Hospital-based emergency care: at the breaking point.

17. Dall TM, Storm MV, Chakrabarti R, et al. Supply and demand analysis of the current and future US neurology workforce. *Neurology.* Jul 30 2013;81(5):470-478.

18. Houkin K, Fukuhara S, Selladurai BM, Zurin AA, Ishak M, Kuroda S, et al. Telemedicine in neurosurgery using international digital telephone services between Japan and Malaysia--technical note. Neurol Med Chir (Tokyo). 1999 Oct;39(11):773,7; discussion 777-8.

19. Meyer BC, Raman R, Hemmen T, Obler R, Zivin JA, Rao R, et al. Efficacy of site-independent telemedicine in the STRokE DOC trial: a randomised, blinded, prospective study. Lancet Neurol. 2008;7(9):787–95.

20. Agrawal K, Raman R, Ernstrom K, Claycomb RJ, Meyer DM, Hemmen TM, et al. Accuracy of stroke diagnosis in telestroke-guided tissue plasminogen activator patients. J Stroke Cerebrovasc Dis. 2016;25(12):2942–6.

21. Demaerschalk BM, Bobrow BJ, Raman R, Ernstrom K, Hoxworth JM, Patel AC, et al. CT interpretation in a telestroke network: agreement among a spoke radiologist, hub vascular neurologist, and hub neuroradiologist. Stroke. 2012;43(11):3095–7.

22. Muller-Barna P, Hubert GJ, Boy S, Bogdahn U, Wiedmann S, Heuschmann PU, et al. TeleStroke units serving as a model of care in rural areas: 10-year experience of the TeleMedical project for integrative stroke care. Stroke. 2014;45(9):2739–44.

23. Audebert HJ, Wimmer ML, Hahn R, Schenkel J, Bogdahn U, Horn M, et al. Can telemedicine contribute to fulfill WHO Helsingborg declaration of specialized stroke care? Cerebrovasc Dis. 2005;20(5):362–9.

24. Audebert, Heinrich J., et al. "Telemedicine for safe and extended use of thrombolysis in stroke: the Telemedic Pilot Project for Integrative Stroke Care (TEMPiS) in Bavaria." *Stroke* 36.2 (2005): 287-291.

25. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)--a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform.* Apr 2009;42(2):377-381.

26. Steine S, Finset A, Laerum E. A new, brief questionnaire (PEQ) developed in primary health care for measuring patients' experience of interaction, emotion and consultation outcome. Fam Pract. 2001 Aug;18(4):410-8.

27. Yip MP, Chang AM, Chan J, MacKenzie AE. Development of the telemedicine satisfaction questionnaire to evaluate patient satisfaction with telemedicine: A preliminary study. J Telemed Telecare. 2003;9(1):46-50.

28. Baker, Alastair. "Crossing the quality chasm: a new health system for the 21st century." *BMJ: British Medical Journal*323.7322 (2001): 1192.

State of New Mexico
Medical Assistance Program Manual

Supplement

HUMAN SERVICES DEPARTMENT

Date: **January 3, 2019** **Number:** 19-01

To: **Medicaid Hospital Providers and Centennial Care Managed Care Organizations**

From: **Kari Armijo, Deputy Director, Medical Assistance Division**

Subject: **Reimbursement for Neurological and Neurosurgical Consultations Provided Through the ACCESS Program**

This Supplement explains the reimbursement structure and rates for neurological and neurosurgical consultations provided through telemedicine via the Access Remote Neuro Consult Experts (ACCESS) Program at the University of New Mexico (UNM). The rates are based on the cost to hospitals for consultations provided by the ACCESS Program through contract with UNM.

Neurological and neurosurgical consultations provided by the ACCESS Program are new covered services that are part of the Medicaid benefit package effective January 1, 2019. Consultations provided by the ACCESS Program are covered under both Medicaid fee-for-service (FFS) and the Centennial Care managed care program.

Background

Through the ACCESS Program, New Mexico hospitals can connect to on-call expertise in neurology and neurosurgery for telemedical consultation on conditions such as stroke, brain injury and altered mental status through real-time virtual visits with patients and doctors. The ACCESS Program empowers local hospitals to take a greater role in caring for their patients and helps them avoid unnecessary transport to other hospitals for treatment.

Payment Rates & Instructions

To ensure consistency and adequacy of payment, the Human Services Department Medical Assistance Division (HSD/MAD) has established the following billing methodology and payment rates:

- Billing for the cost of the consultation must be done by the hospital on the CMS1500/837P format through their professional component Medicaid ID number.
- Code 95999 (Unlisted Neurological or Neuromuscular Diagnostic Procedure) with modifier U1 is to be used for neurology consultations. The rate is $850, which is the cost to the hospital to pay UNM for the consultation service.

- Code 95999 with modifier U2 is to be used for neurosurgery consultations. The rate is $1,200. As above, this rate is the cost to the hospital to pay UNM for the consultation service.

This billing process and the established rates are the same for members being treated in the outpatient, emergency or inpatient setting. Note that payment under the 95999 code is only intended to cover the "per episode" payment that the hospital makes to the ACCESS Program for the remote consultation. The hospital will still bill for the Emergency Department or other outpatient/inpatient codes and services, including the telemedicine charge, and be reimbursed at their usual rates for such services. The payment for 95999 is in addition to and separate from any payment made for emergency, inpatient or outpatient services.

If the hospital does not have the ability to electronically submit the CMS 1500/837P format, FFS claims may be entered on the Medicaid Portal by setting up this capability with Conduent, the Medicaid fiscal agent. Please see: https://nmmedicaid.portal.conduent.com/static/index.htm.

If the patient has Medicare rather than Medicaid as their primary payor, then Medicare rules for billing and coverage will apply.

Provider Enrollment Information

The billing hospital must have a professional component Medicaid ID number obtained by enrolling with the Medicaid program through HSD/MAD. Payment will be made to the professional component provider of the hospital on the CMS 1500/837P billing format, as described above, and not on the UB form.

Many hospitals already have a professional component number as provider type 303. If the payment made to that existing professional component number is satisfactory for the hospital's reimbursement under the ACCESS Program, then the hospital does not need to do anything further to enroll.

If the hospital does not have a professional component number or if its professional component is an entity that is not financially connected to the hospital, then the hospital must complete a provider application for provider type 303, even if the neurological consultation episode provided by the ACCESS Program is the only service that will be billed under that number. A hospital may have more than one professional component Medicaid ID number; however, an application for a new professional component number must have a different NPI than any existing professional component or the hospital facility's NPI. When applying for a new NPI number for a professional component, one of the most likely taxonomies for the professional component number will be Non-Individual Multi-Specialty: 261QM1300X.

A provider enrollment application may be found on the New Mexico Medicaid Portal website at: https://nmmedicaid.portal.conduent.com/webportal/enrollOnline. Additional information, including contact information, may be found at https://nmmedicaid.portal.conduent.com/static/ProviderInformation.htm.

