



# PUBLIC REPORTING OF OUTCOMES

The University of New Mexico  
Comprehensive Cancer Center

2016 ANNUAL REPORT



University of New Mexico  
Comprehensive Cancer Center

# A Message from our Director & CEO



As the Official Cancer Center of the state of New Mexico, The University of New Mexico Comprehensive Cancer Center is deeply committed to serving all the people of our state who battle cancer. Our world-class team of physicians, nurses, pharmacists, patient navigators and supportive care specialists work closely with our outstanding research scientists to bring our patients the most advanced cancer diagnosis and treatment available. And they don't have to leave home or the support of their family and friends.

As part of our mission to provide the unique specialized and essential cancer care all New Mexicans deserve, we sought and earned Comprehensive designation from the National Cancer Institute. We are one of only 47 NCI Comprehensive-designated cancer centers in the country and the only NCI designated cancer center in New Mexico. Our 125 board-certified oncology physicians, 130 research scientists and over 500-person staff are dedicated to providing you with the most advanced treatment and finest support from the moment you begin your care.

Because of our NCI designation, we have access to nationwide clinical trials that offer our patients the most advanced cancer treatments. We and other NCI centers develop these new therapies. You should discuss your eligibility for clinical trials with your team of physicians, to get the most cutting-edge cancer treatment available to you. In addition, we offer the Total Cancer Care® protocol at our site to bring you a lifetime of the most advanced care. Through this large clinical trial, you will have the opportunity to have your cancer tissues genetically sequenced, to help cancer research and to perhaps be matched to the most promising anticancer therapy available in the future.

We realize that cancer affects every aspect of life and that cancer patients and their loved ones have very specific needs. That's why we have developed a wide range of programs to address cancer treatment and to support our patients' total well-being. Our Patient and Family Support Services include counseling, nutrition guidance, patient education, social work and an array of support groups. We add new programs regularly.

This annual report describes our cancer center and the accomplishments we've achieved over the past year. We also highlight the improvements we'll focus on in the coming year.

Thank you for your interest in the UNM Comprehensive Cancer Center.

Cheryl L. Willman, MD  
The Maurice and Marguerite Liberman Distinguished Chair in Cancer Research  
Distinguished Professor of Pathology and Medicine, UNM School of Medicine  
Director & CEO, University of New Mexico Comprehensive Cancer Center.



Cheryl L. Willman, MD

## THE BEST CANCER CARE IN NEW MEXICO

The UNM Comprehensive Cancer Center treats about 60 percent of adults and virtually all the children in New Mexico diagnosed with cancer from every county in the state in more than 135,000 clinic visits each year. A few facts about our innovative treatment, research and clinical trials:



Among the **top 3%** of cancer Centers in the U.S., right here in New Mexico  
Only Comprehensive Cancer Center **within 500 Miles**



**Only facility** in NM offering chemotherapy, radiation therapy, cancer surgery, genetic cancer assessment, clinical trials, and supportive care **under one roof**



The UNM Comprehensive Cancer Center serves more than **11,300 New Mexicans** each year and provides more than **3,900 chemotherapy infusions** every month



**First to Join a National Databank** a founding member of ORION, an innovative partnership between top cancer centers to share information that will help search for cures and bring personalized care to New Mexicans



**175 Available Clinical Trials** our clinical trials include studies to prevent, screen, diagnose and treat cancer. And the New Mexico Cancer Care Alliance offers access to clinical trials to all New Mexicans, in their own communities



**Working in teams**, 125+ doctors, medical assistants, nurses and 500+ staff **fight 11 specific types of cancer**

# Our Mission and Goals

## Cancer Care

*To provide and deliver the highest quality, state of the art, comprehensive cancer diagnosis and treatment for all New Mexicans.* At UNMCCC, multidisciplinary teams of cancer physicians and surgeons work together with nurses, pharmacists, and staff to develop the most effective treatment plan for each of our patients.



The UNM Cancer Center Auditorium

## Cancer Research

*To conduct outstanding cancer research in our laboratories, clinics, and communities* focused on discovering the causes and cures for cancer, particularly those cancers that disproportionately affect the people of New Mexico, and to translate our discoveries into more effective means to prevent, diagnose, and treat cancer. At UNMCCC, scientific teams are focused on discovering and overcoming the genetic, environmental, social, and behavioral factors that contribute to the distinct patterns of cancer incidence, mortality, and disparities in New Mexicans.

