



The mission of NurseAdvice New Mexico is to be the premier health service line in New Mexico by offering every New Mexican an opportunity to access healthcare by providing quality, cost effective and culturally sensitive services using New Mexican resources.

Our Impact

- New Mexico is the first state in the nation to create a fully integrated, statewide Health Advice Line
- **37 RNs and 4 MAs** helping New Mexicans with health care issues
- **120,000** calls per year. **70%** of New Mexicans - more than **1.4 million** - are registered in NANM's system. Satisfaction rate of **98%** maintained.
- Prevents unnecessary ER visits - 66% of callers intending to go to the ER are diverted away from the ER to a more appropriate, less costly, lower level of care
- **\$3.5-5 million annual savings** in health care costs. \$28 million estimated since inception
- **100%** Health Information Line score from National Committee for Quality Assurance (NCQA)
- NANM has received national recognition. The CDC plans to publish the results of recent site visit to NANM, and presented NANM as an innovative care delivery model to achieve better care for patients, improved health quality, and reduced healthcare costs at the national conference in April 2014.
- Improves New Mexicans health outcomes through improved health care access.
- Helps the uninsured access appropriate medical care, reducing gaps and disparities in health care services.
- Facilitates continuity of care and care coordination. NANM e-faxes call reports to PCPs to keep them informed, assists the uninsured without a medical home in finding one, and refers patients to care coordination when indicated
- Improves retention and recruitment of physicians to rural New Mexico by providing after-hours access to tele-triage services. NANM handles 95% of calls without having to page an on-call physician for physician groups contracted with NANM.
- Assists in identification of potential health threats through Syndromic Surveillance software. Provides access to health information to the public during times of health emergencies.
- NANM services the statewide immunization line through DOH partnership, making referrals and answering questions regarding flu and other vaccines.



Challenges

- **Unfunded Calls -24,000 or 20%** calls serviced by NANM currently have **no funding source**.
- **Transfers from Non-Partnered Entities** - Many unfunded calls are transferred to the line by non-partnered hospitals, medical groups and health systems.
- **Diminishing Support** – Some health plans utilize out-of-state corporate lines, others sever partnership to integrate services for their members in lieu of staying with a model that serves broader public interests.

Opportunities

- The **University of New Mexico** has stepped up to support the line, however, this is short-term and will only last through July 2016.
- **Nurse911** – NurseAdvice NM is working with 911 affiliates in New Mexico to develop and pilot solutions to the cost of unnecessary emergency transport and emergency room over crowding. This will provide nurse tele-triage as an alternative to ambulance dispatch, diverting lower level Omega calls from ER.
- **Health Risk Assessments** – NANM will offer HRA services to health systems needing those services.
- **Post Discharge Follow-up** - NANM will provide calls to patients post-discharge follow to patients. These efforts can help avoid unnecessary re-admissions that can result in health risks.



NurseAdvice New Mexico Handouts in addition to One-page factsheet:

1. NANM Cost-savings as a result of appropriate ER diversions to a lower, more appropriate level of care.
2. The Pew Charitable Trusts Article on NANM, February 2015
3. Sample of recent NANM Syndromic Surveillance report on Influenza
4. Attestation of support to Community Health Centers from NM Primary Care Association
5. Draft of CDC Case Study Analysis of NANM

Cost Savings that Result from Appropriate Nurse Advice New Mexico Emergency Room Diversions

Insurance Status/Payer Source	Number Indicating They Would Have Gone to the ER (FY14)	Number Appropriately Diverted to Lower Level of Care (FY14)	Percentage Diverted	at \$1,276 Cost Savings per Visit Diverted	at \$1,197 Cost Savings per ER Visit Diverted	Savings to entity	Savings to entity
Total I H S	93	59	63.44%	\$75,284.00	\$70,623.00	\$70,623.00	Savings to Indian Health Services, taxpayers and hospitals
Total Medicaid	2,971	2,036	68.53%	\$2,597,936.00	\$2,437,092.00		
Total Medicare	502	296	58.96%	\$377,696.00	\$354,312.00	\$2,791,404.00	Savings to taxpayers through federal and state governments
Total Insured	2,213	1,501	67.82%	\$1,915,276.00	\$1,796,697.00	\$1,796,697.00	Savings to insurance companies
Total Uninsured	953	561	58.87%	\$715,836.00	\$671,517.00	\$671,517.00	Saving to taxpayers and hospitals
Total Not known	5	4	80.00%	\$5,104.00	\$4,788.00		
Total	6,737	4,457	66.16%	\$5,687,132.00	\$5,335,029.00	\$5,335,029.00	Total savings to system

1. *Healthcare Bluebook* for Level 2 ER visit and physician fee at: https://healthcarebluebook.com/page_ProcedureDetails.aspx?id=239&dataset=md&g=Emergency+Department+Visit%2c+Level+2
2. *Healthcare Bluebook* for a Level 2 ER visit minus the cost of a Level 2 office visit for an established patient, level 2 at: https://healthcarebluebook.com/page_ProcedureDetails.aspx?id=224&dataset=MD&g=Office+Visit%2c+Established+Patient%2c+Level+2
3. According to the Agency for Healthcare Research and Quality at the US Department of Health and Human Services, the average cost of an ER visit in the United States in 2008 was \$1,265. (at: http://meps.ahrq.gov/mepsweb/data_stats/tables_compendia_hh_interactive.jsp?_SERVICE=MEPSSocket0&_PROGRAM=MEPSPGM.TC.SAS&File=HCFY2008&Table=HCFY2008%5FPLEXP%5FE&VAR1=AGE&VAR2=SEX&VAR3=RACETH5C&VAR4=INSURCOV&VAR5=POVCAT08&VAR6=MSA&VAR7=REGION&VAR8=HEALTH&VARO1=4+17+44+64&VARO2=1&VARO3=1&VARO4=1&VARO5=1&VARO6=1&VARO7=1&VARO8=1&_Debug=)

The Pew Charitable Trusts **Research & Analysis** **Stateline** New Mexico's Nurse Hotline Touted as a Model in States
<http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/2/25/new-mexicos-nurse-hotline-touted-as-model-in-states>

Stateline

New Mexico's Nurse Hotline Touted as a Model in States



A registered nurse takes a call at New Mexico's 24/7 NurseAdvice call center in Albuquerque. The U.S. Centers for Disease Control and Prevention wants other states to adopt similar call centers to assist residents during pandemics and other emergencies. (NurseAdvice New Mexico)

If your infant has a high fever or you're experiencing an unusual pain in your abdomen and you live in New Mexico, you may want to call the NurseAdvice line before you do anything else.