Note that individual consultants associated with the ACCESS Program will be listed as members of that practice. ACCESS Program consultants should not enroll as providers under the hospital's professional component number.

HEALTH SCIENCES
OFFICE OF THE CHANCELLOR

September 1, 2018

Physician-Focused Payment Model Technical Advisory Committee
c/o U.S. DHHS Asst. Secretary of Planning and Evaluation Office of Health Policy
200 Independence Avenue S.W.
Washington, D.C. 20201

Re: University of New Mexico Health Sciences Center Support of the
Access to Critical Cerebral Emergency Support Services (ACCESS) Payment Model

Dear Committee Members:

On behalf of the University of New Mexico Health Sciences Center we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD, Principal Investigator and Neurosurgery Chairman, and his team are submitting to the Physician-Focused Payment Model Technical Advisory Committee (PTAC) for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model combining telemedicine technology with specialty care physicians to accomplish two important goals. It improves the quality of patient care by providing expert consultations in locations previously without access. It also reduces costs through significant reduction of unnecessary patient transportations by providing decision-making and care at local hospitals. The unique model is episode-based, using a per consult fee based on specialty fair market values to provide emergent specialty care. It brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of the lack of physician education and specialist availability/support.

Unlike existing CMS episode-based payment models, the ACCESS model does not require a hospitalization, and moves a significant percentage of patients to outpatient care. This program meets MACRA Advanced APM requirements and continues to support the Triple Aim goals. The financial risk is attributed to hospitals based on their payer mix, the call center, the technology infrastructure, provider and consulting physicians.

The ACCESS patient-focused emergent care approach, employing team-based care for the neuro-emergent patient, easily translates to other forms of specialty care, which our ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides

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chancellor@hsc.unm.edu

direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level, we believe this healthcare delivery model will provide significant savings to CMS and other insurance payers. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please feel free to contact me if you have any questions.

Sincerely,

Paul B. Roth, MD, MS
Chancellor for Health Sciences
CEO, UNM Health System
Dean, UNM School of Medicine

Attachment

CONGRESS OF THE UNITED STATES

DELEGATION OFFICE

STATE OF NEW MEXICO

HART SENATE OFFICE BUILDING

WASHINGTON, D.C. 20510

(202) 224-8962

February 7th, 2019

Brenda Destro, Ph.D.
Deputy Assistant Secretary
US Department of Health & Human Services
200 Independence Avenue SW, Room 415F
Washington, DC 20201

Dear Dr. Destro:

The New Mexico Congressional Delegation writes in support of the Physician-Focused Payment Model proposal submitted by Dr. Howard Yonas of the University of New Mexico's Department of Neurosurgery for review by the Physician-Focused Payment Model Technical Advisory Committee. This proposal will allow the UNM Department of Neurosurgery's (Department) Access to Critical Cerebral Emergency Support Services (ACCESS) program to serve as a model for delivering specialized medical services to underserved areas in a cost-effective manner.

The Department's ACCESS Advanced Alternative Payment Model uses an episode-based, per-consult fee, determined by the fair market value of the specialty care provided, to deliver emergent neuromedical care to remote medical facilities via telemedicine. This model has a number of distinct advantages relative to existing payment models: It improves the quality of patient care by providing expert consultations in locations previously without access and reduces costs by preventing unnecessary patient transports to specialized healthcare facilities.

In 2013, the Department received Center for Medicare & Medicaid Services Health Care Innovation Award funding to implement the ACCESS telemedicine program in order to provide emergent neuromedical services to hospitals serving predominantly rural and low socioeconomic

status patients. The New Mexico Congressional Delegation believes the resulting program has proven successful in addressing the challenge of providing specialized neuromedical services to underserved populations in a cost-efficient manner and represents a viable model for providing specialized medical services generally to such populations.

If approved, we believe this healthcare delivery model may provide significant cost savings to the Center for Medicare & Medicaid Services while also increasing the delivery potential of physicians operating in rural communities to meaningfully improve patient outcomes.

The New Mexico Congressional Delegation proudly supports the Physician-Focused Payment Model proposal submitted by Dr. Howard Yonas of the University of New Mexico's Department of Neurosurgery and we request that you give this proposal thorough consideration within your review guidelines.

Sincerely,

Tom Udall
United States Senator

Ben Ray Luján
United States Representative

Martin Heinrich
United States Senator

Deb Haaland
United States Representative

Xochitl Torres Small
United States Representative

Gerald Champion
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August 2, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of the Gerald Champion Regional Medical Center, located in Alamogordo, NM we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians that both improves the quality of care through consultations where none were available and reducing costs through significant reduction of unnecessary transportations by providing decision making and care at local hospitals.

As a longstanding site for the ACCESS program we have seen first-hand how the model is perfect for rural and underserved hospitals. It is episode-based, using a per consult fee based on specialty fair market values to provide emergent specialty care. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of the lack of physician education and specialist availability/support.

The model incorporates a rigorous quality measurement, significant education and training along with constant surveillance that promotes the rural hospital as the Anchor institution for that community. Payments can be adjusted based upon the quality of care delivered. Unlike existing CMS episode-based payment models, the ACCESS model does not require a hospitalization, and moves a significant percentage of patients to outpatient care not to mention discharge home. This program meets MACRA Advanced APM requirements and continues to support the Triple Aim goals.

Our patient-focused emergent care approach, based on team-based care for the neuro-emergent patient, easily translates to other forms of specialty care which our ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. The savings provided just in air transport for our hospital alone is estimated to be annually a million dollars. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please contact me at 575-443-7845 if you have any questions,

Sincerely,

Jim Heckert, FACHE
CEO
Gerald Champion Regional Medical Center

ATTACHMENT B: Support Letter

July 20, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of the Guadalupe County Hospital, located in Santa Rosa, New Mexico, we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians that both improves the quality of care through consultations where none were available and reducing costs through significant reduction of unnecessary transportations by providing decision making and care at local hospitals.

As a site for the ACCESS program we have seen first-hand how the model is perfect for rural and underserved hospitals. It is episode-based, using a per consult fee based on specialty fair market values to provide emergent specialty care. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of the lack of physician education and specialist availability/support.

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Our patient-focused emergent care approach, based on team-based care for the neuro-emergent patient, easily translates to other forms of specialty care which our ACCESS and

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GUADALUPE COUNTY HOSPITAL

Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please contact me if you have any questions. Christina Campos, 575-472-3417 x1010, ccampos@gchnm.org

Sincerely,

Christina R. Campos, CEO

LEA REGIONAL
MEDICAL CENTER

5419 North Lovington Highway
P.O. Box 3000
Hobbs, New Mexico 88240
575-492-5000
www.learegionalmedical.com

July 12, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/O U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy
200 Independence Avenue S.W. Washington, D.C. 20201

Re: Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of Lea Regional Medical Center, located in Hobbs, NM we would like to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians that both improves the quality of care through consultations where none were available and reducing costs through significant reduction of unnecessary transportations by providing decision making and care at local hospitals.