## Community Outreach

*To develop and expand partnerships* with New Mexico's communities statewide and American Indian Nations to deliver community-based education, screening, and prevention programs.

## Cancer Clinical Trials

*To provide access for all New Mexicans* to the newest and most effective cancer treatments and prevention agents in cancer clinical trials at the UNMCCC and statewide through the NM Cancer Care Alliance.

## Education and Training

*To educate, train, and mentor the next generation* of cancer physicians, scientists, nurses, pharmacists, and healthcare professionals to assure that New Mexico and the nation have a highly qualified healthcare workforce.

## Economic Development

*To enhance economic development* through scientific discoveries, inventions, and the formation of new ventures

# About the UNM Cancer Program

## A Celebrated History

The New Mexico State Legislature founded The University of New Mexico Comprehensive Cancer Center in 1971 as New Mexico's first cancer program. The center was named the Official Cancer Center of New Mexico by the State Legislature in 2003. In 2005, we earned the prestigious National Cancer Institute Designation and joined the network of the nation's premier cancer centers. Last year, we earned the even more elite NCI Comprehensive Designation, which only the top three percent of cancer centers attain. Partnerships with Sandia National Laboratories, Los Alamos National Laboratory, Lovelace Respiratory Research Institute and New Mexico State University have fueled New Mexico's economic development and biotechnology growth.

## A Supportive Community

Visionary leaders foresaw the need for greatly increased clinical space called for action. University of New Mexico leaders and UNM Regents, the Governor and the State Legislature worked tirelessly to secure funding for this facility. Increased state taxes on cigarettes took effect in 2003, providing \$23.4 million for the new building. In August of that year, the State Legislature approved \$30 million in tax-exempt bonds to finance the first phase of construction. With additional support from the UNM Board of Regents and UNM Hospital, the vision became a reality. Thanks to the voters in the 2008 general election, the UNM Cancer Center received another \$17 million. On August 31, 2009, the first patients were seen in this \$100 million, state-of-the-art, five-story, 206,000 square-foot UNM Cancer Treatment and Clinical Research Facility.

## Dedicated Multidisciplinary Teams

The UNM Cancer Center is home to New Mexico's largest and most experienced team of cancer experts, with board-certified oncology physicians who represent every cancer specialty. Each year, we diagnose and treat more than 10,000 patients from every county in New Mexico and across the region. UNM Cancer Center scientists, supported by about \$60 million annually, conduct cutting-edge cancer research at the nearby Cancer Research Facility and collaborate with experts around world to bring the very latest advances in cancer prevention, diagnosis and treatment to New Mexico.

The order in which patients get their care matters. The sequence of treatment can help patients greatly to overcome cancer and get back to their lives. That's why our providers work as a team to create a treatment plan just for each patient.

Our multidisciplinary teams pool the expertise of our providers and the many other healthcare professionals who work closely with them. The teams include: medical oncologists, radiation oncologists, surgical oncologists, oncology radiologists, oncology pathologists, oncology nurses and oncology pharmacists. Our teams also include other providers to round out patient



care and to support each patient's family. The teams work with: cancer genetic counselors, a nutritionist, oncology social workers, a chaplain and patient navigators.

Our teams create a treatment plan tailored to each patient — focusing on that person's needs, honoring his or her wishes, providing the right treatment at the right time — that will give that person the best chance for overcoming cancer

## An Expansive Vision

The UNM Cancer Center serves as a hub for a Statewide Cancer Care Network. World-class care and research flow through this center to collaborative clinical programs in the state. Clinical trials, which offer the most effective cancer treatments, reach everyone in the state through a National Cancer Institute Community Oncology Research Program grant and a partnership with the New Mexico Cancer Care Alliance. Outreach programs provide vital culturally sensitive cancer education to at-risk populations across our uniquely diverse, vast and beautiful the state.