New Mexico is the only state with a 24/7 registered nurse call center that is free to all residents, whether insured or not. In operation since 2006, it has kept tens of thousands of New Mexicans out of emergency rooms and saved the state more than \$68 million in health care expenses.

It has provided a basic form of health care to thousands of uninsured people who have no other access to care. It also has relieved demand on doctors and hospitals in a sparsely populated state where all but a few counties have a severe shortage of health care providers.

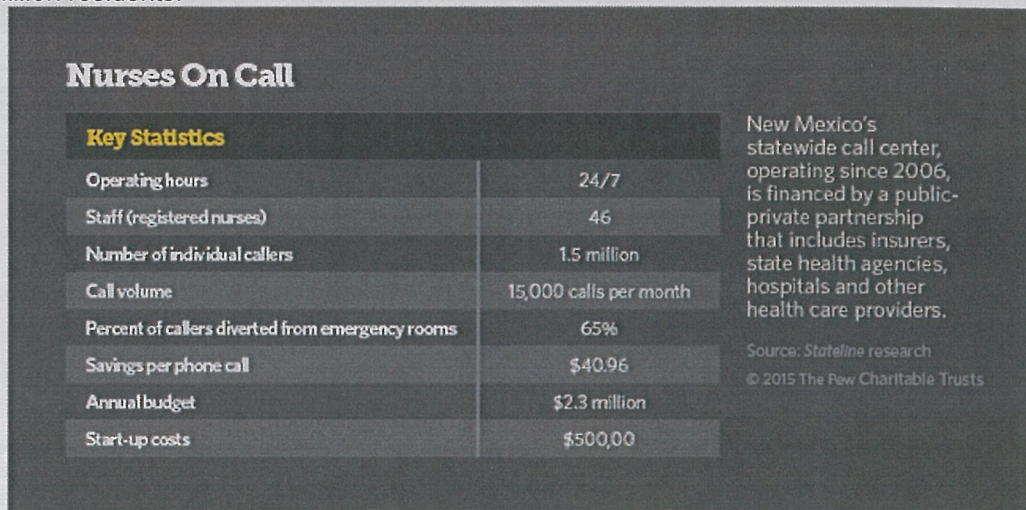
On top of that, the statewide call center has generated real-time public health data that has served as an early warning system during epidemics and natural disasters. In April, the U.S. Centers for Disease Control and Prevention (CDC) will recommend New Mexico's advice line as a national model that other states adopt during an emergency preparedness summit in Atlanta.

“We did a thorough search to find out whether anyone had an ongoing telephone triage system that could be used as a model,” said Lisa Koonin, a senior adviser in the CDC’s influenza coordination unit. “New Mexico’s NurseAdvice line is the only one we found. It really is one-of-a-kind,” she said.

Nurse advice hotlines have been around since the 1960s, when health maintenance organizations (HMOs) tried to cut costs by inviting members to call a toll-free number to report their symptoms and get a nurse’s advice before racing to the emergency room or making an appointment with a doctor.

Similar call centers proliferated in the mid-1980s when computerized guidelines and so-called tele-triage software became widely available. Medicaid programs also began including nurse hotlines as part of their benefits. But the vast majority of these advice lines have been for members and patients only.

New Mexico’s advice line is free and has been used by nearly everyone in the state old enough to make a phone call – 1.5 million residents are registered in NurseAdvice line’s database, 75 percent of the state’s roughly 2 million residents.



How It Works

Using one well-published telephone number (877-725-2552), anyone in the state can reach a registered nurse who picks up the line in less than three minutes – no telephone tree and no talking to robots. Most nurses who answer calls work part-time in local hospitals or clinics. All but a few answer phone calls from their homes.

After asking a series of questions, moving from most serious to least serious symptoms, a registered nurse uses medical algorithms and professional judgment to formulate a diagnosis. He or she then instructs the caller on what to do immediately and then often sets up an appointment with a local doctor. In a smaller number of cases, nurses tell callers to get to an emergency room as quickly as possible. “We always err on the conservative side,” said registered nurse and program director Connie Fiorenzio.

Financial support for New Mexico’s line comes from a public-private partnership that includes nearly every insurance carrier and managed care organization in the state, the state’s Medicaid and public health departments, the University of New Mexico’s Health Sciences Center, Indian Health Services, and numerous hospitals, physician practices and community health centers across the state.

The statewide reach of New Mexico NurseAdvice line, as well as its close ties with the medical community, have made it particularly effective at stemming the spread of infectious diseases, the CDC’s Koonin said. During the H1N1 flu pandemic in 2009, for example, the line was able to keep thousands of people out of crowded emergency rooms and doctor’s offices where they were at risk of either spreading or contracting the virus.

Registered nurses were able to quickly determine whether callers’ symptoms indicated they had the flu, or something else. In some cases, nurses would contact an on-call doctor to prescribe Tamiflu, saving the caller a trip to an overcrowded waiting room.

New Mexico’s advice line stemmed the surges on hospitals and doctor’s offices that other states across the country experienced. In other states, many of those who were illness-free panicked and went to the emergency

room when they experienced any possible symptoms. In contrast, New Mexico's 24/7 nurses convinced many disease-free people to stay home, and gave clear instructions on how to avoid the contagion.

"When H1N1 hit, we were *the* resource," Fiorenzio said. "I got a call from the New Mexico Department of Health on a Friday night at 9:00. We were using a (flu-specific) protocol by the next morning and we've been responding in the same way ever since – whether it's hepatitis, listeria, salmonella or a water or restaurant problem."

When wildfires start burning in the summer, Fiorenzio said, the line is able to quickly pinpoint who is experiencing breathing problems so the state can set evacuation plans.

Beyond its public health benefits, NurseAdvice New Mexico stands out for other reasons. It has a 98 percent customer approval rating and a compliance rate of 85 percent, meaning callers heed the nurses' advice and either care for themselves at home, go to a doctor or go directly to a hospital based on the nurses' orders.

Importance of Being Local

Another distinction that led the CDC to hold up New Mexico's advice line as a model is the program is state-run and staffed by locals.

"It's really important that the nurses who answer the line are familiar with the state's health care system and its unique culture and lifestyles," said former state Sen. Dede Feldman, who sponsored \$500,000 in start-up funding for the service in 2006. Feldman, a Democrat, said a major selling point was the call center would be state-based.