As a site for the ACCESS program we have seen first-hand how the model is perfect for rural and underserved hospitals. It is episode-based, using a per consult fee based on specialty fair market values to provide emergent specialty care. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of the lack of physician education and specialist availability/support.

The model incorporates a rigorous quality measurement, significant education and training along with constant surveillance that promotes the rural hospital as the Anchor institution for that community. Payments can be adjusted based upon the quality of care delivered. Unlike existing CMS episode-based payment models, the ACCESS model does not require a hospitalization, and moves a significant percentage of patients to outpatient care. This program meets MACRA Advanced APM requirements and continues to support the Triple Aim goals.

Our patient-focused emergent care approach, based on team-based care for the neuro-emergent patient, easily translates to other forms of specialty care which our ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please contact me if you have any questions at Timothy.Thornell2@learegionalmedical.com.

Sincerely,

Tim Thornell, CEO

ATTACHMENT B: Support Letter

MIMBRES
MEMORIAL HOSPITAL
AND NURSING HOME

July 26, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W.
Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of Mimbres Memorial Hospital and Nursing Home, located in Deming, NM we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians that both improves the quality of care in our community and reduces costs by providing decision making and care at local hospitals. As a site for the ACCESS program we have seen first-hand how the model works for rural hospitals. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of no specialist availability/support.

If implemented on a national level we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Sincerely

Steve Westenhofer
Chief Executive Officer
Mimbres Memorial Hospital and Nursing Home

900 West Ash St., P.O. Box 710, Deming, New Mexico 88031
Phone (575) 546-5803, Fax (575) 543-6907

Net Medical Xpress

February 11, 2019

Physician-Focused Payment Model Technical Advisory Committee
C/O U.S. DHHS Asst. Sec. of Planning & Evaluation Office of Health Policy
200 Independence Avenue S. W.
Washington, D.C. 20201

Letter of Support

Dear Committee Members,

Our company, Net Medical Xpress Solutions, Inc., has been a supporter and technical partner for the University of New Mexico for several years. We are very proud of the program started at the University to assist emergency room physicians with vital neurological care that would otherwise be unavailable in most rural areas of the state.

The ACCESS to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) will provide a health care delivery model that combines telemedicine technology with sub-specialty care physicians that improve the quality of care and reduces costs by providing decision making and care at local hospitals.

I remember one of the first cases we did at a rural hospital in New Mexico, and we heard the patient's family say in amazement, "We saw the doctor on TV for Dad." By the support of the local physicians at rural hospitals, this program offers additional opportunities for participation in Advanced APMs.

The model developed in New Mexico certainly has application throughout the United States. In this time of limited specialty physicians, the service can save lives, eliminate costly transportation costs (in most cases), and provide local hospitals with good community relations with their populations.

Net Medical supports the program headed by Dr. Howard Yonas, Chairman of Neurosurgery and ACCESS Program Principle Investigator. Without this program, the lack of neurological care in our state would have be severely impacted.

We support the proposal PFPM and deem it to be a high priority for continued service to communities.

Sincerely,

Richard F. Govatski
Chairman and CEO

5021 Indian School Rd. NE Suite 100 - Albuquerque, New Mexico 87110 – (505) 255-1999 – (505) 255-7201 (Fax)
www.netmedical.com or www.nmxs.com – OTC: NMXS - Twitter: @netmedxpress

ATTACHMENT B: Support Letter

July 16, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of Nor-Lea Hospital District, located in Lovington, NM we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians that both improves the quality of care through consultations where none were available and reducing costs through significant reduction of unnecessary transportations by providing decision making and care at local hospitals.

As a site for the ACCESS program we have seen first-hand how the model is perfect for rural and underserved hospitals. It is episode-based, using a per consult fee based on specialty fair market values to provide emergent specialty care. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transports occur because of the lack of physician education and specialist availability/support.

The model incorporates a rigorous quality measurement, significant education and training along with constant surveillance that promotes the rural hospital as the Anchor institution for that community. Payments can be adjusted based upon the quality of care delivered. Unlike existing CMS episode-based payment models, the ACCESS model does not require a hospitalization, and moves a significant percentage of patients to outpatient care. This program meets MACRA Advanced APM requirements and continues to support the Triple Aim goals.

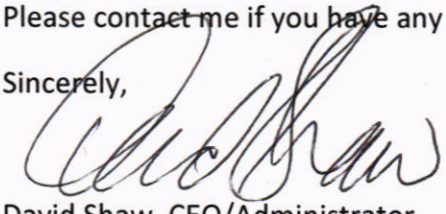
Our patient-focused emergent care approach, based on team-based care for the neuro-emergent patient, easily translates to other forms of specialty care which our ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad

range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level, we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. By providing a specialty care physician to support the physicians at rural hospitals, this program provides opportunities for participation in Advanced APMs. By enhancing the ability of rural physicians to participate in transformative delivery system reforms, we believe it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please contact me if you have any questions at 575-704-7512.

Sincerely,



David Shaw, CEO/Administrator

ATTACHMENT B: Support Letter

New Mexico State Senate

State Capitol
Santa Fe

COMMITTEES

MEMBER:
· Public Affairs
· Rules

SENATOR GERALD ORTIZ y PINO
D-Bernalillo-12

400 12th NW
Albuquerque, NM 87102

Home: (505) 243-1509
E-Mail: jortizyp@msn.com
Senate E-Mail: gerald.ortizypino@nmlegis.gov

July 24, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov

Re: Support for University of New Mexico Health Sciences Center Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

I am a state senator in New Mexico and over the past few years serving on the Legislative Health and Human Services interim committee I have learned of the benefits of the **Access to Critical Cerebral Emergency Support Services (ACCESS)** and telemedicine program. I am writing to voice my strong support for the Physician-Focused Payment Model (PFPM) proposed by the ACCESS team and principal investigator, Howard Yonas, MD, UNM's Neurosurgery Chairman.

The ACCESS PFPM proposed model combines telemedicine technology, specialty care physicians, and rural physicians to work together to improve the quality of care and timely treatment via telemedicine consultations. The neuro-emergent telemedicine consultations reduce costs by decreasing unnecessary transportations. This is done by partnering the ACCESS and telemedicine programs with the care provided at local hospitals around the state, which are thus promoted as Anchor institutions for their communities.

The PFPM proposal incorporates rigorous quality measurement; significant educational components, and surveillance components. Payments may be adjusted based upon the quality of care delivered which is different than existing CMS-based payment models. The ACCESS proposed model does not require a hospitalization, it supports patients being moved into outpatient settings, it meets the Medicare Access and CHIP Reauthorization Act (MACRA) requirements, and it supports Triple Aim goals.