# The Cancer Committee

## 2016 Cancer Committee

The Cancer Committee has authority and responsibility for all cancer care at UNM Hospitals. The following table shows the Committee's members and each person's role

| Name                         | Role  |
|------------------------------|---|
| Richard Lauer, MD            | Cancer Committee Chair  |
| Sandi Peacock, RN            | Clinic Operations Manager   |
| Janet Abernathy, RN          | Quality Improvement Coordinator   |
| Steven Eberhardt, MD         | Diagnostic Radiologist  |
| Nancy Joste, MD              | Pathologist   |
| Bridget Fahy, MD             | Surgeon (includes general surgeon and surgical specialist(s) involved in cancer care)   |
| Melanie Royce, MD            | Medical Oncologist  |
| Thomas Schroeder, MD         | Radiation Oncologist (if all radiation oncology services are provided by referral and program's medical staff does not include a radiation oncologist, a radiation oncologist is recommended to be part of the committee but not required.) |
| Bridget Fahy, MD             | Cancer Liaison Physician  |
| Richard Lauer, MD            | Cancer Program Administrator  |
| Sandi Peacock, RN            | Oncology Nurse  |
| Jill Schulke, LCSW           | Social worker or case manager   |
| Auvergne Taylor Holly        | Certified Tumor Registrar   |
| Gale Craft                   | Certified Tumor Registrar   |
| Esme Finlay, MD              | Palliative care professional (if services are provided on-site)   |
| Lori Ballinger, MS, CGC, LGC | Genetics professional (if services are provided on-site)  |
| Amy Tarnower, MD             | Cancer Registry Quality Coordinator   |
| Jill Schulke, LCSW           | Community Outreach Coordinator  |
| Terri Stewart                | Clinical Research Representative or Coordinator   |
| Anjanette Cureton, PsyD      | Psychosocial Services Coordinator   |
| Carolyn Muller, MD           | Specialty physician   |
| Ernastine Trujillo, RD       | Registered Dietitian Nutritionist or nutrition services representative  |



| Name                    | Role  |
|-------------------------|---|
| Scott Roach, RPh        | Pharmacist  |
| Lisa Anselmo, RPh       | Pharmacist  |
| Skip Chase-Murphy       | Pastoral care representative  |
| Michelle Tatlock        | Pastoral care representative  |
| Anjanette Cureton, PsyD | A psychiatric or mental health professional trained in the psychosocial aspects of oncology |
| Eileen Bilynsky         | American Cancer Society representative  |
| Carmen Olguin           | American Cancer Society representative  |
| Tanya Robins            | Pediatric Hospice   |

# Prevention Programs

## The Breast and Cervical Cancer Early Detection Program (BCC)

The BCC Program is provided at the University of New Mexico Health Sciences Center through both screening and diagnostic sites.

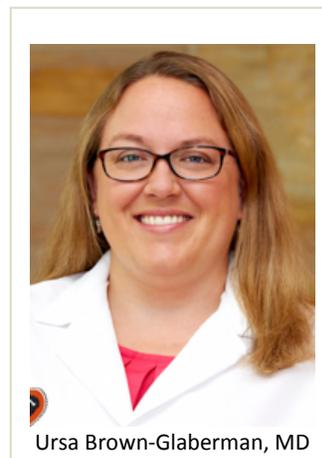
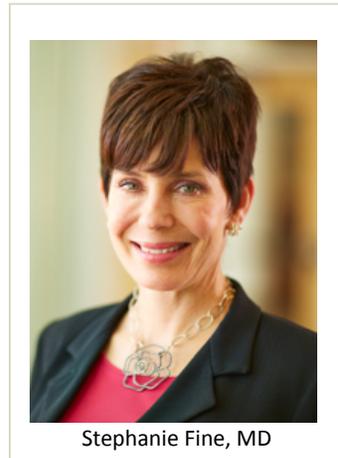
The M&FP Clinics provide annual well woman examinations to women age 30 and over, which can include clinical breast examinations and pap smears, as needed, based on current medical guidelines. OSIS provides screening mammograms to women age 40 and over based on current guidelines. Numbers of women served 2016 are captured below.

| M&FP Clinics   | 2016 |
|--|------|
| Number of Normal Annual Exams                              | 74   |
| Number of Abnormal Annual Exams                            | 24   |
| Abnormal CBE (Breast mass, Nipple Discharge, Skin Changes) | 11   |
| Abnormal Pap/HPV   | 14*  |
| Patients lost to follow-up                                 | 0    |