Lawmakers immediately saw the advantage, Feldman said. One lawmaker, she recalled, told a story about calling his own HMO advice line after he burned his eyes while peeling green chilis. He said a nurse in Nova Scotia answered the call and had no idea what a green chile was, much less how to help relieve the burning.

But New Mexico's aims in 2006 went beyond providing culturally sensitive health advice. Dr. Art Kaufman, chief of the community medicine department at the University of New Mexico, saw the project as a way to provide much needed health care advice to the state's large uninsured population. At the time, New Mexico had the second highest uninsured rate in the nation. He envisioned the advice line taking pressure off hospitals and doctors, particularly in the state's remote regions.

He also believed the line was a way to help the state's large uninsured population find what medical professionals call "medical homes," a primary care provider or pediatric practice that coordinates a patient's care. When callers say they have no doctor, the NurseAdvice line sets up an initial appointment with a local doctor.

The line also provides respite for hard-to-find doctors who are willing to practice in remote parts of the state. "It has helped them avoid burn out and stay in their jobs longer," Feldman said.

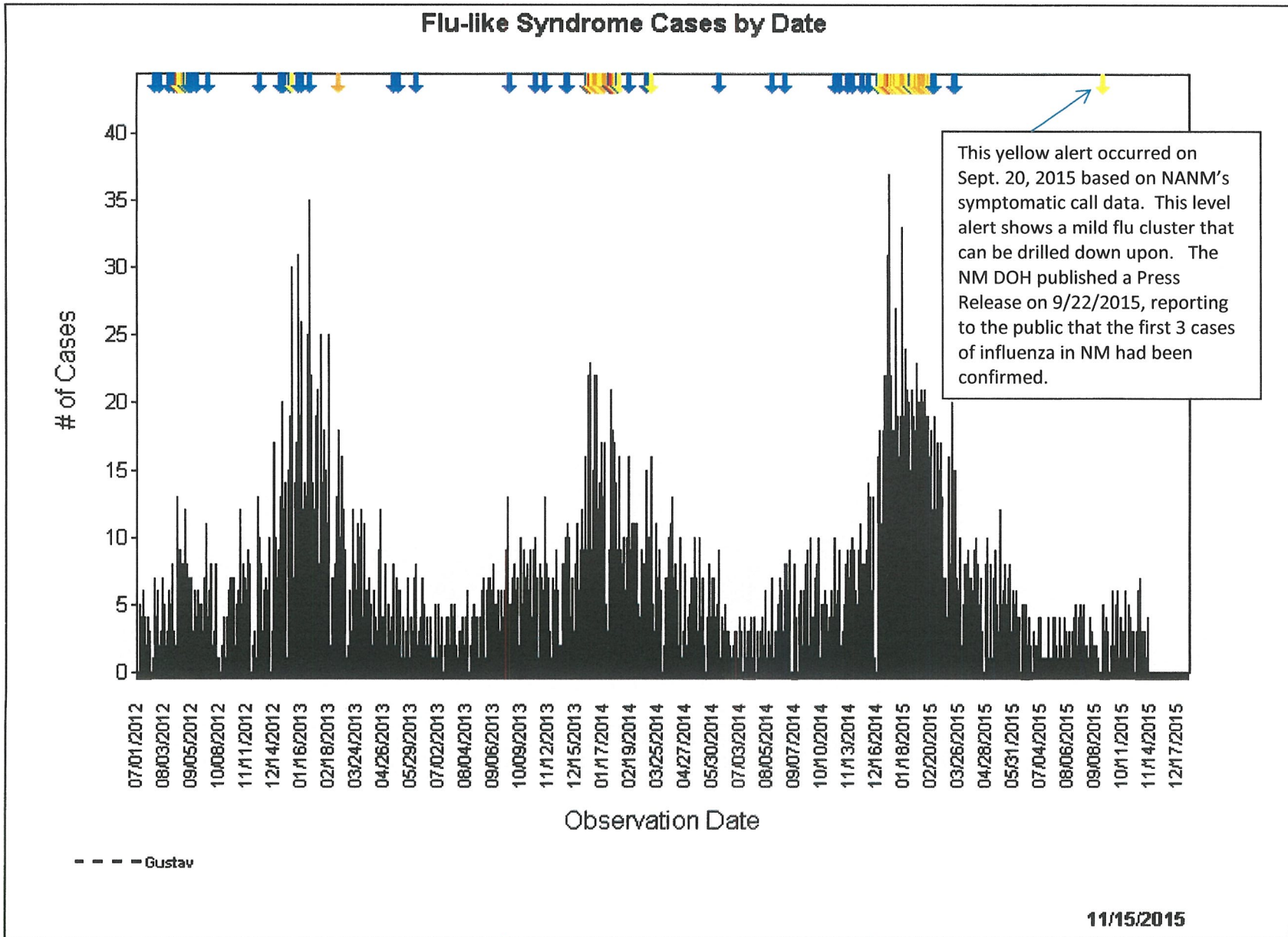
New Mexico's success at launching its first-in-the-nation, public-private advice line was due in large part to a profound need for greater access to health care. With too few doctors and too little insurance coverage, it was obvious to everyone that something had to be done, Feldman said.

In 2006, New Mexico's then-Democratic Gov. Bill Richardson tried and failed to enact a major health care reform law aimed at expanding insurance coverage. "While that was going on," Feldman said, "we snuck this one through. It was low-tech and straightforward. It would make a difference on the ground."

Dr. Bart Schmitt, a pioneer in the field of telephone triage, gives Richardson much of the credit for the NurseAdvice line. "Bill Richardson pulled together the stakeholders – big hospitals, the university and insurance companies – and he made it work in the second poorest state in the country," he said.

Schmitt said every state should have a call center for the uninsured and the insured who have no medical home. "Otherwise, who do they call? They're boxed in," he said. "They can't get advice from anybody."

Sample of NANM Syndromic Surveillance Data for Influenza, Showing How Alerts slightly precede or coincide with other Surveillance Activities



Syndromes monitored in NANM's Syndromic Surveillance Software include: Rashes like Measles and those of other communicable diseases, Gastro-intestinal syndromes that can result from contaminated food or water, West Nile, Hepatitis, Influenza, Systemic illnesses that pose a public health threat such as Plague and Listeriosos, Pulmonary illness that can result from Hanta Virus, Pertussis, RSV or environmental factors such as fires.