I fully support this proposal as we have seen the benefits first hand in New Mexico. I'd hope that this PFPM model become implemented on a national level as it will provide better health outcomes for rural populations nationwide as well as significant savings to CMS and other payers. I can foresee that it also may lead to retaining hospitalists in rural settings where they are so desperately needed.

Sincerely,

State Senator Gerald Ortiz y Pino

SAN JUAN REGIONAL MEDICAL CENTER

801 West Maple Street • Farmington, New Mexico 87401
Telephone 505.609.2000 • www.sanjuanregional.com

August 1, 2018

Physician-Focused Payment Model Technical Advisory Committee
c/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

On behalf of San Juan Regional Medical Center located in Farmington, New Mexico, we are proud to express our strong support for the accompanying proposal for a Physician-Focused Payment Model, which Howard Yonas, MD – Principle Investigator and Neurosurgery Chairman and his team are submitting to the PTAC for review.

The Access to Critical Cerebral Emergency Support Services (ACCESS) Advanced Alternative Payment Model (APM) provides a health care delivery model that combines telemedicine technology with specialty care physicians, both of which improves the quality of care through consultations where none were available and reducing costs through significant reduction of unnecessary transportation by providing decision-making and care at local hospitals.

As a site for the ACCESS program, we have seen first-hand how the model is perfect for rural and underserved hospitals. It is episode-based, using a per consult fee based on specialty fair market value to provide emergent specialty care. The model is built on affordable, state of the art technology which brings a specialist into an emergency or intensive care room when time is of the essence and where many times unnecessary transport occurs because of the lack of physician education and specialist availability/support.

The model incorporates rigorous quality measurement, significant education and training along with constant surveillance that promotes the rural hospital as the Anchor institution for that community. Payments may be adjusted based upon the quality of care delivered. Unlike existing CMS episode-based payment models, the ACCESS model does not require hospitalization, and moves a significant percentage of patients to outpatient care. This program meets MACRA Advanced APM requirements and continues to support the Triple Aim goals.

Our patient-focused emergent care approach, based on team-based care for the neuro-emergent patient, easily translates to other forms of specialty care which our ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated. The episodes that form the basis for assessing cost also create a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities and individual providers and helps them target cost drivers and improve quality.

If implemented on a national level, we believe that this healthcare delivery model will provide significant savings to CMS and all other insurance payers. This program provides opportunities for participation in Advanced APMs by providing a specialty care physician to support the physicians at rural hospitals. We believe that by enhancing the ability of rural physicians to participate in transformative delivery system reforms, it will increase their willingness to work in rural settings where they will experience increased satisfaction in providing improved patient outcomes.

Thank you for the opportunity to submit this proposal and for your consideration of its merits. Please contact me if you have any questions. I can be reached via email at jbourgeois@sjrmc.net or by phone at 505-609-6110.

Sincerely,

Jeff Bourgeois, FACHE
President / CEO

ATTACHMENT B: Support Letter

New Mexico State Senate

State Capitol
Santa Fe

SENATOR MICHAEL PADILLA
D-Bernalillo-14

P.O. Box 67545
Albuquerque, NM 87193

Cell: (505) 977-6247
E-mail: michael.padilla@nmlegis.gov

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·Education

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·New Mexico Finance Authority Oversight Committee

ADVISORY MEMBER:
·Legislative Council
·Legislative Education Study Committee
·Mortgage Finance Authority Act Oversight Committee

DESIGNEE:
·Legislative Finance Committee

July 16, 2018

Physician-Focused Payment Model Technical Advisory Committee
C/o U.S. DHHS Asst. Sec. of Planning and Evaluation Office of Health Policy 200 Independence Avenue S.W. Washington, D.C. 20201 PTAC@hhs.gov
Letter of Support – University of New Mexico Health Sciences Center in support of the Access to Critical Cerebral Emergency Support Services (ACCESS) payment model.

Dear Committee Members,

I hope this letter finds each of you well. I am a senator in the State of New Mexico and over the past few years I have had the pleasure of learning and understanding the benefits of the Access to Critical Cerebral Emergency Support Services (ACCESS) and telemedicine program. I am writing this letter to voice my strong support for the proposed Physician-Focused Payment Model (PFPM). This PFPM is proposed by the ACCESS team and Principle Investigator: Howard Yonas, MD who is also the University of New Mexico Neurosurgery Chairman.

The ACCESS PFPM proposal provides a state of the art health care delivery model. This model combines telemedicine technology, specialty care physicians, and rural physicians so that all work together to improve the quality of care and outcomes of timely treatment through telemedicine consultations. The neuro-emergent telemedicine consultations are reducing costs through the decreasing unnecessary transportations. This is achieved through partnering with the ACCESS and telemedicine program which provides and supports decision making, treatment, and optimal care either at local hospitals or at hospitals with higher level of care.

The PFPM proposal incorporates a rigorous quality measurement, significant educational components, surveillance components, and it uniquely promotes rural hospitals as the Anchor Institutions for their communities. Payments may be adjusted based upon the quality of care delivered which is different than existing Centers for Medicare and Medicaid Services (CMS) based payment models. The ACCESS proposed model does not require a hospitalization, it supports patients being moved into outpatient settings, it meets the Medicare Access and CHIP Reauthorization Act (MACRA) requirements, and it supports Triple Aim goals.

This proposal highlights the patient-focused emergent care approach which focuses on team-based care for the neuro-emergent patient. Which may translate to other forms of specialty care which the ACCESS and Center for Telehealth/Telemedicine programs have already demonstrated (i.e., dermatology). The episodes that form the basis for assessing cost also creates a comprehensive and coherent framework for evaluating clinically meaningful performance in quality, efficiency, and value across a broad range of procedures and conditions provided in a wide range of settings. The model provides direct care support and education to all related entities, individual providers, and it helps Anchor Institutions target cost drivers and improve quality.

I fully support this proposal as we have seen the benefits first hand in New Mexico. Also, I endorse this proposal and I recommended that this PFPM proposal is implemented with high priority consideration on a national level. This PFPM proposal will provide better health outcomes for rural populations nationwide, as well as provide significant savings to CMS, and all other insurance payers. This program provides opportunities for participation in the PFPM's by providing a framework which partners specialty care physicians with the physicians at rural hospitals. Which in turn enhances the ability of rural physicians to participate in transformative delivery system reforms, which may led to retaining hospitalists in rural settings where they are so desperately needed.

Thank you for your attention, as well as for the opportunity to submit this letter of support for the ACCESS and Telemedicine Program, and for your consideration of its merits. If you have any questions about the attached proposal, please contact ACCESS Program Principle Investigator, Distinguished Professor and Chairman of Neurosurgery, Howard Yonas, MD at hyonas@salud.unm.edu, or ACCESS Program Director and Department of Neurosurgery Administrator, Colin Semper, MBA, HMA, CAAMA at csemper@salud.unm.edu or ACCESS Program Manager, Susy Salvo-Wendt at ssalvo-wendt@salud.unm.edu.