\*1 patient had both breast & cervical abnormalities

## The LOVE Study

**Breast cancer screening among medically underserved women in New Mexico: Comparing outcomes and Lowering recall rates with digital breast tomosynthesis (3D mammography) Versus full-field digital (2D) mammography.**

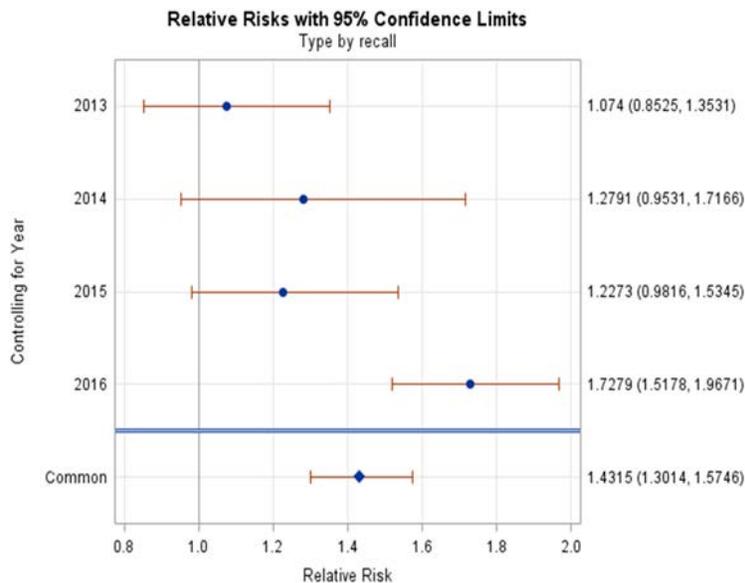


Digital breast tomosynthesis (DBT), or 3D-mammography, is a 3-dimensional transformation of the more commonly used 2-dimensional (2D) full-field digital mammography. This modality has the potential to improve breast imaging by providing a series of images through the breast, reducing tissue overlap and assisting in the discrimination between normal tissue structures and malignancy. This, in theory, may reduce the “recall rate”, a triggering event whereby screening detects a questionable finding that requires additional visits for diagnosis, and potentially, biopsy.

New Mexico’s high level of poverty, frequent presence of a language barrier, and geographical access issues create an environment that discourages frequent medical encounters. We initiated a study to review whether 3D mammography might favorably impact our unique population by reducing the number of visits associated with screening mammography while preserving cancer detection.

The study has 3 components:

- 1) overview of 3D vs 2D mammography using data gleaned from the de-identified PENRAD system,
- 2) further interrogation of a subset of medically-underserved women whose 3D mammograms were paid for with the aid of a State appropriation fund, and
- 3) an interview component examining belief systems associated with 3D mammography



Our initial PENRAD-derived data revealed equivalent cancer detection rates between the 2 modalities, 5 cancers per 1000 screening mammograms read. The recall rate, however, was significantly lower in the 3D group, 11.1% (2D) vs. 8.4% (3D), a difference accentuated by a year-to-year breakdown of data. A trend in the reduction of recalls was seen through the study time period 2013-2016, such that by 2016, recall rates were reduced by 27% in the tomosynthesis group,  $p=.0001$ .

In conclusion, the first round of data supports the positive impact of 3D mammography within our State. The remaining two components of our study are still in the collection and analysis phase.

# Accountability and Quality Improvement Measures

## Breast Metrics

| Metric   | UNM CCC |       | Required Performance | Action Plan           |
|--|---------|-------|----------------------|-----------------------|
|  | 2013    | 2014  |                      |                       |
| (NQF #219) Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.<br><br>(Accountability)   | 92.3%   | 92.5% | 90%                  | No action plan needed |
| (NQF #0220) Tamoxifen or third generation aromatase inhibitor is recommended or administered within 1 year (365 days) of diagnosis for women with AJCC T1cNoMo, or stage IB - III hormone receptor positive breast cancer.<br><br>(Accountability) | 91%     | 92.9% | 90%                  | No action plan needed |
| Radiation therapy is recommended or administered following any mastectomy within 1 year (365 days) of diagnosis of breast cancer for women with $\geq 4$ positive regional lymph nodes.<br><br>(Accountability)                                    | 90%     | 85.7% | 80%                  | No action plan needed |
| Image or palpation-guided needle biopsy to the primary site is performed to establish diagnosis of breast cancer.<br><br>(Quality Improvement)   | 88.1%   | 93.6% | 80%                  | No action plan needed |