New Mexico
PRIMARY CARE ASSOCIATION

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June 16, 2014

To Whom It May Concern:

New Mexico Primary Care Association (NMPCA) is pleased to offer strong support for NurseAdvice New Mexico (NANM) to remain partnered with the University of New Mexico Hospitals as their nurse advice and triage line.

NMPCA and its members have worked with NANM for many years, and have seen the impact of its 24/7 services to New Mexicans from all counties in our state, regardless of their insurance status. As a unique public-private collaborative model, the value of having in-state nurses available and capable of accessing local resources for callers is invaluable.

Many of our Community Health Centers utilize NANM for their after-hours health center call line, which not only assists the centers in achieving compliance with Patient Centered Medical Home standards, but provides their clinicians with relief from the burden of excessive night and weekend call. This benefit cannot be underestimated, particularly in rural areas, where it assists health centers in provider recruitment and retention, in many of the designated Health Professional Underserved Areas throughout our state. The health centers are unanimous in their praise of NANM for the high quality culturally competent services rendered to their patients after hours. The triage nurses' strong knowledge of New Mexico people, customs, and culture and their long track record of excellence will serve the UNMH and its patients well.

I have had the opportunity to see NANM grow over the years, and they are well positioned to continue to provide University patients with a level of service that would be difficult for an out-of-state vendor to match. Thank you for your consideration.

Sincerely,

David Roddy
Executive Director

INTRODUCTION

Purpose of the Study:

Public Health Management Corporation (PHMC) has been engaged as a partner on the CDC-led Flu on Call™ project since 2012. Flu on Call™ is an initiative that is examining the feasibility of utilizing nurse triage lines as a resource in the event of a severe pandemic. There are several nationwide partners in this effort including ASTHO and NACCHO. Part of the project related to PHMC is examining policy issues around the use of nurses for providing triage and prescription services. An additional part of the project related to PHMC is investigating existing nurse triage lines to gather additional information on operations, key partnerships, funding, etc. After conducting an exhaustive search for state-based NTLs in the U.S., PHMC and CDC researchers identified NurseAdvice New Mexico (NANM), based in Albuquerque, New Mexico, as the only currently functioning statewide NTL, operated as a result of both public and private collaboration. NurseAdvice New Mexico, therefore, presented as a viable nurse triage line for analysis.

NurseAdvice New Mexico (NANM) is a statewide telephone triage line based in Albuquerque, New Mexico. NANM was conceptualized in 2001 by a community board of safety net providers in order to address issues related to access to care and misuse of emergency rooms. In addition, New Mexico is a frontier state where provider shortage is a critical need. At its inception, NANM had key, timely support from staff at University of New Mexico; New Mexico's Department of Health, the state senate and governor and several local health plans. Having these "champions" in place was a key factor of the foundation of NANM.

NANM began operations on June 1, 2006 with start-up funding from New Mexico's Department of Health. It remains in operation today at New Mexico's Primary Care Association. NANM is a 501 (c) 3 non-profit organization and receives funding from New Mexico Department of Health and 28 additional partner organizations. It is governed by a Board of Directors and currently has an Executive Director and 48 staff members.

Registered Nurses staff call lines 24 hours a day, 7 days/week, 365 days per year. Protocols developed by RelayCare (formerly McKesson) are utilized for call guidance. Approximately 15,000 calls are handled during one month. 90% of calls received are captured in a software system with 1.4 million New Mexicans registered in the NANM system. NANM currently serves 70% of the population in New Mexico including vulnerable populations and the uninsured.

In addition to daily operations, NANM performs services related to public health emergency response, Syndromic Surveillance, healthcare information and serves as a key partner with New Mexico's Department of Health immunization program. During the 2009/2010 H1N1 response, NANM was a critical resource to New Mexicans.

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While NANM has completed some cost savings analysis, it would like to explore opportunities to expand this work to better quantify the value of NANM. All qualitative analysis of the triage line demonstrates a positive impact to healthcare entities and the community at large.

METHODS

*Case studies can be a useful method for focusing on a specific issue or example to explore that issue/example in detail. Case study methodology was chosen for this project because case studies provide valuable information about “why” and “how” a phenomenon may have occurred, and in this case, why and how NurseAdvice New Mexico (NANM) was established and sustained; and allow for exploration of these questions in a real-world context (Yin, *Case Study: Research Design and Methods*, 2014; Creswell, 2006). As case studies rely on triangulation of data from multiple data collection activities to examine a case, PHMC research staff gathered and analyzed primary and secondary data from a variety of sources; PHMC staff:*

- *conducted qualitative key informant interviews with NANM leadership, staff and other stakeholders;*
- *conducted a site visit to NANM;*
- *analyzed U.S. Census and New Mexico Department of Health datasets describing the population of New Mexico; and*
- *reviewed a variety of documents from NANM, including reports and proposals describing its operation since start-up funding began in November 2005.*

RESULTS

- **Conceptualization:** *Conceptualization of NANM began in 2001 with a community board of safety net providers. The Community Board was comprised of several private and public healthcare entities including local health plans, social services groups (Catholic Charities, Peanut Butter and Jelly, etc.), University of New Mexico (Health Services Center), New Mexico Department of Health, New Mexico Primary Care Association (representing all Federally Qualified and Community Health Centers in New Mexico) and the hospital association in New Mexico. The group met with the purpose of addressing issues related to access to care and inappropriate use of emergency rooms. The group was also focused on providing care to the uninsured. New Mexico is a large, rural, frontier state with social, economic and language challenges. Additionally, emergency rooms were often on divert status as a result of people utilizing them for primary care needs. In New Mexico, at the time there was no 24/7 local resource for healthcare. While there were several nurse advice lines available to insured New Mexico residents, they were staffed by nurses in other parts of the country who did not have critical knowledge about the healthcare systems in New Mexico. Unique to New Mexico is significant provider shortage and one key goal with the development of NANM was to address this by providing relief to the provider community and improve retention. NANM also wanted to provide assistance during public health emergencies in order to ensure that the public had access to consistent, accurate information.*

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Key partners in the conceptualization of NANM, in addition to the community board, included personnel from the University of New Mexico- especially, Dr. Arthur Kaufman - Governor Bill Richardson, Senator Dede Feldman, Michelle Lujan-Grisham (Secretary of the Department of Health), Barbara Hickok (Chief Nurse, Public Health Division), ~~and~~ Bob DeFelice (CEO of First Choice Community Healthcare Group), and Dr. Dale Anderson (Presbyterian Healthcare Services). During NANM's conceptualization phase, there were several planning meetings held to discuss operationalizing the line; securing partners; and locating sustainability funding.

