



**NCCN Virtual Nursing Program:
Advancing Oncology Nursing™**

**Wednesday, March 17, 2021
3:20 PM – 4:05 PM EDT**

Current Clinical Challenges in Cancer Pain Management

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Cancer Pain Incidence

- **55% of patients undergoing active treatment for cancer**
- **Two thirds of patients with progressive disease**
- **Globally, 60-90% of people with advanced cancer experience moderate to severe pain**
- **Moderate to severe pain (≥ 5 on NRS) reported by 38% of all cancer patients**
- **One third of patients report they did not receive treatment proportional to their pain intensity levels**

Rosa, W. H. et al. (2019). Patient trade-offs related to analgesic use for cancer pain: A max-diff analysis study. *Pain Management Nursing*, 21, 245-254.

Van den Beuken van Everdingen, M.H., et al. (2016). Update on prevalence of pain in patients with cancer: Systematic review and meta-analysis. *Journal of Pain and Symptom Management*, 51, 1070-1090e.

Cancer Pain Incidence

- **20-40% of cancer survivors**
- **Long-term opioid therapy (LTOT) risk factors**
 - **certain cancers**
 - **multimodal treatment**
 - **opioid use prior to cancer diagnosis**
 - **post-surgical use/high intraoperative dose**
 - **comorbidities**
 - **white race**
 - **lower income/unemployment**
 - **tobacco use**
 - **zip codes associated with lower educational level**

Bulls, H. W., et al. (2019). Cancer and opioids: Patient experiences with stigma (COPES) – a pilot study. *Journal of pain and Symptom Management*, 57, 816-819.

Miller, K.D., et al. (2019). Cancer treatment and survivorship statistics, 2019. *CA. A Cancer Journal for Clinicians*, 69, 363-385.

Vitzthurn, L., et al. (2019). Predicting persistent opioid use, abuse and toxicity among cancer survivors. *International Journal of Radiation Oncology, Biology & Physics*, 105, S71.

Etiology of Cancer Pain

- **Invasion by cancer**
- **Iatrogenic causes**
 - **Surgery**
 - **Radiation**
 - **Chemotherapy**
 - **Other therapies**

Are, M., McIntyre, B. S., & Reddy, S. (2017). Global disparities in cancer pain management and palliative care. *Journal of Surgical Oncology*, 115, 637-641.

Clark, H. et al. (2012). The prevention of chronic postsurgical pain using gabapentin and pregabalin: a combined systematic review and meta-analysis. *Anesthesia & Analgesia*, 115, 428-42.

Provider Barriers to Adequate Cancer Pain Management

- Inadequate provider knowledge regarding pain management
 - principles of pain management
 - unable to differentiate between pseudoaddiction, physiologic dependence, tolerance, abuse and/or misuse
- Lack of assessment or inaccurate assessment
 - study of medical students – 50% believed myths regarding African-Americans' perception of pain

Hoffman, K. M. et al. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *PNAS*, 113, 4296-4301.

Kwon, J. H. (2014). Overcoming barriers in cancer pain management. *Journal of Clinical Oncology*, 32, 1727-1733.

Scarborough, B. & Smith, C. B. (2018). Optimal pain management for patients in the modern era. *CA - Cancer Journal for Clinicians*, 68, 182-196.

Shields, C. G., et al. The influence of patient race and activation on pain management in advanced lung cancer: A randomized field experiment. *Journal of General Internal Medicine*, 34, 435-42.

Principles of Pain Management

- Multidisciplinary approach
- Assessment of pain
- Treatment with evidence-based therapies
- Address additional symptoms as well as psychosocial concerns

Treatment of Cancer Pain

- Opioids
- Adjuvants
- Interventions/procedures
- Complementary methods

Disparity



- A noticeable and usually significant difference or dissimilarity
- Latin *dis*, meaning "apart" or "non-", represents "nonequality".
- Often used to describe a social or economic condition that's considered unfairly unequal.
- Late Latin *disparitāt-*, *disparitās*, from Latin *dispar-*, *dispār* "unequal, different" (from *dis-* DIS- + *par-*, *pār* "matching, equal," of uncertain origin) + *-itāt-*, *-itās* -ITY

"Disparity." Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/disparity>. Accessed 20 Feb. 2021.