Thank you for your time. Please do not hesitate to call me if I can be of service or answer any questions. You can reach me directly at (505)977-6247.

Very Respectfully,

Michael Padilla
Senator
New Mexico

UNM ACCESS Telemedicine program hospitals

	Facility Name	City	RUCA	System	Hospital Status
	Live				
1	ALTA VISTA REGIONAL HOSPITAL	LAS VEGAS	4	Quorum	Live
2	CIBOLA GENERAL HOSPITAL	GRANTS	4	Quorum	Live
3	EASTERN NEW MEXICO MEDICAL CENTER	ROSWELL	4	CHS	Live
4	GERALD CHAMPION REGIONAL MEDICAL CENTER	ALAMOGORDO	4		Live
5	GUADALUPE COUNTY HOSPITAL	SANTA ROSA	7		Live
6	LEA REGIONAL MEDICAL CENTER	HOBBS	4	CHS	Live
7	LOS ALAMOS MEDICAL CENTER	LOS ALAMOS	4	Lifepoint	Live
8	LOVELACE MEDICAL CENTER	ALBUQUERQUE	1	Ardent	Live
9	LOVELACE WESTSIDE HOSPITAL	ALBUQUERQUE	1	Ardent	Live
10	MIMBRES MEMORIAL HOSPITAL	DEMING	4	Quorum	Live
11	MINERS' COLFAX MEDICAL CENTER	RATON	7		Live
12	NOR-LEA HOSPITAL DISTRICT	LOVINGTON	7.4		Live
13	REHOBOTH MCKINLEY CHRISTIAN HEALTH CARE SERVICES	GALLUP	4		Live
14	SAN JUAN REGIONAL MEDICAL CENTER	FARMINGTON	1		Live
15	UNION COUNTY GENERAL HOSPITAL	CLAYTON	10		Live
16	MEMORIAL MEDICAL CENTER INC	LAS CRUCES	1	Lifepoint	Live
17	ROOSEVELT GENERAL HOSPITAL	PORTALES	4		Live
	In Implementation and Contracting				
18	UNM SANDOVAL REGIONAL MEDICAL CENTER	RIO RANCHO	1		In implementation
19	HOLY CROSS HOSPITAL	TAOS	4		In implementation
20	ARTESIA GENERAL	ARTESIA	4		In contracting
21	CARLSBAD MEDICAL CENTER	CARLSBAD	4		In contracting
22	SIERRA VISTA HOSPITAL	SOCORRO	7		In contracting
23	LOVELACE ROSWELL HOSPITAL	ROSWELL	4	Ardent	In contracting
24	LOVELACE HEART HOSPITAL	ALBUQUERQUE		Ardent	In contracting
25	LOVELACE WOMEN'S HOSPITAL	ALBUQUERQUE		Ardent	In contracting
26	MESCALERO IHS HOSPITAL	MESCALERO	10.6	IHS	In contracting
27	NORTHERN NAVAJO MEDICAL CENTER	SHIPROCK	7.3	IHS	In contracting
28	GALLUP INDIAN MEDICAL CENTER	GALLUP	4	IHS	In contracting
29	ACOMA-CANONCITO-LAGUNA (ACL) HOSPITAL	ACOMA	4	IHS	In contracting
30	ZUNI COMPREHENSIVE HEALTH CENTER	ZUNI	4	IHS	In contracting
31	CROWNPOINT HEALTHCARE FACILITY	CROWNPOINT	10.5	IHS	In contracting

	RUCA 1 Category
	RUCA 4 Category
	RUCA 7 Category
	RUCA 10 Category

U. Picker Patient Experience (PPE-15) Questionnaire

Description:

The PPE-15 is a 15-item patient experience questionnaire designed for use in inpatient care settings by Jenkinson, Coulter, and Bruster (2002). It can be used for both planned and emergency inpatient settings. It is a short form version of the Picker Adult In-Patient Questionnaire, which was developed by the Picker Institute. It was developed to identify patient experiences and problems with specific health care processes that affect the quality of care in inpatient settings. It contains specific questions about whether specific processes and events occurred during the patient's care episode.

(Source: http://www.measuringimpact.org/s4-the-picker-questionnaire-ppe-15

The data presented is derived from surveys conducted by the UNM ACCESS program with 15 hospitals contracted for the period from program inception until 5/31/18. There were no additional surveys done during 6/1 through 8/31/2018.

For further information or details, contact David van der Goes, PhD at dvandergoes@unm.edu.

Question list:

1. When you had important questions to ask a doctor, did you get answers that you could understand?

2. When you had important questions to ask a nurse, did you get answers that you could understand?
3. Sometimes in a hospital, one doctor or nurse will say one thing and another will say something quite different. Did this happen to you?

4. If you had any anxieties or fears about your condition or treatment, did a doctor discuss them with you?
5. Did doctors talk in front of you as if you weren't there?
6. Did you want to be more involved in decisions made about your care and treatment?
7. Overall, did you feel you were treated with respect and dignity while you were in hospital?

8. If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?
9. Did you find someone on the hospital staff to talk to about your concerns?
10. Were you ever in pain?
Do you think the hospital staff did everything they could to help control your pain?
11. If your family or someone else close to you wanted to talk to a doctor, did they have enough opportunity to do so?
12. Did the doctors or nurses give your family or someone close to you all the information they needed to help you recover?
13. Did a member of staff explain the purpose of the medicines you were to take at home in a way you could understand?

14. Did a member of staff tell you about medication side effects to watch for when you went home?
15. Did someone tell you about danger signals regarding your illness or treatment to watch for after you went home?

V. Picker Patient Experience Survey Results

1. When you had important questions to ask a doctor, did you get answers that you could understand?			I had no need to ask	No	Yes, always	Yes, sometimes	Total
			7	16	546	61	630
			1.1%	2.5%	86.7%	9.7%	
2. When you had important questions to ask a nurse, did you get answers that you could understand?			**I had no need to ask**	**No**	**Yes, always**	**Yes, sometimes**	**Total**
			6	10	555	60	631
			1.0%	1.6%	88.0%	9.5%	
3. Sometimes in a hospital, one doctor or nurse will say one thing and another will say something quite different. Did this happen to you?				**No**	**Yes, often**	**Yes, sometimes**	**Total**
				532	37	61	630
				84.4%	5.9%	9.7%	
4. If you had any anxieties or fears about your condition or treatment, did a doctor discuss them with you?			**I didn't have any anxieties or fears**	**No**	**Yes, completely**	**Yes, to some extent**	**Total**
			56	43	475	56	630
			8.9%	6.8%	75.4%	8.9%	
5. Did doctors talk in front of you as if you weren't there?				**No**	**Yes, often**	**Yes, sometimes**	**Total**
				590	26	14	630
				93.7%	4.1%	2.2%	
6. Did you want to be more involved in decisions made about your care and treatment?				**No**	**Yes, definitely**	**Yes, to some extent**	**Total**
				438	89	101	628
				69.7%	14.2%	16.1%	
7. Overall, did you feel you were treated with respect and dignity while you were in hospital?				**No**	**Yes, always**	**Yes, sometimes**	**Total**
				27	542	58	627
				4.3%	86.4%	9.3%	
8. If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?			**I didn't have any anxieties or fears**	**No**	**Yes, completely**	**Yes, to some extent**	**Total**
			67	20	480	62	629
			10.7%	3.2%	76.3%	9.9%	
9. Did you find someone on the hospital staff to talk to about your concerns?			**I had no concerns**	**No**	**Yes, definitely**	**Yes, to some extent**	**Total**
			64	16	488	57	625
			10.2%	2.6%	78.1%	9.1%	