“...it was a synergy of multiple factors that came together at the same time. They had the political climate and Governor Bill Richardson was in at the time. Healthcare was a focus. Senator Feldman had heard about the efforts of the community board and embraced the concept of a nurse advice line provided for New Mexicans by New Mexican nurses. She had held some focus groups throughout the state and interviewed some people about their experiences with nurse advice lines, people that were insured and had access to nurse advice lines at the time. And the one message that came through to her was that people out of state were not familiar enough with our healthcare climate, with our healthcare conditions in the state, and it would be better if local nurses were available for New Mexicans.” Connie Fiorenzio, Executive Director, NANM

Start-Up: *Start-up funding for NANM came from legislation written by Senator Dede Feldman. An RFP was then issued through New Mexico Department of Health with specific deliverables including a 6 month timeframe for making NANM fully operational by June 1, 2006. Other deliverables included the development of an IT infrastructure and setting policies and procedures for NANM. These funds were designated only for the start-up phase of NANM. During the time that the Community Board was responsible for securing sustainability funding, the New Mexico Primary Care Association offered space to house NANM and the University of New Mexico maintained the human resources and payroll functions of NANM. This was a significant task, as the line had been advertised to the community by July 1, 2006 and was actively receiving calls.*

Oversight of NANM was provided initially by the community board which evolved into a Board of Directors. Cheryl Lopez, founding Executive Director, and Connie Fiorenzio, then Nurse Operations Manager, maintained chief responsibility for the operation of NANM and were the primary liaisons with the Board of Directors.

NurseAdvice New Mexico Operations

Current functioning: *As described above, NANM began operations on June 1, 2006 with start-up funding from New Mexico's Department of Health. It remains in operation today at New Mexico's Primary Care Association. NANM is a 501 (c)3 non-profit corporation and receives funding from New Mexico Department of Health and 28 additional partner organizations. It is governed by a Board of Directors and currently has an Executive Director and 48 staff members.*

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system with 1.4 million New Mexicans registered in the NANM system. NANM currently serves 70% of the population in New Mexico including vulnerable populations and the uninsured.

To date, over 1.4 million New Mexicans, representing 70 percent of the state's population are registered in the NANM system and have access to services. NANM links patients with a medical home and helps them navigate the health care system, and by utilizing New Mexican nurses, NANM provides culturally appropriate information and keeps health care dollars in New Mexico rather than sending those funds to an out-of-state service.

➤ **Partners:**

There are currently 29 partners for NANM representing pediatric and adult groups, FQHCs, local health plans, hospitals, public entities and tribal groups.

Partners include:

1. New Mexico Health Connections- a new Cooperative Health Plan model created as part of the ACA, has contracted with NANM since their operational implementation January 1, 2014.
2. UNM Health Plan- a fairly new self-funded health plan recently implemented by the University of New Mexico for employees
3. United Health Community Plan, Blue Cross Blue Shield of NM and Molina HealthCare pay for the calls serviced by NANM for their Medicaid Centennial Care members.
4. It is important to note that health plan support of NANM has diminished over the last several year, which is substantial. Whereas 2 of the state's largest health plans used to partner with NANM- Lovelace Health Plan and Presbyterian Health Plan – Lovelace closed in 2014, and Presbyterian severed partnership in September 2015 to implement their own line in order to provide a more system-integrated model for their membership, in lieu of remaining with a line that serves a broader public health interest
5. After Hours Private Pediatric Group in Albuquerque Bernalillo County
6. Crawley Private Pediatric Practice in Las Cruces
7. El Centro Family Health - a Federally Qualified Community Health Center (FQHC) in Northeastern New Mexico
8. First Choice Community Health Care – A FQHC Center with several clinics in Albuquerque and the Greater Albuquerque surrounding area.
9. First Nations Community Healthsource – a FQHC Center (FQHC) in Albuquerque
10. Gila Regional Medical Center in Silver City, NM – NANM handles symptomatic calls to their Emergency Department.
11. Hidalgo Medical Services in the southwestern portion of the State, including Silver City, Lordsburg and Deming – also a FQHC group
12. Isleta Pueblo, a tribal entity.
13. The Albuquerque Service Unit of Indian Health Services (IHS) contracts, covering multiple providers.
14. La Casa Family Health Care Centers in the southeastern portion of the State, including Roswell, Clovis, Portales, Melrose and Hondo - a FQHC group
15. La Clinica del Pueblo de Rio Arriba- also a FQHC in northern NM

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16. *Las Clinicas del Norte – also a FQHC group in northern NM*
17. *Las Vegas Children & Youth and the Alta Vista Regional Medical Center medical group in Las Vegas, NM (pediatric and adult providers).*
18. *Mora Valley Community Health Service – also a FQHC in Mora NM,*
19. *Presbyterian Medical Services (PMS) a FQHC group with multiple clinics throughout New Mexico, particularly in rural and frontier areas.*
20. *Presbyterian Pediatric Medical Group, in Albuquerque, Belen, Espanola, Los Lunas, Rio Rancho and Clovis NM (a group of over 100 pediatric and family practice providers, including pediatric specialists such as endocrinology.*
21. *Rehoboth-McKinley Pediatrics in Gallup, NM*
22. *Santa Fe Pediatric Associates in Santa Fe, NM*
23. *Upplegger Pediatrics in Albuquerque, NM*
24. *Santa Fe Indian Health Service, covering several clinics with multiple providers.*
25. *The New Mexico Department of Health Immunization Program has contracted with NANM since the fall of 2006, to handle statewide flu vaccine inquiries. In 2008, this contract was expanded to handle all vaccine calls with a dedicated Statewide Immunization Line.*
26. *The New Mexico Department of Health has contracted with NANM since 2008 for service provision to the uninsured and the under-insured.*
27. *Taos Clinic for Children & Youth in Taos, NM*
28. *Union County General Hospital in Clayton, NM – NANM handles all of their calls from patients to their Emergency Department.*
29. *University Hospital in Albuquerque (includes day time calls from patients calling their primary care clinics, and after-hour clinic and emergency department calls, and the specialty clinic at the UNM Cancer Center).*
30. *Medicare Medication Navigation: sponsored through the local Medical Review Association/Medicare PRO [dba HealthInsight New Mexico], this program provides coordinated availability to Medicare beneficiaries for assistance with medication-related questions and problems; NANM functions as the first-line responders to these questions, with access to the clinical pharmacists at the NM Poison & Drug Information Center for questions outside of the NANM scope*
31. *Project ECHO: this is an intensive case management program, grant funded through the University of New Mexico, that provides intensive primary care case management to patients with high level medical and social needs and/or who have a history of high ER utilization; NANM functions as the first-line responders to these callers, with easy access to the patients' PCP for more intense care coordination needs.*
32. *San Juan Regional Medical Center in the Four Corners area of Northwestern NM contracts with NANM to provide nurseline services to their community.*
33. *Several additional IHS Service Unit have recently partnered with NANM, including the Taos-Picuris, Jicarilla, and Crownpoint Service Units.*

Partners are defined as entities that contract with NANM to take calls for their patients and/or their members. Each partner receives a monthly report from NANM.