Areas of Disparity in Cancer Pain Management

- Race
- Gender
- Age
- Socioeconomic status
- Education
- Location
- Site of care
- Vulnerable populations

Racial Disparities

- Most studied disparity in pain management
- Minorities have a higher rate of severe pain at the time of diagnosis
- Report less validation of pain and more unmet symptom needs
- Less likely to receive adequate assessment and management of pain
- Report greater care fragmentation





Racial Disparities



- Providers are more likely to underestimate pain experienced and reported by minorities
 - two thirds of Hispanics and 75% of AA patients
- Less likely to be prescribed and/or administered opioids
- Less likely to live near a pharmacy that carries opioids
- May lack financial resources to obtain opioids

Hoffman, K. M. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *PNAS*, 113, 4296-4301.
Scarborough, B. & Smith, C. B. (2018). Optimal pain management for patients in the modern era. *CA - Cancer Journal for Clinicians*, 68, 182-196.

Gender Disparities

- Conflicting literature in cancer pain
- Disparity in opioid dose reduction well-documented in chronic setting

Buonora, M., et al. (2019). Race and gender are associated with opioid dose reduction among patients on chronic opioid therapy. *Pain Medicine*, 20, 1519-1527.

Age-Related Disparities

- The elderly are less likely to have pain assessed appropriately or receive an opioid to treat pain
- Twice as likely to experience pain that is excruciating at times
- Providers are less likely to use age-appropriate rating scales for pain
 - facial pain scales
 - verbal pain descriptors
- Minority nursing home (NH) residents were significantly less likely to have self reported pain or staff reported pain documented in record
- Elderly AA NH residents experience worse pain management compared to white counterparts
 - more likely to be at a lower quality NH

Green, C. R. & Hart-Johnson, T. (2010). Cancer pain: An age-based analysis. *Pain Medicine*, 11, 1525-1536.

Mack, D. S., Hunnicutt, J. N., Jesdale, B. M., & Lapane, K.L. (2018). Non-Hispanic black-white disparities in pain and pain management among newly admitted nursing home residents with cancer. *Journal of Pain Research*, 11, 753-761.

Disparities Related to Socioeconomic Status

- Higher SES more likely to receive an opioid prescription
- More likely to have the ability to pay for costs associated with medication co-pays
- More likely to have private insurance
- More likely to have access to opioids in community

Meghani, S. H. et al. (2015). Controlling for socioeconomic status in pain disparities research: All-else equal analysis when “all else” is not equal. *Pain Medicine*, 16, 2222-2225.

Meghani, S. H. et al. (2020). Both race and insurance type independently predict the selection of oral opioids prescribed to cancer outpatients. *Pain Management Nursing*, 21, 65-71.

