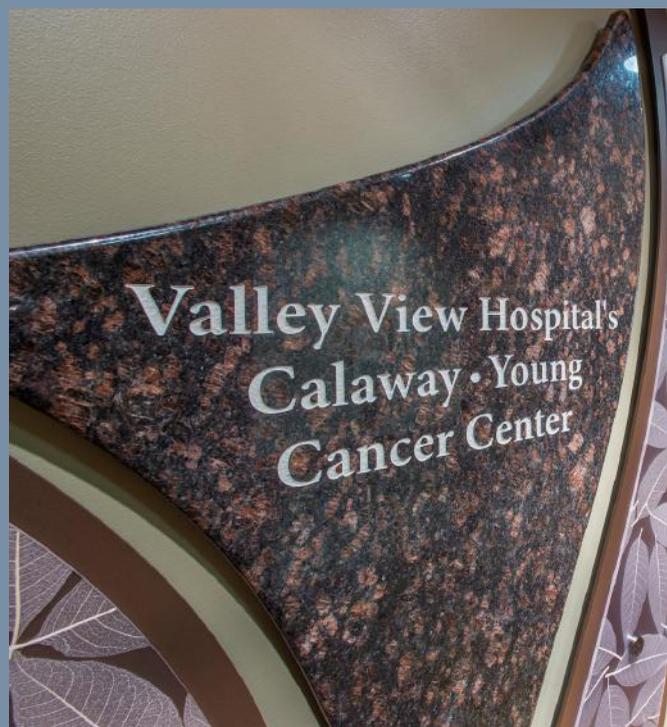


2016 ANNUAL REPORT

Calaway • Young
CANCER CENTER

 VALLEY VIEW





Welcome to Calaway Young Cancer Center where exceptional care is always close to home.

Calaway•Young Cancer Center is proud to bring world-class, outpatient cancer care to the Western Slope. Our ever-expanding services range from imaging, medical, surgical and radiation oncology, chemotherapy, and supportive and integrative services all conveniently accessible in one location. Our patients are met by valet parking attendants at the front door and guided by skilled physicians and support staff through every step of the cancer journey.

This past year, we have placed a strong focus on expanding our care into nearby regions to meet the needs of our broader community. We have reached out to physicians in Aspen, Carbondale, Edwards and Grand Junction to help connect their patients to our facilities and services. A new Meeker clinic offers diagnosis and follow-up care to reduce travel stress for our neighbors to the west, and a Rifle clinic will soon provide the same benefits to patients.

Over the past year, we've also improved our services at our primary location in Glenwood Springs. Our advanced technologies now include Varian's Enhanced Imaging X-Ray tracking, and a TrueBeam linear accelerator.

These state-of-the-art tools help provide superior imaging and marker

placement, so patients receive precisely targeted treatments for more successful outcomes.

Since our inception, our goal has been to support patients through every stage of cancer care, from diagnosis to treatment and follow-up visits. Our multi-disciplinary team utilizes the most advanced diagnostic imaging and treatment options available to ensure optimal results. Collaborations with other Valley View departments, including neurology, pulmonology, and heart and vascular, help us deliver individualized and effective cancer management - while making the treatment process as seamless as possible. Last year, we treated our first endobronchial high-dose-rate (HDR) case. We've also strengthened our cardiac risk stratification procedure and have continued to build our head and neck program.

Across the board, our staff continues to raise the bar on their achievements. Their growing expertise, combined with our exceptional facility, earned the Calaway•Young Cancer Center full accreditation with commendations this year from the American College of Surgeons (ACS) Commission on Cancer. By 2018 we expect that all of our nurses will be oncology certified. In addition, a new nurse navigation system provides an advocate for each patient to help schedule appointments, make sense of test results and answer general questions. Following treatment, our survivorship program helps patients celebrate the milestones of reclaiming a full life after cancer.

Perhaps what our patients will notice and appreciate most, however, is our

expanded integrated services, which are designed to support mind, body and spirit with massage, acupuncture, therapeutic touch, aromatherapy and other holistic treatments to promote healing. Additionally, a chaplain is available to offer patients the ministry of presence. Nutritional services provide support for lifestyle changes, and a certified esthetician helps patients feel more confident throughout the physical side effects that often accompany treatment.

Heading into the coming year, we remain committed to listening to patient concerns and treating the whole person, not just the condition of cancer. With the generous support of individuals and our community, we will continue to grow and expand to serve the needs of our growing population.

We're committed to demystifying and humanizing the journey through cancer — and to bringing premium cancer care to the western slope of the Rocky Mountain region. As we go forward, wherever and whenever research discoveries are made, we will strive to bring them home to our patients here in the valley.

After all, many of us moved here to improve our quality of life. At the Calaway•Young Cancer Center, we're honored to be able to offer the kind of expert treatment and personalized cancer care that can assist our patients in maintaining that quality of life before, during and after treatment.