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➤ **Funding:**

Funding for NANM comes from partnered entities as identified above. Department of Health funds are considered sustainable funds with 4-year funding cycles. These funds help to defray the costs of calls from the uninsured. Funding received from health plans are one to two year contracts with evergreen clauses that automatically renew.

The top three costs for operating NANM are 1) staff salaries and benefits, 2) maintenance contracts for software, and 3) insurance- both malpractice and cyber liability insurance.

- *"The biggest initial funders of NANM were the Medicaid Managed Care Organizations who were partially mandated by the New Mexico Department of Human Services to use the new in-state line instead of outsourcing their lines (unless they already ran their own, national line). After several months of operation, the two Managed Care Organizations who had joined realized a considerable cost saving from the in-state line and decided to contract with NANM for their commercially insured patients as well. Contract earnings from the combination of Medicaid and commercially insured patients enabled NANM to better serve uninsured and reservation-based callers."*

Dr. Arthur Kaufman

- **Audience:** *Ultimately the audience for NANM is the entire state of New Mexico, although most immediately, NANM's goal is to reach patients of current partnered entities. One other key targets are the uninsured population and subpopulations that reside in rural areas throughout the state, those that live in poverty, have limited education, are undocumented and/or are faced with particular ethnic, cultural, or linguistic barriers. Given New Mexico's physical placement in the United States (the southern part of the state borders Mexico), there are many undocumented adults with children who are US Citizens. Given the complexity of this situation and the number of people within New Mexico who are categorized in this way, NANM is a critical resource to this group. One other unique audience for NANM is people who live on reservations. There is no triage option or 24/7 care for these groups and often their caregivers direct people to NANM. It is noteworthy that there is an additional benefit to have local nurses answering calls who understand the reservation system. Significant statewide marketing is planned to take place when contract funding is secured to provide services to all New Mexicans.*

➤ **Services provided:**

- *Professional health advice and triage services via telephone, 365 days per year, 24 hours a day, 7 days a week. At the time of the site visit, all calls were being answered by Registered Nurses through a live answer or voice message system, with an average wait time of less than 60 seconds. Plans were in place at the time of the site visit to add Medical Assistants to the call queue in order to reduce callers' average wait time. Callers have the option to leave a message if wait time exceeds 60 seconds. Nurses return voice mail messages within 5 minutes of receipt 85% of the time. Nurses return email inquiries within 24 hours of receipt. In providing this service, NANM does not operate under standing orders and to date, no prescriptions have been provided. Calls received by NANM are varied with the top reasons being: vomiting, abdominal pain, chest pain, flu, and questions related to recent motherhood. As triage calls are received, call logs are created and patient information is captured via software. E-fax reports are sent to primary care*

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facilities respectively. NANM conducts random patient satisfaction survey calls to determine if advice provided was followed. In addition, follow up calls are part of a subset of the protocols, and are also encouraged if a nurse has a concern about a patient. NANM uses Relay New Mexico in place of a TTY line (recently discontinued because of lack of use), as well as real-time 3-way language interpretation services.

“For all of our partnered entities, I think one of the key things is that as long as we have a valid fax number for the primary care provider, they get an eFax of the triage call report. So for the health plans, for the physician groups that we partner with, any call that we take for their patients, they get a copy of the call report so they know the care advice that was given, they know the disposition that was recommended. For instance, if we recommended they be seen by their primary care provider in three days, when the primary care person gets in in the morning, they've got an eFax waiting at their fax machine that says your patient called, we recommended they follow up with you within three days, so anticipate a phone call. And a lot of the offices that we work with will use those call reports if they don't hear from that patient, they'll reach out. So it facilitates primary care coordination that way.” Laura Valdez (Nurse Manager).

- *Health information and assistance with information on immunizations- New Mexico's Department of Health has contracted with NANM to handle calls related to immunizations- NANM maintains a separate 800 line that is dedicated to this service. Currently, NANM is developing a program related to immunizations for pertussis in adults.*
- *Assistance during public health emergencies- During the 2009/2010 H1N1 pandemic, there was a special MOU with the public health department which expanded funding for NANM during this time. DOH was able to refer the public to NANM during the pandemic surges and together with the Immunization Line manned by NANM staff, NANM provided critical services to New Mexicans during the pandemic. As a result of very high call volume, Medical Reserve Corps volunteers were utilized during this time. These volunteers were provided with just-in-time training. Staff from NANM were satisfied with services of Medical Reserve Corps volunteers and would use this resource in the future if needed. NANM is also part of the Health Alert Network, and so is provided with announcements of all actual as well as potential public health dangers, from influenza, food-borne issues, and environmental threats such as fires, floods, etc; when indicated during these events, the NM DOH also publishes and refers the public to NANM for information and/or advice.*
- *Through the New Mexico Department of Health, NANM provides Syndromic Surveillance monitoring. Through the use of specialized software, NANM delivers ongoing, real-time analysis and “mining” of data to search for certain combinations of signs and symptoms in New Mexico. When the occurrence of certain signs and symptoms show an increase above what is expected, a timely warning is provided that can assist with appropriate prevention and control measures.*
- *NANM maintains a listing of all county 911 dispatch numbers throughout the state, so that when callers cannot safely call 911 themselves, NANM nurses can provide assistance. NANM also coordinates with the Statewide 911 Affiliate Group. In addition, NANM maintains a close relationship and can conduct “warm transfers” to the Health Crisis Line, local Poison Control Center, Medicaid Case Management, health plan care coordination, New Mexico's 3-1-1 line and Healthcare for the Homeless.*

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Language Interpretation Services: Though NANM initially offered a separate TTY line for the hearing impaired, use of that line declined substantially due to the popularity of RelayNM, and so NANM transitioned to utilization of Relay NM in late 2013. Multi-lingual translation services are available 24/7 for callers with interpretation needs via a three-way call set up by the NANM RN. These services are provided through a contract maintained with Pacific Interpreter, and virtually every language is covered – including Navajo.