## Colon Metrics

| Metric  | UNM CCC |       | Required Performance | Action Plan           |
|---|---------|-------|----------------------|-----------------------|
|   | 2013    | 2014  |                      |                       |
| Adjuvant chemotherapy is recommended, or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC stage III (lymph node positive) colon cancer<br><br>(Accountability) | 68.8%   | 57.1% | Not Applicable       | No action plan needed |
| (NQF #0225) At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.<br><br>(Quality Improvement)  | 87.5%   | 100%  | 85%                  | No action plan needed |

## Gastric Metric

| Metric   | UNM CCC |      | Required Performance | Action Plan  |
|--|---------|------|----------------------|--|
|  | 2013    | 2014 |                      |  |
| At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer.<br><br>(Quality Improvement) | 25%     | 100% | 80%                  | All pathologist have been educated on standards; and now use multiple pass dissect-AID to enhance visualization of lymph nodes 100% in 2014. |



## Lung Metrics

| Metric   | UNM CCC |      | Required Performance | Action Plan           |
|--|---------|------|----------------------|-----------------------|
|  | 2013    | 2014 |                      |                       |
| Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months postoperatively, or it is recommended for surgically resected cases with pathologic, lymph node-positive (pN1) and (pN2) NSCLC.<br><br>(Quality Improvement) | 100%    | 100% | 85%                  | No action plan needed |
| Surgery is not the first course of treatment for cN2, Mo lung cases<br><br>(Quality Improvement)   | 100%    | 100% | 85%                  | No action plan needed |

## Rectum Metric

| Metric   | UNM CCC |      | Required Performance | Action Plan           |
|--|---------|------|----------------------|-----------------------|
|  | 2013    | 2014 |                      |                       |
| Preoperative chemo and radiation are administered for clinical AJCC T3No, T4No, or Stage III; or Postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1-2No with pathologic AJCC T3No, T4No, or Stage III; or treatment is recommended; for patients under the age of 80 receiving resection for rectal cancer.<br><br>(Quality Improvement) | 92.3%   | 100% | 85%                  | No action plan needed |

## Telephones Can Bring Cancer Genetic Counseling to Rural Women

Ever since Angelina Jolie used cancer genetic counseling and testing to learn about her risk for hereditary breast and ovarian cancer, many other women have chosen to do the same. But for women in rural communities, traveling to meet in person with cancer genetic counselors can be time-consuming and expensive. Now, a new study shows that getting cancer genetic counseling over the phone can be just as good as getting the same counseling in person. The work, led by Anita Kinney, PhD, RN, at The University of New Mexico Comprehensive Cancer Center, was published in the *Journal of Clinical Oncology*.



Anita Kinney, PhD, RN

All the women who took part in the study were at increased risk for hereditary breast or ovarian cancer. The researchers divided the women into two groups. One group traveled to meet in person with a cancer genetic counselor and the other received counseling over the telephone. Both groups of women received teaching materials and letters about their risk in the mail. With the women's permission, letters about their risk and how to manage it were mailed to their doctors.

One year after their counseling, the study assessed how the women felt: their anxiety and cancer-related distress, and how much control and how informed they felt about their risk and medical recommendations. It also tracked how many women went on to get genetic testing. Both groups benefited similarly from genetic counseling.

"This study provides important evidence that telephone counseling is an effective alternative to in-person counseling," says Kinney. "It can help to make cancer genetic services more widely accessible, which is an important consideration in rural states like New Mexico. We hope that our study's results will help increase health insurance coverage of telephone counseling so that more cancer patients and their family members can benefit from potentially lifesaving cancer risk information."



## An Intra-Departmental Comparison of Patient Image Registrations, 2015 to 2016

### Purpose

The purpose of this practice quality improvement (PQI) project was to evaluate departmental performance in patient image registration, specifically to determine whether a difference in image fusion results were seen between various radiation oncology members. The goal was to determine if there were any treatment sites in which a high variance of image registration indicated that some additional training and/or education was needed.