Warmest Regards,
Ann Wilcox
Executive Director

LETTER *from the Cancer Committee Chair*

2016 was an important milestone for the Calaway-Young Cancer Center (CYCC)

We received a three year Accreditation with Commendations from the American College of Surgeons Commission on Cancer (ACOS COC) after a comprehensive on-site review of our program was performed in December, 2015. The three year approval with commendations is a rare accomplishment, particularly for programs seeking initial accreditation, and it reflects favorably on the highly qualified team assembled and performing here. An endorsement from an objective nationally recognized body, such as this, confirms to our colleagues and community that care provided at Valley View meets and exceeds widely accepted national standards.

The tumor registry was commissioned in January, 2013, and has accessioned 973 patients into our database through May, 2016, including patients from our immediate service area and beyond.

Every new patient is included in a multidisciplinary conference confirming our commitment, and to quality patient care we continue to collaborate with academic colleagues from centers including the University of Colorado, MD Anderson, Memorial Sloan Kettering, Emory University, Mayo Clinic, University of Florida and others.

Our services include consultation, diagnosis, advanced imaging, both inpatient and outpatient chemotherapy, infusion and lifelong follow-up. Dr. David Marcus and I continue to offer the full spectrum of advanced radiation therapy services including Intensity Modulated Radiation Therapy (IMRT), High Dose Rate (HDR) Brachytherapy, Intracranial Stereotactic Radiosurgery (SRS), Extracranial Stereotactic Body Radiation Therapy (SABR, SBRT) and Superficial Radiation Therapy.

The pharmaceutical clinical research program continues to grow under the guidance of Dr. Armando Armas. We now have five active clinical trials open and a total of 53 patients enrolled on clinical trials through CYCC.

This program enables patients to receive investigational therapies without having to leave their home.

The pulmonology, infectious disease, medical neurology and plastic/reconstructive surgery services continue to complement our strong and longstanding general surgery, neurological surgery, urologic surgery, internal medicine, diagnostic radiology and pathology services. Additionally, cardiothoracic surgical services are now available for CYCC patients at Valley View.

We remain committed to the full spectrum of cancer patient care including such additional patient support services as genetic counselling, nurse navigation, nutritional and social service support. Additionally, the full range of integrated therapies including acupuncture, yoga, tai-chi, massage, and aroma therapy is available for all patients at no additional cost, via funds raised from our annual Rally the Valley event. Housing is provided as needed for patients travelling here from beyond our service area.



The first Medical Oncology outreach clinic launched in September, 2015, in Meeker, Colorado and continues to grow. A new Medical Oncology outreach clinic in Rifle, Colorado was initiated in September, 2016. These new clinics are staffed by Dr. Armas, while Dr. Doug Rovira continues to staff the Medical Oncology clinic in Aspen, Colorado.

The success of these programs would not be possible without the ongoing support from our administrative team, the Valley View Board of Directors and our western slope communities.

We look forward to continued growth and providing state-of-the-art cancer care to the western slope community going forward.

Respectfully,
Bruce D. Greene, M.D.

COMMUNITY *outreach*

The Calaway•Young Cancer Center is committed to the prevention and early detection of cancer. In 2016, the Center committed to a multi-year initiative focused on lung cancer. Patients of the Center as well as an assessment of the community demonstrate an opportunity to promote the prevention and early detection of lung cancer. The goal of this initiative is to leverage prevention and screening efforts to impact the health of the community.

Collectively in Garfield, Pitkin, Eagle, Grand and Summit counties, lung cancer is the third most common cancer. For 2015, lung cancer was the fourth most common kind of cancer for patients of the Center. Lung cancer had the highest number of late-stage presentations of any kind of cancer at the Center during that time as well.

According to the American Lung Association, smoking is the main cause of lung cancer. It contributes to 80 percent of lung cancer in women and 90 percent of lung cancer in men. The 2013 – 2014 Colorado Behavioral Risk Factor Surveillance System identified Garfield County as having a higher rate of smokers than the state of Colorado as a whole: 23.4% versus 16.8%. Therefore, for the Center, tobacco cessation presents an important prevention.



Valley View's Quit Smart is an evidence-based, multicomponent tobacco cessation program. The organization has led the program for over ten years. It includes small group classes, adjunct therapies as well as partnerships with programs such as the Colorado QuitLine. To increase the number of Quit Smart program participants, aligning a referral system among the Valley View clinics, specialties and inpatient services has been a priority for cessation in 2015.

The community served by the Center is designated by the Colorado Department of Health and the Environment as a high radon potential area. Exposure to radon not only creates a greater risk for lung cancer in smokers but is also thought to be a significant cause of lung cancer deaths among non-smokers. Therefore, another prevention program is focused on radon. Valley View's pediatric practice leads a unique radon testing kit initiative. During well-child visits, providers educate parents on the importance of radon testing in their homes. If families have not tested their home for radon, the practice gives the family a kit to do so. This initiative is made possible through a partnership with Garfield County Environmental Health.