- *Health Education services are provided utilizing a variety of libraries contained within the RelayCare Care Enhance Call Center software, which contains information on over 1,200 Health Education topics; approved health related websites are also used for topics not included in the libraries.*

➤ **Staffing:**

- *In total, 48 Registered Nurses are employed by NANM. Each of these nurses has an active license to practice in the state of New Mexico. Nurses who are hired must have a minimum of 5 years of direct clinical patient care- preferably, varied because calls received are varied.*
- *Fifty percent (50%) of the nurses are categorized as “pointage” nurses- they work a minimum of 20 hours per week and have benefits. The remainder are PRN nurses who work approximately 8-10 hours per week. At maximum capacity, the NANM call center, in the Primary Care Association, houses 10 nurses. Half of the nurses employed work remotely and are expected to rotate through the call center periodically in order to maintain contact with their peers.*
- *Recruitment for staff is typically done via newspaper. Word of mouth is also a good source for staff recruitment. Two staff nurses were interviewed for the case study analysis and respectively, they were employed by NANM for 5 and 8 years. Both indicated that they liked the scheduling flexibility and the ability to do the work of nursing without the physical labor of nursing.*
- *NANM used guidance from Relay Care to develop staffing ratios. For maximum efficiency, seasoned tele-triage nurses can take 6 calls per hour with an average of 10 minutes per call. NANM conducts an annual analysis to ensure that this is effective.*
- *NANM utilizes an access database for credentialing. Credentials are tracked with license numbers from the start of employment to the time employment is terminated.*
- *Performance evaluation is conducted monthly to ensure compliance with standards, metric adherence, and customer service expectations. All NANM calls are recorded and reviews are conducted monthly by the management team (nursing supervisors and manager). The team reviews a random sample of the recorded calls for each nurse, using an Evaluation Tool designed specifically for this purpose. A review is conducted of at least 5 calls per month on every nurse and feedback is given monthly.*

➤ **Training:**

- *Nurse training for NANM is intensive. In total, training for nurses takes approximately 4 weeks to complete. Training includes one week of didactic instruction, including a software*

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demonstration and the purpose and structure of NANM. The 2nd week of training includes listening in on calls with a double headset. There are 15-18 practice scenarios completed and by the end of the 2nd week of training, nurses in training are starting to take calls with the preceptor helping them to navigate through the system. This continues during the 3rd week of training. During the 4th week of training, the goal is to have nurses in training taking calls with a “buddy” available to help answer questions and be available for assistance.

➤ **Protocols utilized:**

- NANM utilizes medical management tele-triage software provided by Relay Health (formerly McKesson) Care Enhance Solutions. This software utilizes 450 evidenced-based adult and pediatric protocols (50% adult and 50% pediatric) that are accessed by RNs to provide symptom management and advice. In addition, the software includes a health information library as well as a drug library. Relay Health goes through a rigorous process of reviewing and updating their guidelines. When updated guidelines are received by NANM, they go through an additional review with the Clinical Review Committee which is comprised of physicians within partnered entities. If enhancements or amendments are recommended, NANM edits the guidelines that are in the software. Moreover, as healthcare topics evolve, guidelines are developed and reviewed (i.e. H1N1, BP oil spill, etc.).

General dynamics specific to NurseAdvice New Mexico

➤ **Qualities unique to New Mexico:**

- New Mexico is a large, rural state with many areas classified as frontier.
- In the state of New Mexico, there are significant access to care issues, as 30 of the 33 counties are designated Healthcare Professional Shortage areas or Medically Underserved Communities.
- Because of its location in the country, there are significant numbers of undocumented immigrants. In addition, there exists the dynamic that children of adults who are undocumented, are US Citizens.

From NANM's 2013 Department of Health report:

“The state of New Mexico has the third highest rate of uninsured in the United States (21%), ranks 43rd in per capita income and over 40 percent of the state's population lives in a primary care Health Professional Shortage Area (HPSA). These challenges are exacerbated by New Mexico's rural nature, including its large geographic size (the 5th largest state in the nation), sparsely populated rural counties, and diverse populations and cultures. The highest health inequities are found in subpopulations that reside in rural areas throughout the state, those that live in poverty or are uninsured, have limited education, and/or are faced with particular ethnic, cultural, or linguistic barriers.”

➤ **Perceived benefits:**

- NANM leadership was asked about the benefits they perceived regarding the triage line. Questions centered around benefits to the community, providers, public health entities, New Mexicans, etc. There is quantifiable data on caller satisfaction, which has been

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maintained between 94-98% since start-up. While NANM would like to assess provider satisfaction more robustly, there are indicators overall that prove confidence in the services that NANM provides: significant referrals to the line from physician groups; after hours direction to the line from healthcare entities; health plan members calling NANM for information after a call is made to their own national triage line; strong relationships with public health and use of NANM's services during public health emergencies and for immunization resources; low call abandonment rate; increased funding from New Mexico's Department of Health; strong relationships with community based agencies (911, New Mexico's crisis line, etc.); and continued growth in the number of people registered with the line.

- *In NANM's most recent funding proposal to the Department of Health, NANM indicates the following: "One of the major benefits of NANM is that it prevents unnecessary emergency room visits; nearly 70 percent of callers who report that they would have gone to the ER are diverted to a more appropriate, less costly, lower level of care. NANM saves an estimated \$3.5 million annually in health care costs and has saved an estimated \$19 million since the program's inception.*
- *NANM improves health outcomes through improved health care access. NANM also improves the retention and recruitment of physicians to rural New Mexico by providing after-hours access to health triage services. For physician groups & clinics using the service for after-hours coverage, NANM is able to handle 95% of calls without having to page an on-call physician."*
- **Challenges:**
 - *Limited hospital support for NANM: in addition to the University of New Mexico, there is one small hospital in the northern part of the state, one small hospital in the southern part of the state, and one mid-sized hospital in the northwestern part of the state who contract for services with NANM. There are approximately 28 other hospitals who don't partner with NANM, yet many of them refer or transfer callers to the NANM line, contributing to a sizeable number of unreimbursed calls each month (800 or more)..*
 - *Limited county participation: New Mexico is the poorest per capita state in the United States. Available funds/resources- in particular, indigent funds are very limited and restricted to particular uses.*
 - *Mis-promotion of the line: non-contracted resources advertise NANM as a resource. Protocol for NANM is to address any/all calls that are "urgent or emergent," however, others who call the line who cannot receive services are often unclear about NANM's private, 501(c) 3 status.*
 - *Limited staffing resources: NANM has limited funding available and competing for staff resources, especially regarding salaries, with hospitals and large organizations and health plans is challenging.*
 - *Sharing electronic medical records: when a caller calls into NANM, a call record is created. However, NANM reports it would be beneficial to have some medical information from NANM partnered entities. This would have the potential benefit of simplifying calls for patients.*

