Using Telemedicine to Address Access Disparities for Cancer Care in Kansas

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NCI Designated Cancer Center

THE UNIVERSITY OF KANSAS CANCER CENTER

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Overview

Our mission

Present a general overview of telemedicine/ tele-oncology in Kansas

Describe different applications of telemedicine technology that may enhance cancer care

Describe a model for clinical trials access via telemedicine

Discuss the challenges facing tele-oncology practices

NCI Designated Cancer Center: Our Mission

Enhance cancer care for patients across Kansas and western Missouri…*close to home.*

Provide strong support to cancer patients, community oncologists, and cancer care professionals

Advance access to:

- Expert cancer care
- Innovative clinical trials
- Newly developed diagnostics, therapies, and prevention strategies
- Continuing education opportunities
- Support services
  - Cancer Support Groups
  - Patient navigation
  - Psycho-oncology care

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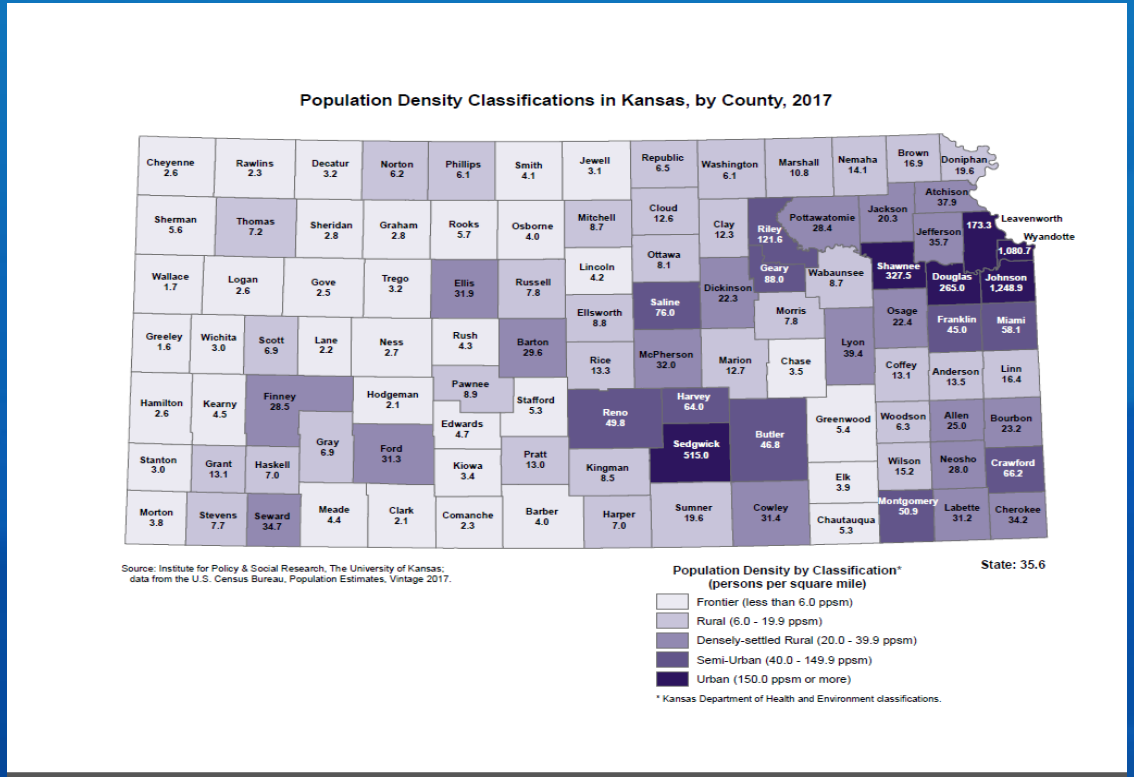
Population Demographics



The Potential of Tele-oncology

Direct patient management:

- New patient evaluations/ follow up visits
- Oncologist of record, chemotherapy oversight

Second opinion clinical consultations

Multidisciplinary Tumor Board participation

Education series

- Continuing Professional Education
- Community Education and Outreach in the form of patient cancer education programs