10. Were you ever in pain?					No	Yes	Total
					328	296	624
					52.6%	47.4%	
10b. Do you think the hospital staff did everything they could to help control your pain?				**No**	**Yes, definitely**	**Yes, to some extent**	**Total**
				19	252	24	295
				6.4%	85.4%	8.1%	
11. If your family or someone else close to you wanted to talk to a doctor, did they have enough opportunity to do so?	**I didn't want my family or friends to talk to a doctor**	**My family didn't want or need information**	**No**	**No family or friends were involved**	**Yes, definitely**	**Yes, to some extent**	**Total**
	6	18	23	10	523	47	627
	1.0%	2.9%	3.7%	1.6%	83.4%	7.5%	
12.Did the doctors or nurses give your family or someone close to you all the information they needed to help you recover?		**My family didn't want or need information**	**No**	**No family or friends were involved**	**Yes, definitely**	**Yes, to some extent**	**Total**
		29	27	10	524	38	628
		4.6%	4.3%	1.6%	83.4%	6.1%	
13. Did a member of staff explain the purpose of the medicines you were to take at home in a way you could understand?		**I didn't need an explanation**	**I had no medicines-- GO TO QUESTION 15**	**No**	**Yes, completely**	**Yes, to some extent**	**Total**
		42	167	22	382	14	627
		6.7%	26.6%	3.5%	60.9%	2.2%	
14. Did a member of staff tell you about medication side effects to watch for when you went home?			**I didn't need an explanation**	**No**	**Yes, completely**	**Yes, to some extent**	**Total**
			56	36	353	17	462
			12.1%	7.8%	76.4%	3.7%	
15. Did someone tell you about danger signals regarding your illness or treatment to watch for after you went home?				**No**	**Yes, completely**	**Yes, to some extent**	**Total**
				69	529	28	626
				11.0%	84.5%	4.5%	

ACCESS ACCESS Physician Survey

1. Did the neurology consultations meet your expectations?

- ◯ Yes, over and above
- ◯ Yes
- ◯ No
- ◯ Not applicable

If no, why? or other comments

2. Did the neurosurgery consultations meet your expectations?

- ◯ Yes, over and above
- ◯ Yes
- ◯ No
- ◯ Not applicable

If no, why? or other comments

3. How could the service be improved?

4. How often did the consulting neurologist change your treatment plan from transfer to a higher level of care to keeping the patient in the local hospital?

- ◯ Never
- ◯ Rarely
- ◯ Frequently
- ◯ Not Applicable

5. How often did the consulting neurosurgeon change your treatment plan from transfer to a higher level of care to keeping the patient in the local hospital?

- ◯ Never
- ◯ Rarely
- ◯ Frequently
- ◯ Not Applicable

6. How often did the consulting neurologist provide agreement with your care plan, empowering you to not transfer a patient?

- ◯ Never
- ◯ Rarely
- ◯ Frequently
- ◯ Not Applicable

7. How often did the consulting neurosurgeon provide agreement with your care plan, empowering you to not transfer a patient?

- ◯ Never
- ◯ Rarely
- ◯ Frequently
- ◯ Not Applicable

8. Prior to ACCESS did you have a positive or negative perception of UNM as a partner for improving health care in your community?

- ◯ Positive
- ◯ Negative
- ◯ Neutral

Comment

9. Did you experience a change in your perception of UNM since working with ACCESS?

- ◯ Yes
- ◯ No

If yes, in what way? or other comments

10. Do you plan to continue using ACCESS after the CMS grant has ended?

- ◯ Yes
- ◯ No

If no, please explain what would keep you in the ACCESS program.

11. With the support of the neuro-emergent consultative services, has there been an increase in staff comfort levels for dealing with patients who present with neurological issues?

- ◯ Yes
- ◯ No

12. Has education/training been sufficient to help support your comfort level in caring for neuro-emergent patients?

- ◯ Yes
- ◯ No

13. Would you prefer more lectures on neurological issues for your staff?

- ◯ Yes
- ◯ No

14. What topics would you like to learn more about?

15. Would you prefer video conferences based upon clinical cases?

- ◯ Yes
- ◯ No

16. Would you like the ability to request a specific case to be reviewed?

- ◯ Yes
- ◯ No

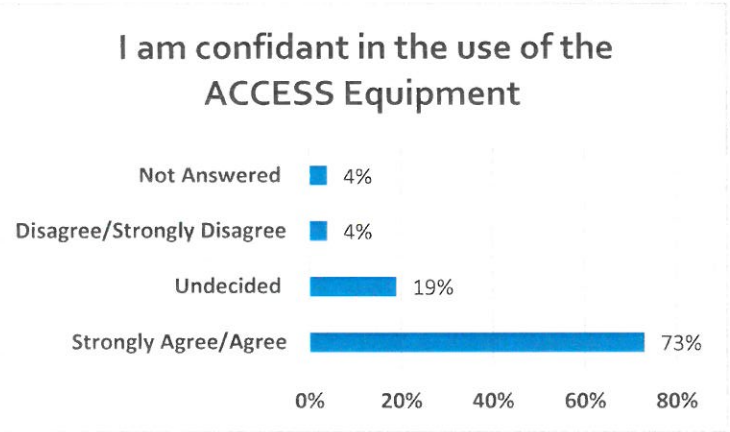
17. Stories from the Field: CMS is collecting stories that demonstrate the personal impact of HCIA interventions, including the ACCESS program. Do you, or your staff, have a related story that highlights how our program impacted participants, providers and communities? Please add yours!