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1- Discussion

➤ **Quality, Monitoring and Data Collection:**

- *NANM has implemented a Quality Management Program to monitor operations and to ensure the provision of high quality clinical care and service to its contracted customers and its patients. The Quality Management Program is based on quality improvement principles, adheres to industry standards (such as NCQA and URAC). This is accomplished by: 1. Identifying the scope of care and service provided. 2. Systematically monitoring adherence to the evidence-based clinical protocols and guidelines. 3. Systematically monitoring service metrics. 4. Measuring patient satisfaction with the services provided. 5. Resolving any identified quality issues. 6. Pursuing opportunities to improve the care and service provided.*
- *To quantify the impact of the NANM program on consumers, five areas are assessed: patient satisfaction, ER Reduction rate for those who reported they would have gone to the emergency room had they not been able to contact NANM, cost savings obtainable to the health care systems of New Mexico, applying the cost-savings model developed in the research study funded by the Office of Border Health, and physician recruitment and retention facilitated by providing after-hours relief to New Mexican Primary Care Providers.*
- *NANM maintains an electronic medical record for each caller, using the Care Enhance Call Center Module from RelayCare. This contains information on allergies to medication, chronic conditions and major medical problems and can be accessed each time a patient calls in. This record also documents who is their primary care provider (PCP), so the PCP can get a copy of the call report.*
- *NANM provides monthly reports to each provider partner that contains information about the number of calls, demographic characteristics of callers and disposition of the calls. Overall, 26 to 30% of clinical encounters by NANM staff recommend home care, which is the most common disposition. Other dispositions include visits to urgent care or the emergency department. Providers indicate that these monthly reports are important in continuing to document the usefulness of the triage line to their patients, as well as assessing cost savings such as emergency room diversions.*

➤ **Return on Investment:**

- *The original plan for NANM was to monitor the ER diversion rate for people who would have gone to the emergency room as compared to the triage that was provided. This question is part of the random patient satisfaction surveying that is done post NANM encounter.*
- *In 2008, the Division of Border Health in Las Cruces, NM, funded a study in a targeted region in Southern New Mexico to develop a cost savings model. There were approximately 100 people in the sample who were contacted 3-4 days after they received services from NANM and asked what their original intention was as compared to the recommendation of NANM. Overall, the savings indicated was \$41.00 per triage encounter completed.*
- *Completing focused, evaluative work as it relates to Return on Investment is a key future goal for NANM. While there is much quality monitoring and assessment done, there are not sufficient staffing resources to complete this work. Students from University of New Mexico's research team and health economists have been helpful but are limited with what they can accomplish.*

➤ ***Future plans/goals:***

- 1. Given changes in Medicaid requirements, NANM will be implementing the use of Certified Medical Assistant Screeners to answer calls. Screeners will not assess or deliver advice to callers, but will take calls initially and funnel them to the nurses to provide clinical services. While calls received within NANM have a low abandonment rate, the use of Screeners will reduce call wait time as well as increase the call to answer rate.*
- 2. NANM would like to secure resources to better evaluate Return on Investment, Provider Satisfaction and the impact of Health Education. There is much data that is captured for the purposes of monthly reporting and having a clear analysis of this data, may help to better illustrate of value of NANM.*
- 3. NANM aims to secure funding/contracts to be able to market NANM to the entire state of New Mexico. While currently, NANM serves roughly 70% of the state, the goal is to have the resources to be able to provide services to all New Mexicans.*

2- Conclusion

- 1. Planning for the start of a triage line and making the line operational should be in close proximity to one another. In terms of NANM, there was the benefit of having support from the New Mexico Primary Care Association and in particular, the University of New Mexico. However, until all the partners were fully engaged with funding attached to them, there was significant debt accrued. This debt was settled, but in the interim, there existed a large challenge.*
- 2. In starting a line like NANM, it is critical to have “champions” in key positions. The roles and relationships between Dr. Arthur Kaufman, Senator Dede Feldman, Governor Bill Richardson, etc. were key driving forces with the establishment of NANM. In potentially replicating this type of triage line, it is important to identify similar supporters with mutual goals.*
- 3. It is critical to have a Medical Director who is committed and engaged. Since 2006, NANM has had four Medical Directors- two of the four are Dr. Arthur Kaufman. Other Medical Directors were supportive of NANM, however, contact with the triage line was limited most often by competing professional priorities. Conversely, there has been low turnover with other key positions- Board members, Directors, etc. and this has been a key success for NANM.*
- 4. While NANM collects significant data on calls received, locating resources to better document the impact of the triage line on health outcomes and to measure return on investment would be a valuable resource to a nurse triage line. This documentation might include surveys of triage line users to assess outcomes, appropriate use of medical services, as well as surveys of providers to assess their perception of impact on their patients.*

3- Recommendations

Based on interviews conducted and a review of documentation provided, NurseAdvice New Mexico is a successful, nurse-run triage line in the state of New Mexico. To date, NurseAdvice New Mexico is the only NTL in the U.S. that is for state residents regardless of health insurance status,

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and operated as a result of multiple private and public partners, 24-hours a day, 7 days a week, 365 days a year. The results of this case study demonstrate that having local nurses who understand the culture and needs of New Mexico residents is one of the main and unique strengths of the NTL. NANM is highly valued in the state of New Mexico, provides a vital service increasing access to health care among communities with difficulty accessing health care, and can play an important role for both routine and preventive care as well as during public health emergencies. Although NANM was established within a fortuitous synergy of enablers, including champions, politically supportive climate, adequate funding and supportive resources, passionate and competent leadership, and understanding of the value of nurses in the healthcare system, each of these enablers are achievable for states interested in replicating NANM's successful NTL model. In this way, capturing detailed information on NANM is a benefit to the larger Flu on Call™ project team.

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