Evidence-based screenings can help support the detection of lung cancer at an earlier stage. At Valley View, low-dose computed tomography is offered to persons aged 55 to 74 years who have cigarette smoking histories of 30 years or more and, if former smokers, quit within the last 15 years. Benefits of screening include a reduction of lung cancer mortality by 20%, according to the National Cancer Institute. Through this screening, we can work to decrease the number of patients with late-stage lung cancer.

By focusing both prevention and screenings on lung cancer, the Calaway•Young Cancer Center seeks to decrease the number of lung cancer diagnoses as well as number of patients with late-stage disease.

2016 AT A GLANCE

CALAWAY•YOUNG CANCER CENTER
LUNG CANCER INITIATIVE

Total low dose scans ordered in 2015: 15
Negative Scans: 9
Positive Scans requiring follow up (nodules): 6
Positive CA findings from initial low dose: 0
Percentage of follow up on all positive scans: 100%

“Being told you have cancer is a traumatic experience, and accepting that reality was one of the hardest obstacles to overcome. I learned just how relentless I truly am, never giving up, facing my diagnosis and treatment head on with resilience and staying positive.”

SURVIVORSHIP PROGRAM *update*

Now in its third year, the survivorship program continues to thrive and gain popularity with our CYCC patients. The survivorship program offers a personalized treatment summary, cancer-specific survivorship care plan, and individualized counseling session to those patients bridging from active treatment to post-treatment surveillance.

The program has met within overwhelmingly positive response from both patients and their families. We will continue to expand the program in 2017 and hope to offer additional activities to address the special dietary, exercise, and psychosocial needs of our patients.

CANCER COMMITTEE MEMBERS

REQUIRED MEMBERS 2016

Diagnostic Radiology
Pathology
General Surgery
Radiation Oncologist,
 Cancer Comm. Chair,
 Cancer Conference Coordinator
Medical Oncologist / CLP
Executive Director
Oncology Nurse Leadership
Social Worker,
 Psychosocial Services Coordinator
Cancer Registry Quality Coordinator
Community Outreach Coordinator
Clinical Research Coordinator
QI Coordinator/ PI
Genetic Counselor

Jason DiCarlo, MD
Rob Macaulay, MD
Brad Nichol, MD

Bruce Greene, MD
Armando Armas, MD
Ann Wilcox, BSN
Irene Selbrede, RN, BSN, OCN

Kate Klos, MSW, LCSW
Shannon Hart, CTR
Stacey Gavrell
Cheryl Page, CCRP
Michelle Krelovichi

ADHOC MEMBERS

Pulmonology
Medical Oncology
Registered Dietician
Pharmacist
Physical Therapy/Rehab Services
Pastoral Care
Chief, Ancillary

Suresh Khilnani, MD
Douglas Rovira, MD
Mallory Silliman, RD
Jo Ann Yacko, Pharm D
Sarah Pocker, PT
Sean Jeung
Dewane Pace

“There were hard times, but I do not remember them. There were painful times, but I cannot recall them. Tears roll down my face constantly; not from pain, not from sadness, not from my desperation but from a place of love and thankfulness for the care and love I received throughout the journey.”

-- Tessa

ORAL MEDICATION ADHERENCE PROGRAM

Standard 4.8 Patient Quality Care Study

The face of oncology and hematology treatment is changing. According to the FDA, 40% of the new drugs approved for use in hematology and oncology treatment in the last two years, have been oral therapies. This new trend toward oral anti-cancer drugs brings with it new challenges for the patient and for the healthcare team. In the past, oncology teams could evaluate their patients receiving treatment frequently, because the patient had to come to the office for treatment. With the convenience of take at home medications, adherence to the treatment regimen is more important than ever.

Due to this changing landscape it is important to understand adherence from a patient perspective. The World Health Organization has defined the Five Dimensions of Adherence (see Table 1). Many things affect a patients' ability to adhere to a medication regime. These dimensions cover reasons such as; cost of medication, ease of acquiring medication, side effects, ability to understanding dosing parameters, and trust in the healthcare team. Being able to understand the barriers to treatment is an important part of the success of oral treatment for cancer. Several interventions exist to enhance adherence such as increased communication, patient education, offering calendars and other helpful items to increase patient memory.

Keeping these keys to adherence in mind, Calaway•Young Cancer Center (CYCC) has developed the Oral Medication Adherence Program (OMAP). OMAP was brought to life by a team of healthcare professionals at CYCC to support the patient receiving

oral medication. When a patient is placed on oral therapy, a roadmap of their treatment is developed to make sure it is successful. First the patient is educated about the specific medication and side effects. A patient brochure is given with frequently asked questions about oral anti-cancer therapy. From the time the medication is prescribed, the OMAP team tracks the insurance approval process and the specialty pharmacies timeline for dispensing. After the patient obtains and starts taking their drug, they receive phone calls from our OMAP leader Alex Critz-Culp PharmD or another healthcare professional to answer questions. Motivational interviewing is used to mitigate barriers that arise during treatment due to side effects and other concerns. As the therapy continues, reminder calls are made to the patient to remind them of physician and lab appointments.

CYCC hopes that these additional patient-centered steps will provide high quality, consistent and detailed care to our patients.