### Introduction

Image registration is a practice conducted by radiation oncologists, therapists, dosimetrists, physicists and radiation therapists in our department. It is an important aspect of radiotherapy treatments as it is routinely implemented to aid in target delineation in treatment planning or it is used to help verify a patient's treatment position right before treatment occurs. It is estimated that 70% of our patients include image registration in some aspect of their treatment process.

Treatment planning systems provide various tools for performing image registrations. Typical options include matching DICOM coordinates, manual selection of the same anatomical points on both imaging sets, manual translation and rotation and various "automatic" algorithms that look at matching similar pixel patterns and gradients (Ulin, et al. 2010). Although benchmarks have been developed for fusions of certain anatomical regions, the importance of a tumor's anatomical location is unique for each patient, thus the success of an image registration is usually a subjective judgement by the individual performing the registration. Erroneous treatments have varying consequences and have been shown to occur most frequently (Klein, et al. 2005) as the result of geometric errors including coordinate shift errors and improper patient positioning. Image registration is a skill and knowledge-based performance; proper training and ongoing training are necessary to improve the skill sets of staff in image registration performance.

In an effort to ensure that image registration is accomplished in an accurate and standardized manner in our Department, we developed the following project:

- Perform a fusion exercise to identify the variation in CT image registration results in our Department.
- If needed, develop a standardized method for image registration based on our findings.
- If needed, train all Department members on the standard method of fusion.
- If needed, perform a follow-up fusion study after training has occurred to see if variations in image registration has decreased amongst department members.

It should be noted that this is a follow-up study to a 2013 PQI study conducted by medical physicist Eder Calderon, MS (see Appendix I). In 2013, participants used the CMS Focal system



to perform all image registrations for the initial study. A follow-up study could not be completed on the same software system because CMS Focal was eliminated in 2014 and replaced with CMS Monaco version 5.0 (Monaco TPS). In addition, it was discovered that it was difficult in the initial registration study to ensure that the starting DICOM coordinates for both image sets used for image registration remained the same for all department members. If one participant saved their work after performing an image registration, the DICOM coordinates for the next participant defaulted to those saved coordinates rather than the proper starting DICOM coordinates. Due to this starting point uncertainty, a change in registration software and the attrition of some staff members, it was decided to repeat the initial part of the study in 2015 using Monaco TPS as the image registration software. Efforts were made in the procedure to ensure that all participants started their image registration using the same DICOM coordinates for both image sets.

### Conclusions and Moving Forward

Because the differences in image registration between department members were not statistically significant, it was decided to close the study rather than perform special training and ask department members to repeat the image registrations afterwards. The agreement between department members was considered satisfactory. The results of this study will be presented in a Department meeting.

Prepared by: Donna Siergiej, PhD and Stephen Martinez, MS Date: 2-7-17

# Public Outreach Results

## 2016 Press Coverage

### Summary

|                       |      |
|-----------------------|------|
| Count of News Stories | 501  |
| Days in the year      | 366  |
| Stories/day           | 1.37 |

### By Month and Channel

| Month              | Online     | TV        | Radio     | Print     | Grand Total |
|--------------------|------------|-----------|-----------|-----------|-------------|
| January            | 51         | 8         | 4         | 1         | 64          |
| February           | 67         | 40        | 7         | 14        | 128         |
| March              | 25         | 6         | 3         | 7         | 41          |
| April              | 19         | 2         | 1         | 5         | 27          |
| May                | 20         | 12        | 13        | 1         | 46          |
| June               | 41         | 16        | 5         | 8         | 70          |
| July               | 16         | 3         | 2         | 0         | 21          |
| August             | 15         | 1         | 3         | 3         | 22          |
| September          | 17         | 3         | 3         | 8         | 31          |
| October            | 19         | 6         | 3         | 5         | 33          |
| November           | 10         | 2         | 1         | 1         | 14          |
| December           | 2          | 0         | 0         | 2         | 4           |
| <b>Grand Total</b> | <b>302</b> | <b>99</b> | <b>45</b> | <b>55</b> | <b>501</b>  |

## 2016 Press Coverage Analysis

We were mentioned in more than 500 stories in our local media in 2016. This is the highest number of story mentions we've received to date.