Disparities Related to Education

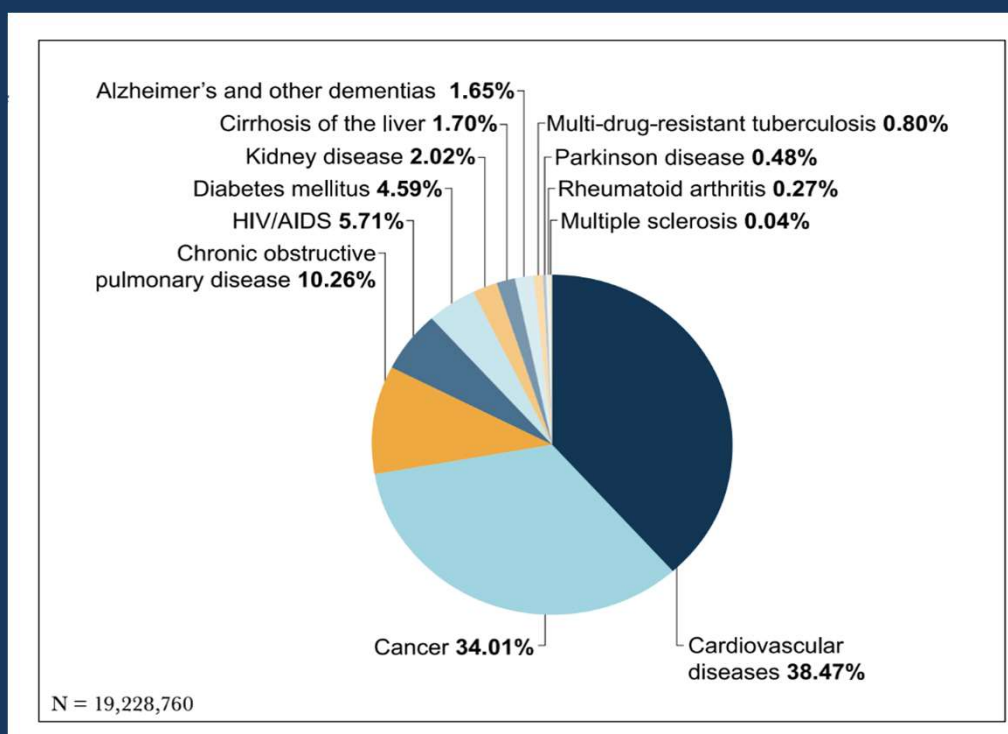
- Patients with lower level of education are more likely to believe their incurable cancer can be cured
- More likely to receive less effective, burdensome treatments near the end of life
- Less likely to utilize complementary and alternative medicine (CAM)

Disparities Related to Location

- United States is the highest consumer of opioids
- Numerous lower/middle income countries do not have access to opioids
- Patients in rural areas lack access to skilled practitioners as well as an adequate supply of opioids

Are, M., McIntyre, A., & Reddy, S. (2017). Global disparities in cancer pain management and palliative care. *Journal of Surgical Oncology*, 115, 637-641.

Distribution of Palliative Care Needs Globally - Adults



Global Atlas of Palliative Care at the End of Life. (2014). *Worldwide Palliative Care Alliance*. London.

Disparities Related to Site of Care

- Nursing home residents lack appropriate assessment of cancer pain
 - often not prescribed or under prescribed appropriate medications for cancer pain
 - often do not receive medications that are prescribed
- Rural hospitals lack specialists in many areas including palliative care
- Home care

Lopresti, M. A., Dement, F., & Gold, H. A. (2016). End-of-life care for people with cancer from ethnic minority groups: A systematic review. *American Journal of Hospice & Palliative Medicine*®, 33, 291-305.
Turkman, Y. E., et al. (2019). Disparities in hospice utilization for older cancer patients living in the deep south. *Journal of Pain and Symptom Management*, 58, 86-91.

Disparities in Vulnerable Populations

- Homelessness or precarious living situation
- Psychiatric comorbidities
- Language barriers
- Prior history of addiction
- Physical/intellectual disabilities
- Lesbian, gay, bisexual, transgender, and queer (LGBTQ)

Methods to Improve Cancer Pain Management

- Awareness of personal implicit biases
- Access to palliative care consultation
- Education of providers
- Ensure routine symptom assessment and documentation through the implementation of patient reported outcome measures into practice

Salas, A. S., et al. (2019). Social disparities and symptom burden in populations with advanced cancer: Specialist palliative care providers' perspectives. *Supportive Care in Cancer*, 27, 4733-4
van der Wees, P. J. et al. (2019). Development of a framework with tools to support the selection and implementation of patient-reported outcome measures. *Journal of Patient-Reported Outcomes*, 3, 75-85.
744.



National Comprehensive
Cancer Network®

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

Adult Cancer Pain

Version 1.2021 — February 26, 2021

[NCCN.org](https://www.nccn.org)