TABLE 1



Source: World Health Organization, 2003

REGISTRY DATA

2015 Cancer Conference Report

Multidisciplinary conferences are held on every 1st and 3rd Thursday for General Cancer Conferences. A site focused GU/GI/Lung Cancer Conference is held as needed on the 2nd Monday of the month.

Treatment plans are reviewed in consultation with radiologists, pathologists, general surgeons, medical oncologists, radiation oncologists and other specialties. This format benefits both the patient and the physician by providing a forum in which experts from varied disciplines can discuss different treatment options for prospective cases.

During 2015, we had a total of 31 General Cancer Conferences and Site-Focused (Breast, GU, GI & Lung) Cancer Conferences were held in which 190 analytic cases were presented prospectively.

Primary sites presented in 2015:

- Colon
- Melanoma
- Kidney
- Prostate
- Ovary
- Soft tissue Sarcoma
- Uterus
- Rectal
- Anal Canal
- Leukemia
- Hypopharynx
- Intra- & Extra-hepatic
- Tonsil
- Peritoneum
- Pancreas
- Breast
- Lymphoma
- Brain
- Lung
- Stomach
- Bladder
- GE Junction
- Esophagus
- Testis
- Thymoma
- Thyroid
- Bile Duct
- Urachus
- Appendix

Physicians are encouraged to submit cases for presentation by contacting the Cancer Registry prior to the upcoming Cancer Conference at 970.384.7586.

2015 Cancer Registry Report

The Calaway•Young Cancer Center at Valley View Hospital Cancer Registry operates under the direction and guidance of the Cancer Committee. The reference date for the organization is January 1, 2013.

There were 296 cases added to the Registry in 2015; 292 of those cases were analytic cases with initial diagnosis and/or first course of treatment done here. The Cancer Program and Registry is currently in the process of seeking initial accreditation through the American College of Surgeons Commission on Cancer, or CoC, Accreditation Program. The Commission on Cancer provides stringent standards and a program review of healthcare facilities that participate in its program.

The Cancer Registry staff consists of one full-time Certified Tumor Registrar (CTR) and one part-time Certified Tumor Registrar (CTR). The cancer registrars collect and analyze all reportable and supplemental data; prepares for and provides a Cancer Registry report and documents Cancer Committee attendance and minutes; documents Cancer Conference information; supplies reports from the registry database to medical and administrative staff; reports all cases to the Colorado Central Cancer Registry. Our Cancer Registry also follows patients annually to obtain any health changes and provide information for survival and outcomes data. Follow-up is an important function of the Registry and increases the chances patients will receive appropriate medical care for early detection and treatment of recurrent or new cancers. As we know, early detection could improve chances of survival. The follow-up rate for all analytic patients is at 94% and the Commission on Cancer requires a rate of 80% follow-up on all patients. We currently do meet the required follow-up rate of analytic cases for the past 5 years as our reference date is January 2013.

The registrars are members of the National Cancer Registrars Association (NCRA), Colorado Cancer Registrars Association (CCRA) and Arkansas Cancer Registrars Association (ArCRA). Our full-time CTR currently holds the position of President of the Colorado Cancer Registrars Association. Both participate in educational events annually to maintain certification status as well as attending a regional or national conference at least every 3 years.

Cancer Registry data is available for multiple uses, including reporting of results and evaluation of quality of care for our patients, along with research needs and educational purposes.

The Cancer Registry is staffed by:

Shannon Hart, CTR - Lead

Nancy May, CTR

Our medical and radiation oncologists utilize a collaborative care approach, working closely with other caregivers, primary care, surgeons and other medical specialists to provide high-quality, compassionate care.