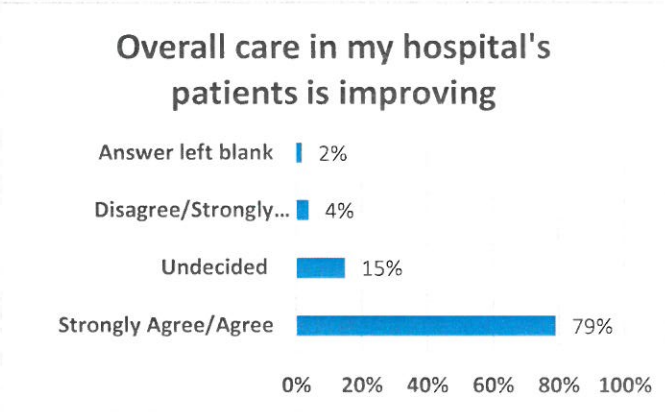
Stories should be interesting, personal and highlight:
* The value of the intervention
* Positive impacts on groups of participants or health care workers
* Difficulties overcome in the field
* Reactions of groups of patients, family members, or staff members, for example, based on information provided within satisfaction surveys or focus groups.

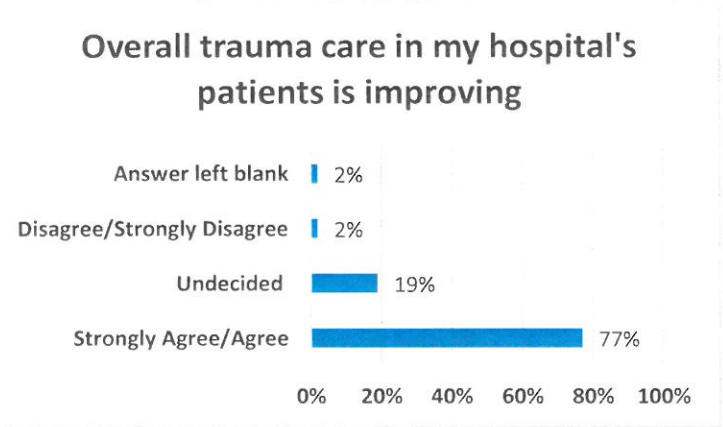
Please do not include Personally Identifiable Information (PII) or Protected Health Information (PHI). UNM ACCESS program reserves the right to edit your story, but will have you review any changes beyond spelling, punctuation, syntax or grammar.

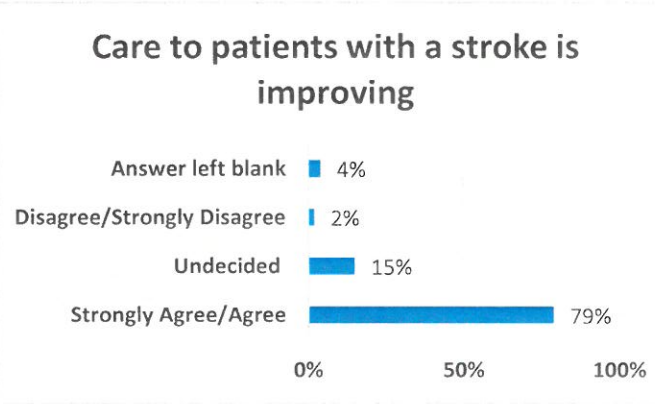
If you need more space, have multiple stories, wish to send later, or have someone else writing a story, please email stories to: ahollander@salud.unm.edu and kersmith@salud.unm.edu

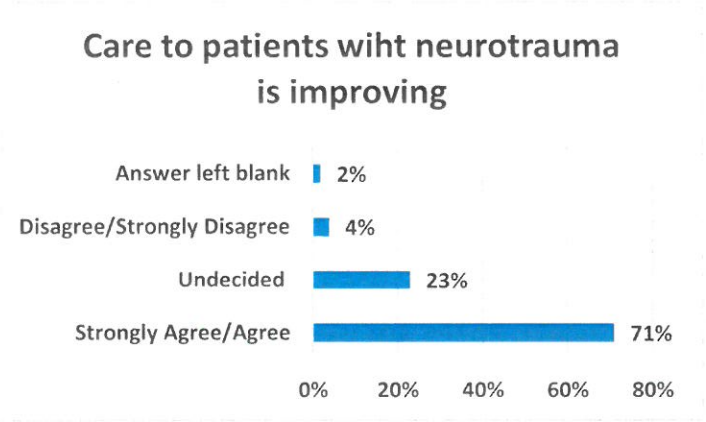
PROVIDER – PHYSICIAN QUARTERLY SURVEY CUMULATIVE RESULTS

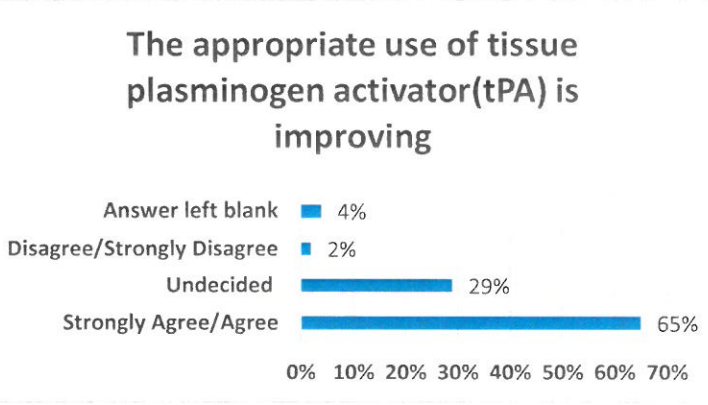






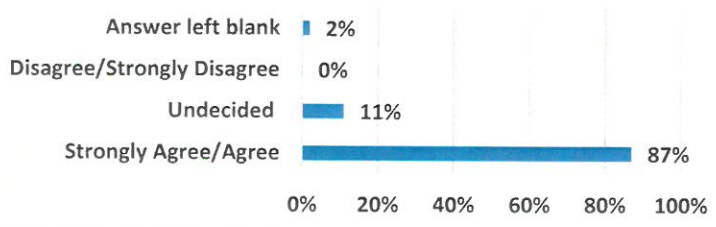




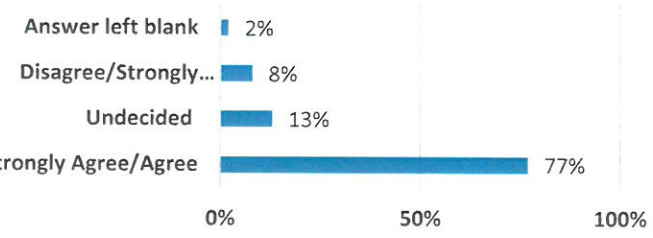


PROVIDER – PHYSICIAN QUARTERLY SURVEY CUMULATIVE RESULTS

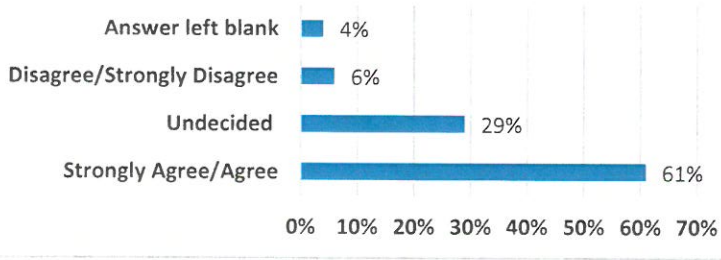
I feel confident in my care to patients admitted with stroke