Tele-oncology in Kansas

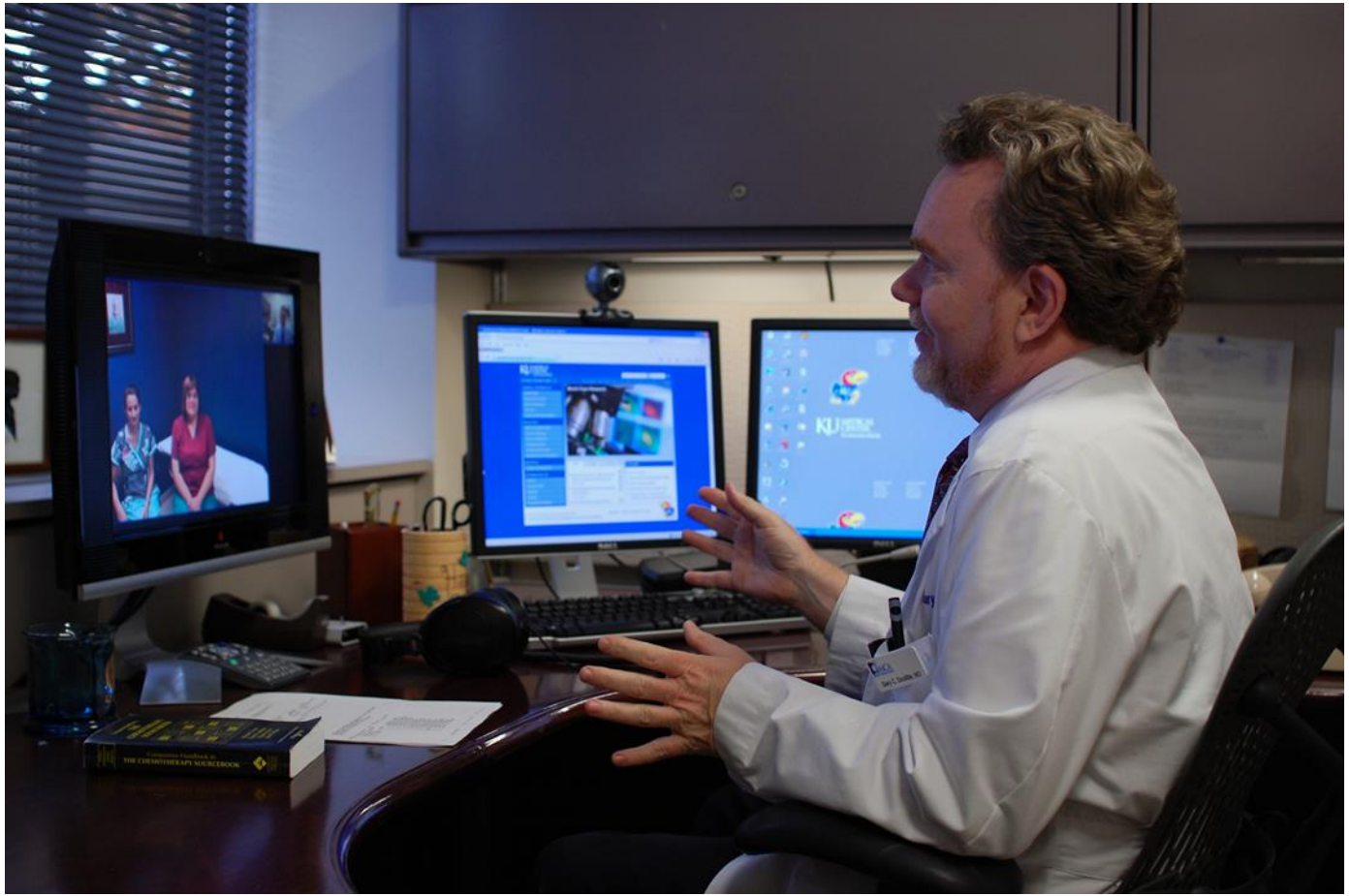
In 1995, tele-oncology began in Kansas connecting the University of Kansas Medical Center (KUMC) in Kansas City, KS, with Hays Medical Center (Hays, KS, 285 miles west of KUMC)

Combination Practice:

- Tele-oncology clinic
- In-person/outreach clinics

Personnel:

- KUMC oncologist
- Remote site nurses
- Administrative and technical support staff: *medical center and rural site*



Direct Patient Management: Diagnosis, Treatment, and Survivorship

MALIGNANCIES:

ONCOLOGIC

breast cancer
lung cancer
melanoma
ovarian cancer
sweat gland cancer
prostate cancer
colon cancer