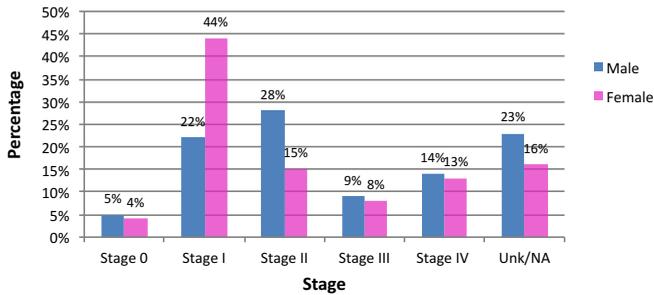
2015 CANCER CENTER REGISTRY REPORT

| Calaway•Young Cancer Center at Valley View Hospital | | | | | | | | | | | |
|---|------------|------------|------------|---------------|----------------|--------------|-----------|-----------|-----------|-----------|------------|
| 2015 Annual Report Primary Site Table | | | | | | | | | | | |
| Primary Site | Total | Male | Female | Class of Case | | AJCC Staging | | | | | |
| | | | | Analytic* | Non-analytic** | 0 | I | II | III | IV | Unk or N/A |
| Tongue | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Tonsil | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Hypopharynx | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Oral Cavity & Pharynx | 4 | 2 | 2 | 4 | 0 | 0 | 1 | 0 | 1 | 2 | 0 |
| Esophagus | 5 | 4 | 1 | 5 | 0 | 0 | 0 | 0 | 2 | 3 | 0 |
| Stomach | 2 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Small Intestine | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Colon excluding Rectum | 10 | 5 | 5 | 10 | 0 | 2 | 2 | 4 | 2 | 0 | 0 |
| Rectum & Rectosigmoid | 6 | 4 | 2 | 6 | 0 | 0 | 0 | 3 | 1 | 1 | 1 |
| Anus, Anal Canal & Anorectum | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Liver & Intrahepatic Bile Duct | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Other Biliary | 2 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Pancreas | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| Peritoneum, Omentum & Mesentery | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Digestive System | 34 | 20 | 14 | 34 | 0 | 2 | 5 | 9 | 8 | 8 | 2 |
| Larynx | 2 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Lung & Bronchus | 22 | 10 | 12 | 22 | 0 | 0 | 5 | 1 | 1 | 14 | 1 |
| Respiratory System | 24 | 12 | 12 | 24 | 0 | 0 | 6 | 1 | 2 | 14 | 1 |
| Bones & Joints | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Soft Tissue(incl Heart) | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Melanoma - Skin | 10 | 6 | 4 | 10 | 0 | 1 | 7 | 1 | 0 | 0 | 1 |
| Breast | 61 | 2 | 59 | 61 | 0 | 4 | 43 | 9 | 3 | 2 | 0 |
| Cervix uteri | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Corpus uteri | 5 | 0 | 5 | 4 | 1 | 0 | 3 | 1 | 0 | 0 | 0 |
| Ovary | 4 | 0 | 4 | 4 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| Vulva | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Female Genital System | 11 | 0 | 11 | 9 | 2 | 0 | 4 | 2 | 0 | 1 | 2 |
| Prostate | 59 | 59 | 0 | 57 | 2 | 0 | 12 | 33 | 5 | 4 | 3 |
| Testis | 3 | 3 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Male Genital System | 62 | 62 | 0 | 60 | 2 | 0 | 15 | 33 | 5 | 4 | 3 |
| Urinary Bladder | 18 | 16 | 2 | 17 | 1 | 6 | 4 | 4 | 0 | 2 | 1 |
| Kidney & Renal Pelvis | 3 | 1 | 2 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Ureter | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Urinary System | 22 | 18 | 4 | 21 | 1 | 6 | 5 | 4 | 1 | 3 | 2 |
| Brain | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Cranial Nerves other Nervous | 7 | 2 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Central Nervous System | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Thyroid | 9 | 0 | 9 | 9 | 0 | 0 | 5 | 0 | 3 | 1 | 0 |
| Other Endocrine | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Endocrine System | 11 | 0 | 11 | 11 | 0 | 0 | 5 | 0 | 3 | 1 | 2 |
| Hodgkin Lymphoma | 4 | 3 | 1 | 4 | 0 | 0 | 1 | 2 | 0 | 1 | 0 |
| Non-Hodgkin Lymphoma | 9 | 5 | 4 | 9 | 0 | 0 | 2 | 2 | 1 | 4 | 0 |
| Myeloma | 8 | 6 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Lymphocytic Leukemia | 8 | 6 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Myeloid & Monocytic Leukemia | 6 | 4 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Leukemia | 14 | 10 | 4 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Miscellaneous | 10 | 6 | 4 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Total | 296 | 158 | 138 | 291 | 5 | 13 | 93 | 64 | 25 | 40 | 56 |

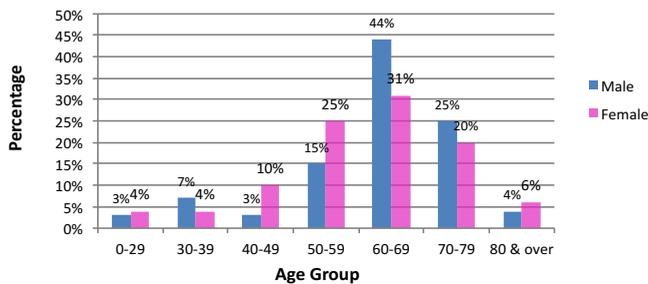
*Analytic = First diagnosed and/or first course of treatment at this facility. **Non-analytic = First diagnosed and first course of treatment elsewhere.