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PAIN INTENSITY	MANAGEMENT OF PAIN IN OPIOID-NAÏVE PATIENTS ^d		
See Pain Intensity Rating (PAIN-A)	<ul style="list-style-type: none"> • Select the most appropriate medication based on the pain diagnosis (See PAIN-K), comorbid conditions, and potential drug interactions • Analgesic regimen may include an opioid (See PAIN-G), acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs) (See PAIN-E), and/or adjuvant analgesics (See PAIN-F) • If pain is continuous, consider regularly scheduled analgesics • Anticipate and treat analgesic adverse effects, including opioid-induced constipation (See PAIN-H) • Provide psychosocial support (See PAIN-C) • Provide patient and family/caregiver education (See PAIN-I) • Optimize integrative interventions (See PAIN-D) 	Reevaluate pain at each contact and as needed to meet patient-specific goals for comfort, function, and safety	
General Principles			
Mild Pain	<ul style="list-style-type: none"> • See General Principles above • AND • First consider non-opioids and adjuvant therapies, unless these are contraindicated due to adverse effects, potential drug interactions, or comorbid conditions (See PAIN-G) 		
Moderate/ Severe Pain	<ul style="list-style-type: none"> • See General Principles above • AND • Non-opioids and adjuvant therapies as appropriate with short-acting opioids as needed (See PAIN-G) • Start and titrate short-acting opioid, every 3–4 hours as needed^{e,f} (See PAIN-G, 7 of 13) <ul style="list-style-type: none"> ▶ Oxycodone immediate release (IR) 2.5–5 mg with or without acetaminophen 325 mg ▶ Hydrocodone 5 mg with acetaminophen 325 mg ▶ Hydromorphone 2 mg PO ▶ Morphine 5 mg (solution) or IR 7.5 mg (1/2 tablet) • If 4 or more doses of short-acting opioid are consistently needed per day, consider addition of a long-acting opioid based on the total daily dose 	<ul style="list-style-type: none"> • Titrate further as needed • If pain is stable, see Ongoing Care (PAIN-6) • If pain is inadequately controlled, reevaluate working diagnosis with a comprehensive pain assessment (See PAIN-B) • Consider pain specialty and/or palliative care consultation (See PAIN-L) • Consider opioid rotation if dose-limiting adverse effects are noted 	
Severe Pain/ Pain Crisis	<ul style="list-style-type: none"> • For acute, severe pain or pain crisis, consider hospital or inpatient hospice admission to achieve patient-specific goals for comfort and function (See PAIN-5) 		

^d Opioid-naïve patients are those not chronically receiving opioid analgesic on a daily basis and therefore have not developed significant tolerance. Opioid tolerant includes patients who are chronically receiving opioid analgesic on a daily basis. The FDA identifies tolerance as receiving at least 25 mcg/h fentanyl patch, at least 60 mg of morphine daily, at least 30 mg of oral oxycodone daily, at least 8 mg of oral hydromorphone daily, or an equianalgesic dose of another opioid for a week or longer.

^e Select, extended-release opioids may also be indicated for opioid-naïve patients in rare circumstances.

^f More frequent dosing may be indicated in select situations.

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

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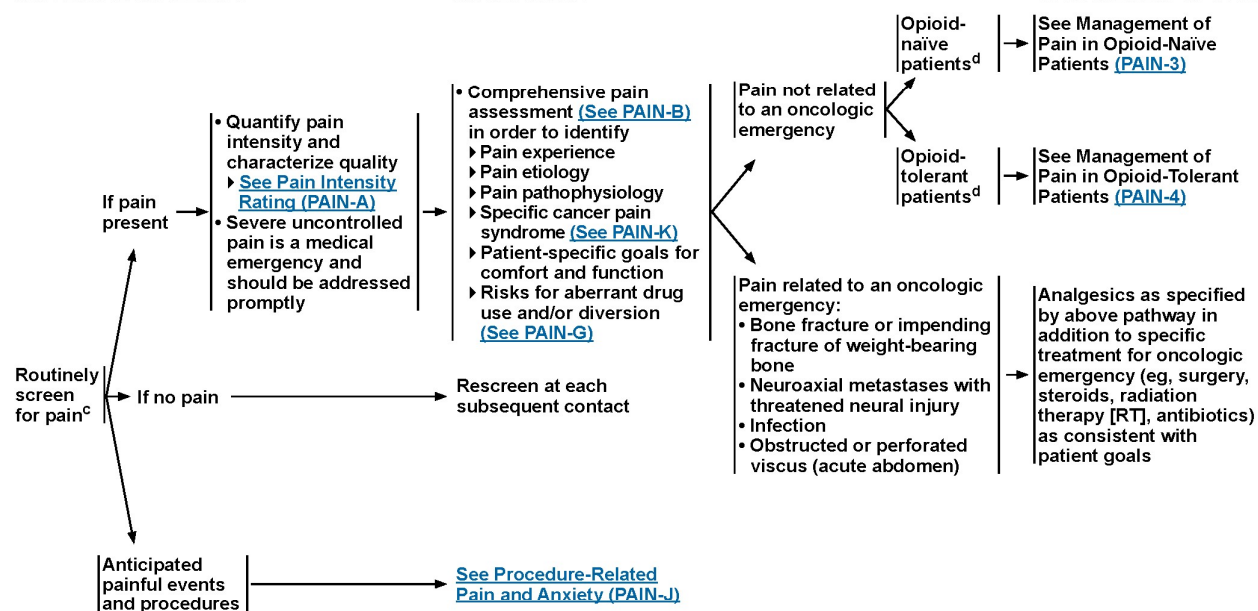
PAIN-3