HEMATOLOGIC

acute myelogenous leukemia
chronic lymphocytic leukemia
chronic myelogenous leukemia
prolymphocytic leukemia
multiple myeloma
non-hodgkin's lymphoma

HEMATOLOGIC DISORDERS:

amyloidosis
coagulopathy
cold agglutinin disease
erythrocytosis
essential thrombocytosis
hemochromatosis
hyperbilirubinemia
hypercoaguable state
hypercoagulation syndrome
Langerhan's histiocytosis
leukocytosis
leukopenia
lymphadenopathy
macrocytosis
monoclonal gammopathy
myelodysplasia
pancytopenia
p. vera
porphyria
splenomegaly
thrombocytopenia
thrombocytosis

Second Opinion & Consultations

- Access to cancer subspecialists via ITV eliminates the need for travel
- Second opinion services via ITV
- Participation in multidisciplinary conference via ITV
- Support for patient, family, and local practitioner

Development of a Statewide Clinical Trials Network

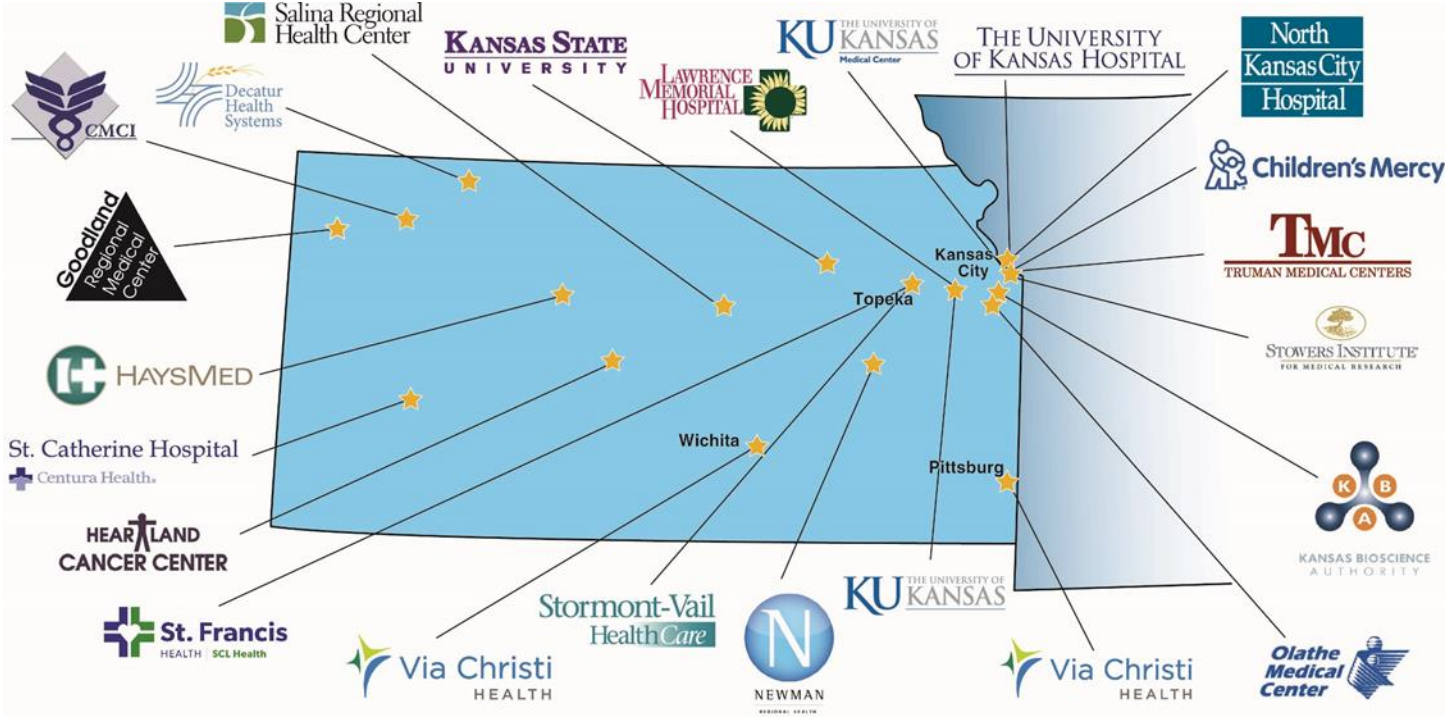
Clinical Trials (CT) Network consists of:

- centralized Internal Review Board (IRB) and
- an online CT data management system, specific for cancer studies

All sites approved to conduct KU trials which are NCTN initiated and/or endorsed

Sites may participate in KU Investigator-Initiated trials

Statewide Clinical Trials Sites



Clinical Trials

Clinical Trials:

- Research studies offered throughout our catchment area
- Standard-of-Care for patients with incurable malignancies

Importance:

- Clinical trials are key to cancer care and to advancing science
- Patients have access to clinical trials close to home

Role of ITV:

- Utilized to remotely consent and enroll patients in cancer clinical trials

Clinical Trials Via Telemedicine

Novartis and KUMC telemedicine provider (Gary Doolittle, MD) discussed the feasibility of a clinical trials via telemedicine project.

Clinical practice:

- Each sub-site team includes an advanced practice provider (APP) who is present at every sub-site telemedicine visit, pharmacist, oncology nurse/data manager
- Treating oncologist on the medical center campus, MCA clinical monitors

Novartis agreed to ship study supplies and investigational product to each MCA participating sub-site.

Clinical Trials Via Telemedicine

- Novartis visited each sub-site and approved each one to participate in the study early on in the process.
- KUMC telemedicine provider applied for--and fulfilled the staff privileges necessary to practice at each of the study sub-sites.
- Novartis studies identified for this clinical trials via telemedicine research study.

Clinical Trials Via Telemedicine

- Sub-sites use existing process for establishing a telemedicine visit;
- Study participant is informed the visit will be by interactive televideo with the patient located at his/her physician's office and the telemedicine provider located at KUMC in Kansas City.
- The patient goes through the informed consent process prior to the telemedicine visit; signed consent for treatment is faxed to the telemedicine provider at KUMC.
- At the initial visit, the KUMC telemedicine provider explains the background and use of the telemedicine technology and ***the study***
- If patient agrees, all visits will be conducted via telemedicine
- Study is ongoing….

Cancer Support Groups

- Cancer 101
- Caring for the Caregiver
- Chemobrain
- Coping with Chronic Illness
- Depression
- Sleep
- Survivorship
- Fear of Recurrence
- Life after Treatment
- Tobacco Cessation

Psycho-oncology Visits

Counseling

Individual Sessions

Family Meetings

Tele-oncology Cost Studies:

Expense is no longer an issue…

Fiscal Year	Cost per Tele-oncology Visit
FY95	$812
FY00	$411
FY03	$401
FY05	$251

Cost per visit has decreased almost 70% in 10 years

Publication in *Journal of Telemedicine and e-Health*

Telemedicine Acceptance

Patient satisfaction studies indicate high levels of satisfaction with telemedicine, often above the rates of expected satisfaction for traditional forms of healthcare delivery.

Provider satisfaction studies also generally point to positive opinions about telemedicine; however, data from providers point to higher concerns with delivery barriers and challenges.

**Whitten P, Love B. Patient and provider satisfaction with the use of telemedicine: Overview and rationale for cautious enthusiasm. J Postgrad Med 2005;51:294-300*

Connectivity widespread / Utilization is the norm

Challenges Facing Tele-Oncology Practices

Bringing together all necessary participants

- define the need
- outline specific goals
- analyze and test the technology
- develop a plan for the implementation

Lack of provider acceptance → underutilization

Reimbursement

Online Internet use by patients

Final Thoughts…

While it is often difficult – physically, emotionally, and economically – for patients with cancer to travel, tele-oncology is a valuable tool that can provide patients with the care they need while alleviating the need for travel.

Successful tele-oncology programs rely on a team of healthcare professionals at both the hub site and the remote site.

Provider acceptance is the greatest challenge to the success of a tele-oncology program; patient acceptance, the technology, and costs generally do not pose as great a challenge as provider acceptance does.

Questions?

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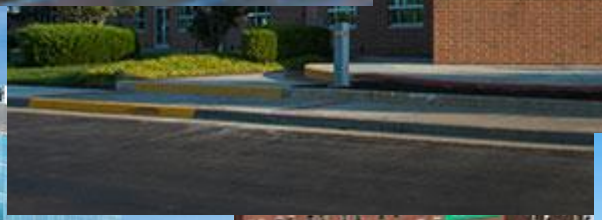

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