Online sources accounted for 60 percent of our local stories.

Most print, radio or TV stories were posted online as well. We reach a different audience with online stories.

Of our 28 press releases, we distributed 20 (which is 71 percent) in the first half of the year. Correspondingly, about 75 percent of our story mentions occurred in the first half of the year.

February 2016 was, by far, the busiest month we've had, with 128 mentions. June and January were very busy, too, with 70 and 64 mentions, respectively.

Our average number of hits for Newswise stories remains above average for institutions like us (source: Newswise).

We reached reporters in more than 50 publications in 2016 (source: Newswise).



In 2016, our Newswise stories received 17 percent more hits than in the previous year. We received 61,000 hits in 2016 compared with 52,000 hits in 2015.

## UNM Comprehensive Cancer Center Director Invited to White House

(Media alert released January 26, 2016)

### Cheryl L. Willman, MD, invited to Washington DC to Brief President Obama's and Vice President Biden's Staffs on New National Cancer Initiative

Vice President Joe Biden's office has invited a delegation of six cancer experts to a meeting with his scientific staff and President Obama's scientific staff to discuss new national cancer initiatives in precision medicine, research and cancer clinical trials.

Cheryl L. Willman, MD, director and CEO of the University of New Mexico Comprehensive Cancer Center, will present at the briefing. She will join the directors of The Ohio State Comprehensive Cancer Center, the City of Hope Comprehensive Cancer Center, The Moffitt Comprehensive Cancer Center in Florida, the University of Southern California Norris Cancer Center and the Murtha Cancer Center at Walter Reed, all of whom are members of the new Total Cancer Care/ORIEN consortium. Willman will provide updates regarding New Mexico cancer patterns, disparities and needs. She will also discuss the UNM Comprehensive Cancer Center's research strengths in genome sequencing and cancer prevention, and its collaborations with the Los Alamos National Laboratory and Sandia National Laboratories. Willman will also make recommendations on how to overcome the challenges that cancer patients, researchers and physicians face as they work to discover the causes of cancer and develop new cures for the cancers that affect New Mexicans.

President Barack Obama announced his challenge to "make America the country that cures cancer once and for all" during his State of the Union Address on Jan. 12. Vice President Joe Biden will lead the initiative. Biden lost his son, Beau, to brain cancer in 2015.

The vice president is working with the National Institutes of Health (NIH) and the National Cancer Institute (NCI) to increase research funding and accelerate cancer discoveries. The recently passed Omnibus Appropriations Act increased the NIH's budget by \$2 billion, the largest increase in more than a decade. The omnibus spending bill also increased the NCI's budget by \$264 million.

While many see curing cancer as a daunting task, Willman and many other cancer experts express hope for the future. Recent advances in genomic testing and in immunotherapy have greatly improved cancer treatments. Cancer treatments can be made vastly more tailored to each person, can have longer-lasting effects, and can make cancer more manageable for many years. Moreover, the UNM Comprehensive Cancer Center has joined 11 other NCI-designated



cancer centers and the Murtha Cancer Center at Walter Reed in a new national collaborative consortium. The Total Cancer Care/ORIEN consortium is focused on assuring that cancer patients benefit from detailed genomic characterization of their cancers and have access to new targeted treatments.

Vice President Biden has described the Total Cancer Care/ORIEN project as a new national model. The delegation will update his staff on advancements in the field of precision medicine, the importance of speeding up development of more effective personalized cancer treatments, and the need for sharing scientific data.

Cheryl L. Willman, MD, has served as director and CEO of the UNM Cancer Center since 1999. She is a distinguished professor of pathology and internal medicine at the UNM School of Medicine, where she holds the Maurice and Marguerite Liberman Distinguished Chair in Cancer Research. She is an internationally recognized leukemia researcher, whose work now focuses on the use of comprehensive genomic technologies to identify novel targets for improved diagnosis, risk classification and therapy, and the translation of these new targets to diagnostics, therapeutics and clinical trials.

The briefing meeting with President Obama's and Vice President Biden's staffs took place Thursday, Jan. 28, 2016, at The White House, 1600 Pennsylvania Avenue, Washington, D.C.