UNIVERSAL SCREENING

ASSESSMENT

MANAGEMENT OF PAIN



^c For chronic pain in cancer survivors, see the [NCCN Guidelines for Survivorship](#).

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PAIN-2



PAIN INTENSITY	MANAGEMENT OF PAIN IN OPIOID-NAÏVE PATIENTS ^d		
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PAIN-3

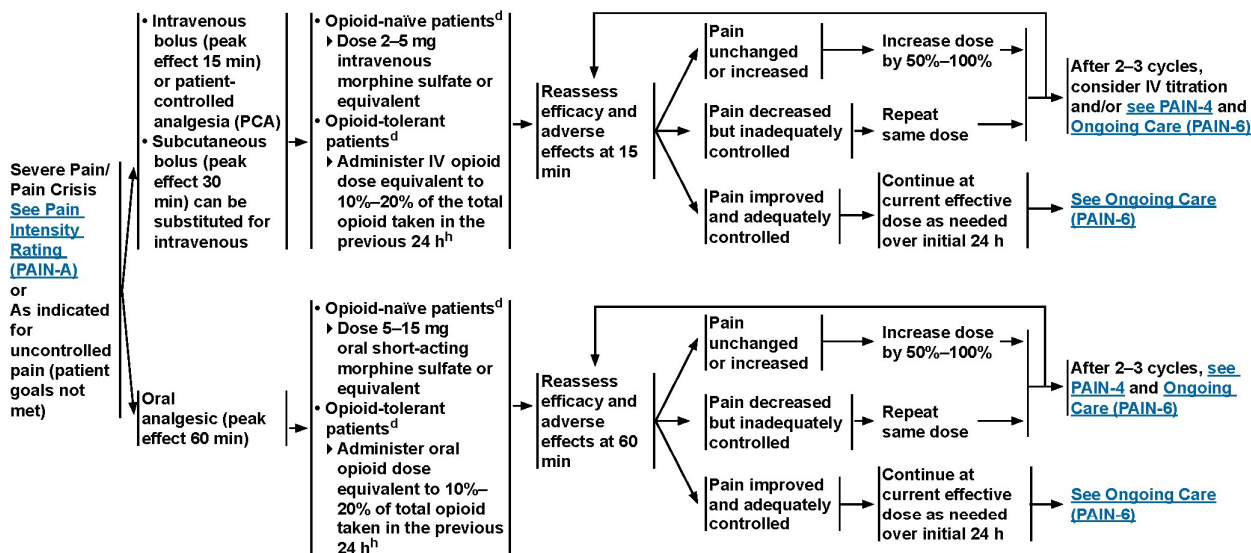


MANAGEMENT OF PAIN CRISIS

Monitor for acute and chronic adverse effects. [See Management of Opioid Adverse Effects \(PAIN-H\)](#)

INITIAL DOSE ([See PAIN-G](#))^g

SUBSEQUENT DOSE^g



^d Opioid-naïve patients are those not chronically receiving opioid analgesic on a daily basis and therefore have not developed significant tolerance. Opioid tolerant includes patients who are chronically receiving opioid analgesic on a daily basis. The FDA identifies tolerance as receiving at least 25 mcg/h fentanyl patch, at least 60 mg of morphine daily, at least 30 mg of oral oxycodone daily, at least 8 mg of oral hydromorphone daily, or an equianalgesic dose of another opioid for a week or longer.