STATISTICAL SUMMARY OF ANALYTICAL CANCER REGISTRY DATA

2015 Stage at Diagnosis by Sex
 Calaway•Young Cancer Center at Valley View Hospital
 Data provided by Cancer Registry



2015 Age at Diagnosis (Male vs. Female)
 Calaway•Young Cancer Center at Valley View Hospital
 Data provided by Cancer Registry

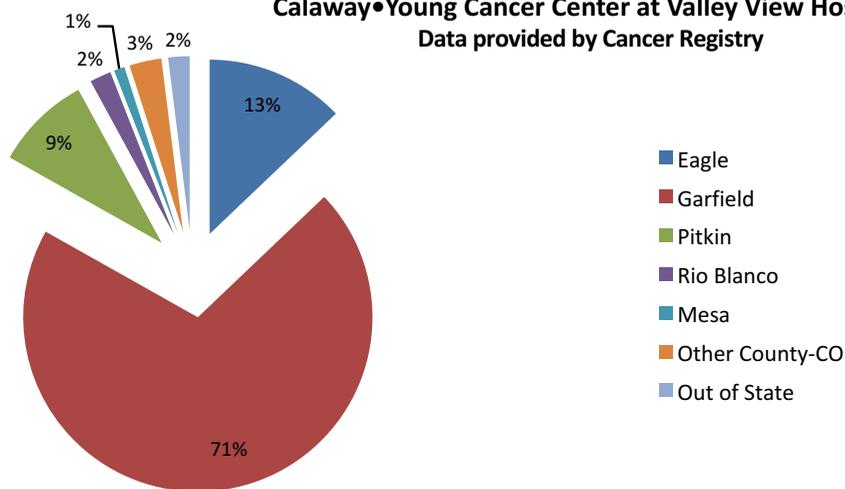


Calaway•Young Cancer Center at Valley View Hospital

| Sites | CYCC @ VVH | Colorado | U.S. |
|------------|------------|----------|------|
| Breast | 20% | 15% | 15% |
| Prostate | 20% | 12% | 13% |
| Lung | 7% | 11% | 11% |
| Melanoma | 3% | 5% | 5% |
| Bladder | 6% | 4% | 4% |
| Colorectal | 5% | 8% | 9% |

*Data obtained from American Cancer Society Facts & Figures 2015 and CYCC Cancer Registry

2015 County at Diagnosis
 Calaway•Young Cancer Center at Valley View Hospital
 Data provided by Cancer Registry



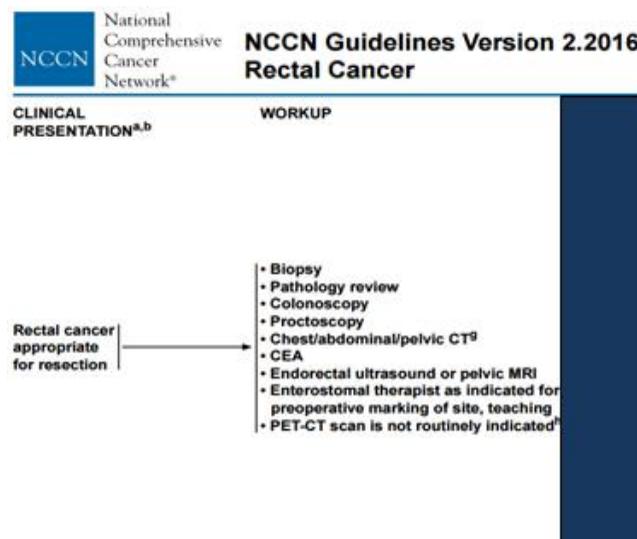
COLORECTAL CANCER WORKUP CEA

Standard 4.7

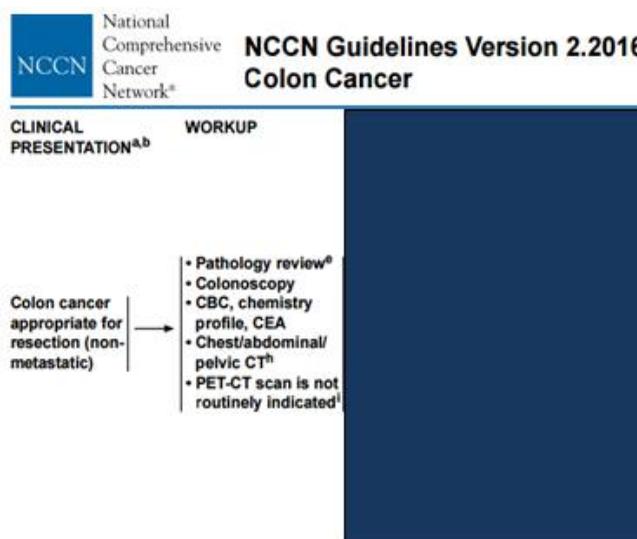
Patient Quality Care Study

In selected cases, obtaining a pretreatment CEA marker can provide information that may assist providers in treatment planning. By obtaining pretreatment CEAs, we can ensure this patient population will receive quality care established by evidence-based guidelines.

The current process for CEA collection prior to treatment was analyzed and areas of improvement were identified. The end goal is focused on assuring all colorectal cancer patients are receiving quality care by adhering to NCCN guidelines.



https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf



https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf

A retrospective analysis was done on colorectal diagnoses from 2013 to 2015 to determine if a CEA was completed at time of diagnosis, during patient workup, or prior to any treatment. Criteria for this study consisted of cases diagnosed and treated here at Calaway-Young Cancer Center (CYCC) between 2013 and 2015. All stages of colorectal cancer were reviewed. Patients presenting with non-invasive cancer or bowel obstruction, without a known diagnosis of colorectal cancer or requiring emergency surgery were removed from the study, as well as those that were treated with a polypectomy at the time of screening colonoscopy. There were 27 patients that met these criteria.