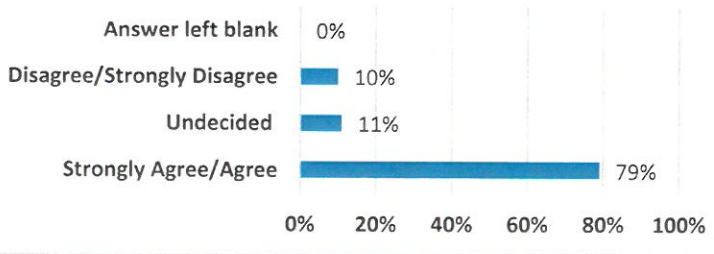
I feel confident in my care to patients admitted with mild brain injury



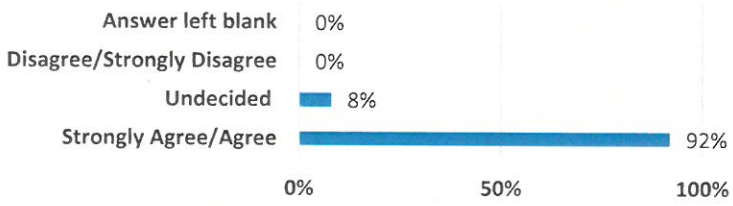
Discharge planning from the hospital is improving



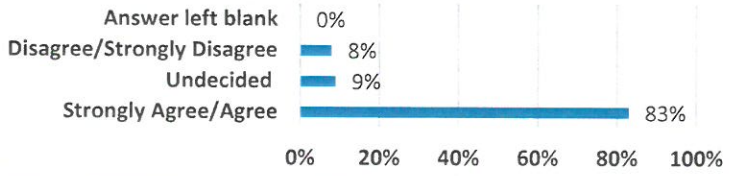
The use of telemedicine has helped me improve continuity of care



I feel confident in providing care to a patient when consulting with another physician through telemedicine

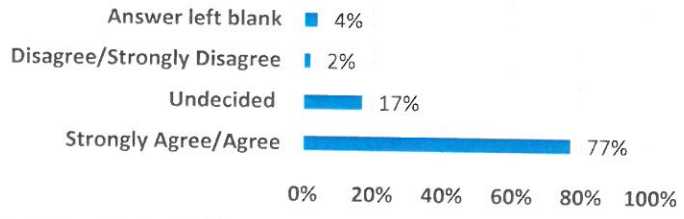


During telehealth consultation, I am able to communicate adequately with the patient and the consulting physician

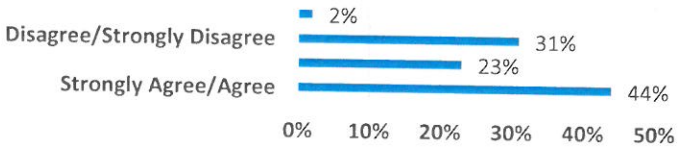


PROVIDER – PHYSICIAN QUARTERLY SURVEY CUMULATIVE RESULTS

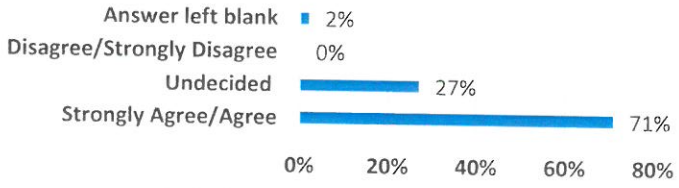
I feel patients and their family members are satisfied with the telehealth encounter



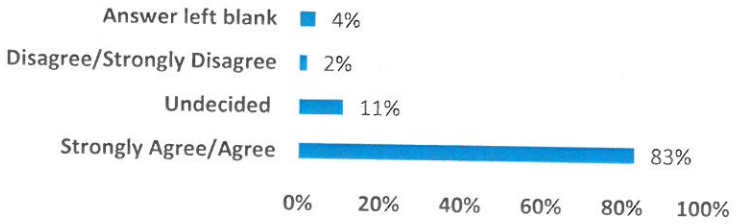
There are adequate resources in the hospital to provde care to patients with neurologic or neurosurgical conditions.



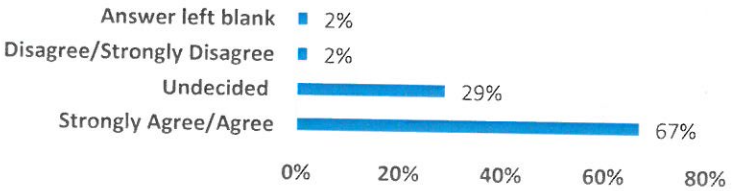
There have been changes in patterns of care for patients after implementation of the ACCESS program.



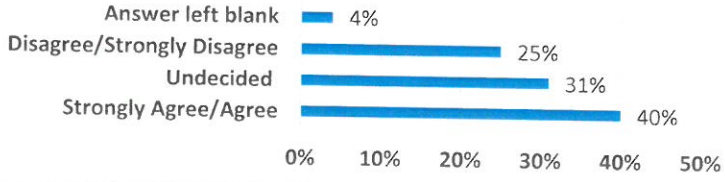
Overall, telemedicine consultation has been effective in assiting me with delivering health care to patients



There have been changes in resources/services in the hospital due to the ACCESS program.



There are adequate resources in the hospital to provide rehabe care to patient with neurologic or neurosurgical conditions (i.e., stroke...



APPENDIX C: Submission Checklist (Check this when finished)

Requirement	Checkbox	Pages
Letter of intent submitted 30 days before the proposal	x	
Name and address of the submitter (individual or organization)	x	
Name, address, phone number, and e-mail address for the primary point of contact	x	
Title Page	x	
Table of Contents	x	
Abstract	x	
If the submitter is an organization, a letter of support from the governing board or responsible officer is included.	x	
Main body of the proposal is ordered by and includes the following sections:		
Model Description		
Background and Model Overview	x	
How the model would work from the patient's perspective	x	
How the model would work from the perspective of participating eligible professionals, the patient's	x	
primary care provider, and other providers (including hospitals, post-acute care providers, etc.) who would participate in or be affected by the model		
Response to Criteria		
Scope	x	
Quality and Cost	x	
Payment Methodology	x	
Value over Volume	x	
Flexibility	x	
Ability to be Evaluated	x	
Integration and Care Coordination	x	
Patient Choice	x	
Patient Safety	x	
Health Information Technology	x	
Main body of the proposal does not exceed 25 pages and formatting requirements are met.	x	