^g Dose and titrate with caution in patients with risk factors such as decreased renal/hepatic function, chronic lung disease, upper airway compromise, sleep apnea, and poor performance status.

^h Not including transmucosal fentanyl dose.

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PAIN-5

Role of Nursing in Pain Management

- Listen to patient reports/concerns
- Advocate for patient
- Provide a comprehensive assessment for prescribers
- Communicate effectively
- Reassess new therapies following implementation

Prescribing in the Era of an Opioid Epidemic

- What is the role of prescription drug monitoring programs (PDMPs)?
- What changes have occurred with insurance companies?
- What should you change about your practice?

Documentation for Opioid Prescriptions

- Risks/benefits/alternatives and appropriate use discussed
- Lock up all controlled substances
- Discuss interaction with other medications and alcohol
- Instruct patient not to drive while titrating or experiencing sedating side effects
- Discourage self escalation or discontinuation of opioids
- Educate regarding addiction vs. physical dependence vs. tolerance
- Review proper disposal

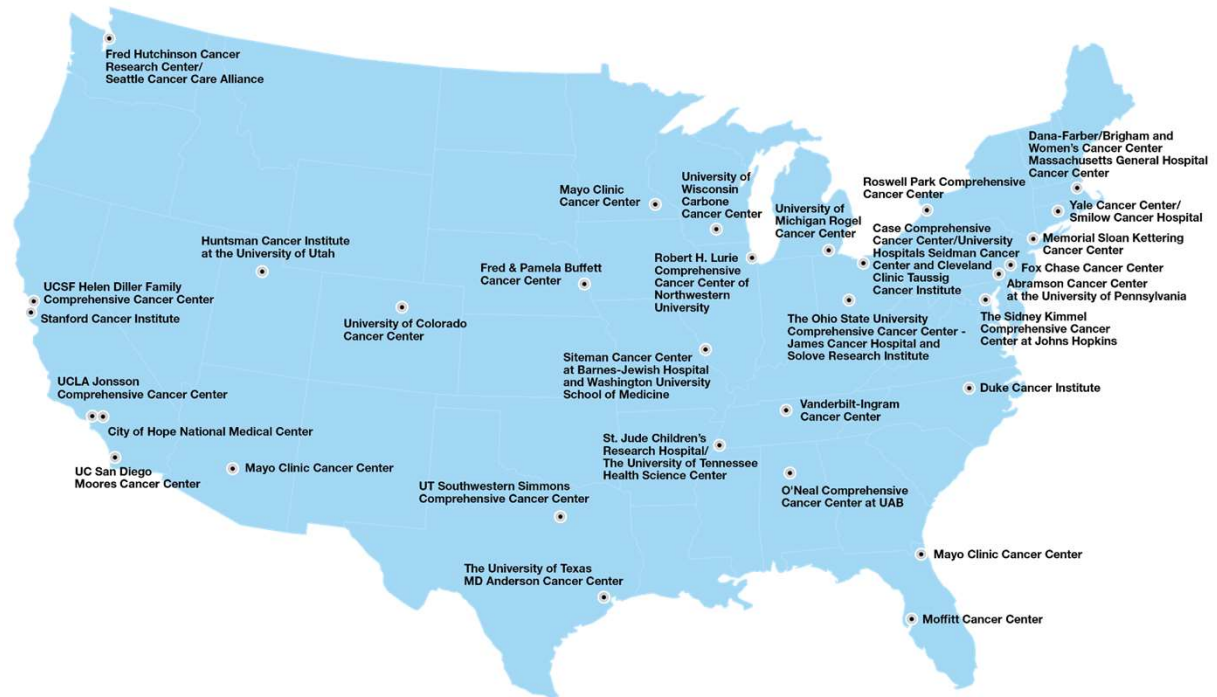




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