The following tables outline the patient's accession number, primary site, stage at presentation, status of first course treatment and if each patient's workup included a pretreatment CEA based on NCCN guidelines. These cases are separated into groups by primary site.

TABLE 1: RECTAL CANCER

| ACCN NUM | Stage | Primary Site | Surgery, Chemo &/or RT | Pretreatment CEA Completed |
|----------------|-------|--------------|------------------------|----------------------------|
| 2013/00005 | I | Rectal | Surgery(E)/CRT(H) | Yes |
| 2013/00209 | I | Rectal | Surgery(H)/CRT(H) | Yes |
| 2013/00006 | Ila | Rectal | Surgery(H)/CRT(H) | No |
| 2013/00184 | IV | Rectal | Chemo(H) | No |
| 2014/00236 | Ila | Rectal | Surgery(E)/CRT(H) | Yes |
| 1997/00115-02* | IIla | Rectal | Surgery(H) | No |
| 2014/00183 | IIlb | Rectal | Surgery(H) | Yes |
| 2000/00081-02* | Ila | Rectal | Surgery(H)/CRT(H) | Yes |
| 8 Subjects | | | | 5/8 with CEA |

**These patients accession number demonstrates their colorectal cancer is a second primary. (H) Reflects treatment given here. (E) Reflects treatment given elsewhere.*

"It's Chemo day! And the best part of chemo day is the massage and PB&J I get to eat. I am so lucky to go to Valley View Hospital. From the valet parking and massages I feel like a rock star. "

— Kelli

TABLE 2: COLORECTAL CANCER

| ACCN NUM | Stage | Primary Site | Surgery, Chemo &/or RT | Pretreatment CEA Completed |
|----------------|-------|--------------|------------------------|----------------------------|
| 2013/00124 | I | Colon | Surgery(H) | No |
| 2013/00139 | IIIb | Colon | Surgery(H)/Chemo(H) | No |
| 2013/00145 | IIIb | Colon | Surgery(H)/Chemo(H) | Yes |
| 2013/00175 | IIIb | Colon | Surgery(H)/Chemo(H) | Yes |
| 2013/00198 | IIIb | Colon | Surgery(H)/Chemo(H) | No |
| 2013/00012-02* | IIIc | Colon | Surgery(H)/Chemo(H) | Yes |
| 2013/00086 | IV | Colon | Chemo(H) | Yes |
| 2013/00109 | IVa | Colon | Surgery(H) | Yes |
| 2014/00134 | I | Colon | Surgery(H) | No |
| 2014/00149 | I | Colon | Surgery(H) | No |
| 2014/00152 | IIIc | Colon | Surgery(H)/Chemo(H) | No |
| 2014/00263 | IIIc | Colon | Surgery(H) | Yes |
| 2014/00229 | IV | Colon | Chemo(H) | No |
| 2015/00163 | I | Colon | Surgery(H) | No |
| 2015/00023 | I | Colon | Surgery(H) | Yes |
| 2015/00093 | Ila | Colon | Surgery(E) | Yes |
| 2015/00042 | Ila | Colon | Surgery(H)Chemo(H) | No |
| 2015/00074 | Ila | Colon | Surgery(H) | No |
| 2015/00007 | IIIc | Colon | Surgery(H) | No |
| 19 subjects | | | | 8/19 with CEA |

*These patients accession number demonstrates their colorectal cancer is a second primary. (H) Reflects treatment given here. (E) Reflects treatment given elsewhere.

Based on the NCCN guidelines, all patients should have a pretreatment CEA documented in their chart. However, the table demonstrates that only 8 of the 19 colon cases and 5 of the 8 rectal cases had this tumor marker completed. Study reveals that 52% of our colorectal patients are not getting a pretreatment CEA performed.

Recommendations based on study findings would be to establish an order set that includes a CEA to be completed prior to patient receiving treatment. However, the final decision on this recommendation will be left up to the committee.

Submitted by:

Shannon Hart, CTR

Michelle Krelovich, RN, BSN – QI coordinator

Armando Armas, MD - CLP

OUR MEDICAL TEAM



ARMANDO ARMÁS, MD

As the lead board certified medical oncologist, I have the privilege of offering over twenty years of experience caring for patients. My experience stems from training at the Mayo Clinic and Memorial Sloan-Kettering Cancer Center and I am motivated to helping patients continue their longevity with the best quality of life.

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BRUCE GREENE, MD

I am dedicated to patients' health and well-being and serve as the lead in the Valley View radiation oncology team. As a board certified radiation oncologist, my peers and other healthcare professionals have recognized me as one of America's Best Doctors and Castle Connolly Top Doctors. These honors speak towards my commitment to caring for patients for over thirty-five years.

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DOUG ROVIRA, MD

For over twenty years, I have served patients in our valley as a board certified medical oncologist. I specialize in the diagnosis, therapy and care of breast cancer patients as well as patients with cancer of the blood and lymphatic systems.

