

Allina Health

Trends in Oncology & the Future of Oncology at Allina Health

Natasha M Rueth, MD
Surgical Oncologist
Medical Director Allina Health Cancer Institute

November 10, 2021

Allina Health

Trends in Oncology

Allina Health

Trends in Oncology

- Impact of COVID-19 on cancer and cancer care
- Less toxic / invasive therapies
- Increasingly patient specific therapy
- Whole person care

Allina Health

Impact of COVID-19

Allina Health

Impact of COVID-19

- Cancer Screening Disruption
 - Cancer screening services dropped dramatically in 2020
 - Colonoscopies dropped 90% April 2020
 - Mammography fell 75% and only recovered at the 1-year mark
 - Pap smears and pelvic ultrasound fell 75% and only recovered by end of the year

Percent Change in Cancer Screening
2019-2020

Legend: Colon (blue), Breast (orange), Cervical (green)

Allina Health

Impact of COVID-19

- Cancer Treatment Disruption
 - Delayed or missed diagnoses in 80,000 (American Cancer Society)
 - Estimated increased deaths of 7,000 - 17,000
 - Suspension of clinical trials
 - Chemotherapy attendance dropped by 60%
 - Increased rate of more advanced stage cancer

Impact of COVID-19

Allina Health

*Inevitable that the pandemic will have substantial impact
on long term cancer outcomes, treatment, and cost*

Less toxic / invasive therapies

Allina Health

Less toxic / invasive therapies

Allina Health

• Leukemia / Hematologic cancers

- Less toxic but effective therapies for newly diagnosed, elderly / unfit acute myeloid leukemia
- Autologous Chimeric Antigen Receptor T-cell (CAR-T) immunotherapy provides durable responses in relapsed or refractory hematologic cancers

• GI cancers

- Increased use of laparoscopic and robotic techniques for tumor removal with equivalent outcomes



Less toxic / invasive therapies

Allina Health

• Breast cancer

- Increased use of neoadjuvant chemotherapy to allow down-staging
- Decreased use of axillary dissection for microscopic tumor burden
- Hypofractionation techniques for breast cancer

• Melanoma / soft tissue cancers

- Observation of the nodal basin for stage III disease
- Observation of desmoid fibromatosis

Less toxic / invasive therapies

Allina Health

• Metastatic disease

- Stereotactic radiosurgery for metastatic brain lesions (over whole brain radiation) gives same survival rates but improved quality of life
- Stereotactic body radiation for oligometastatic disease may improve overall survival

Less toxic / invasive therapies

Allina Health

*Advances in surgical technique, radiation therapy, and
therapeutic agents is allowing for less invasive, less
debilitating treatments with equivalent or improved survival.*

Increasingly patient specific care

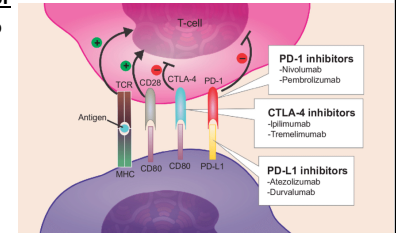
Allina Health

Increasingly patient specific care

Allina Health

Immune checkpoint inhibitor

- Block channels on T-cells so checkpoint proteins (from cancer) can't bind
- Prevents cancer cells from sending "off" signal
- Allows T-cells to kill cancer cells



Increasingly patient specific care

Allina Health

• **Leukemia / Hematologic Cancers**

- New targets identified for multiple myeloma immunotherapies
- Genomic analysis improves prognostication in myelodysplastic syndrome
- Studies underway to test if subtypes of acute leukemia may be treated with targeted therapies only rather than combination chemotherapy

• **Breast cancer**

- Increased use of neoadjuvant chemotherapy to treat HER2+ and triple negative breast cancer, which allows us to better prognosticate based on response to chemotherapy
- New antibody drug conjugates which allow us to treat patients who in the past had no good chemotherapy options