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DAVID MARCUS, MD

My passion for caring for patients with cancer relates to my own personal experience as a cancer patient. This passion has lead me into the field of radiation oncology where I completed my residency training at the Winship Cancer Institute of Emory University and I am now eligible as a board radiation oncologist. It is my pleasure to serve patients at Valley View as I have long dreamt of settling down with my family in the Roaring Fork Valley.

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MATT STINSON, PA-C

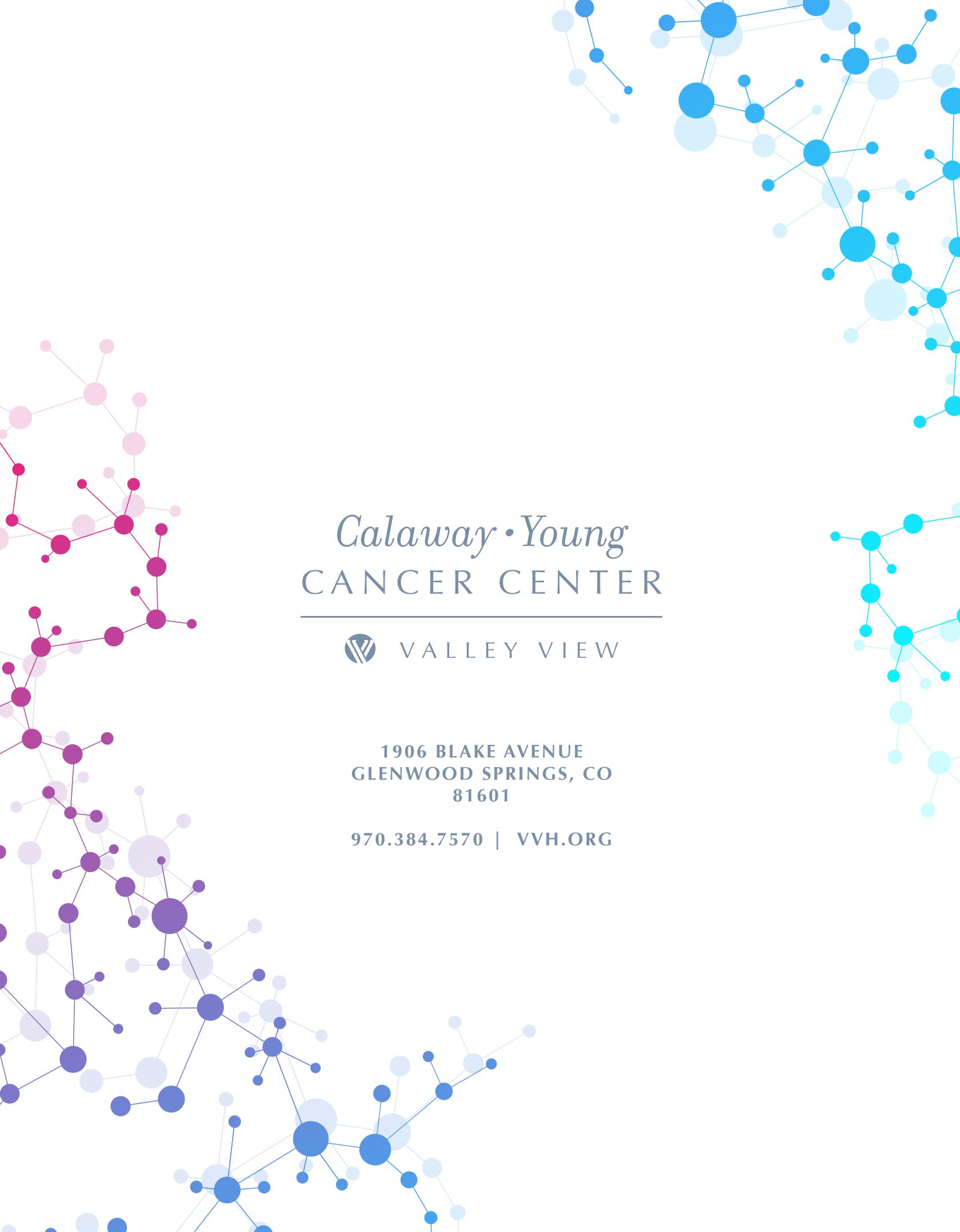
For over 15 years, I have been part of the Valley View Hospital team serving the Roaring Fork communities and beyond. I am excited about the exceptional services we provide at the cancer center, and I consider it a real privilege to participate in our patients' journey through cancer diagnosis, treatment, and surveillance. I lead the survivorship program to assist patients in their transition from active cancer treatment back to enjoying their lives.

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KIM BURNS, NP

As an Oncology Nurse Practitioner with over 10 years' experience, I am privileged to care for patients and their families during this challenging time. I work collaboratively with the Oncologists to provide comprehensive cancer care. My focus is on symptom management for patients receiving chemotherapy, as well as providing follow up care.



Calaway • Young
CANCER CENTER



VALLEY VIEW

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