Increasingly patient specific care

Allina Health

• **Melanoma / soft tissue**

- Advent of neoadjuvant checkpoint inhibition for locally advanced and regionally metastatic melanoma
- Increased emphasis on a histology-specific approach to soft tissue sarcoma

• **Lung cancer**

- Use of targeted and immunotherapy treatments with improvement in progression free survival

Increasingly patient specific care

Allina Health

SIDE EFFECT PROFILE

- Immune-mediated adverse events: -itis events
- Diarrhea, cough, skin irritation, hepatitis, endocrinopathies, fatigue
- Manage with steroids and holding medication until resolution



Increasingly patient specific care

Allina Health

Genomic and biomarker driven cancer care and targeted therapies allow for less use of toxic, traditional chemotherapy with prolonged survival rates and better overall outcomes for patients.

Whole person care

Allina Health

Whole person care

Allina Health

- Safety and quality
- Improve patient and family experience
- Improve health of the broader community
- Improve access and coordination
- Make care more affordable / reduce financial toxicity

Whole person care

Allina Health

- Safety and quality
 - Reduce mortality
 - Reduce hospital stay
- Improve patient and family experience
- Improve health of the broader community
- Improve access and coordination
- Make care more affordable / reduce financial toxicity

Whole person care

Allina Health

- Safety and quality
 - Reduce mortality
 - Reduce hospital stay
- Improve patient and family experience
 - Nurse navigation
 - Cancer nutrition, integrative health
 - Cancer rehabilitation, palliative care partnerships
- Improve health of the broader community
- Improve access and coordination
- Make care more affordable / reduce financial toxicity

Whole person care

Allina Health

- Safety and quality
 - Reduce mortality
 - Reduce hospital stay
- Improve patient and family experience
 - Nurse navigation
 - Cancer nutrition, integrative health
 - Cancer rehabilitation, palliative care partnerships
- Improve health of the broader community
 - Increase cancer screening
 - Diversity / Equality / Inclusion
- Improve access and coordination
- Make care more affordable / reduce financial toxicity

Whole person care

Allina Health

- Safety and quality
 - Reduce mortality
 - Reduce hospital stay
- Improve patient and family experience
 - Nurse navigation
 - Cancer nutrition, integrative health
 - Cancer rehabilitation, palliative care partnerships
- Improve health of the broader community
 - Increase cancer screening
 - Diversity / Equality / Inclusion
- Improve access and coordination
 - Advances in digital footprint
- Make care more affordable / reduce financial toxicity

Whole person care



- Safety and quality
 - Reduce mortality
 - Reduce hospital stay
- Improve patient and family experience
 - Nurse navigation
 - Cancer nutrition, integrative health
 - Cancer rehabilitation partnerships
- Improve health of the broader community
 - Increase cancer screening
 - Diversity / Equality / Inclusion
- Improve access and coordination
 - Advances in digital footprint
- Make care more affordable / reduce financial toxicity
 - Value based care
 - Financial navigation

Whole person care



- Treatment costs
 - Newly approved cancer drugs cost an average of \$10,000 a month and cost as high as \$50,000 a month with costs rising
- Loss of wages, productivity and financial security
 - 80% of patients exhaust all life savings
 - 45% of survivors experienced job-related income loss
 - Leading cause of bankruptcy, 2X national average
- Continued cost of care following treatment
 - Radiation and surgical course of treatment costs
 - Imaging, medications, visits and overall well being

Whole person care



Benefits of financial navigation program

- Educate patients about financial responsibility
 - Review benefits
 - Out of pocket estimates
- Optimize Coverage
 - Screen for eligibility
 - Enhance partnerships with Medicaid and assistance agencies
 - Make eligibility screening automatic
 - Build payment plans

Whole person care



“Whole person care is an approach that recognizes all factors impacting health are connected—mind, body, spirit, and community”

Future of Oncology at Allina Health

AHCI Timeline

