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AHN and the Cancer Institute Expansion

Managing and Expanding a Large Radiation Oncology Network

- Introduction of AHN Network and Structure
- Review Full Suite of Solutions
- Challenges Going In
- How We Overcame These Challenges
- Integrating Your OIS with Your EHR

People are Watching



“The future of health care might just be decided in Pittsburgh.”

**-- Merrill Goozner, Editor,
Modern Healthcare,
October, 2015**



Who We Are ...

The Highmark Health enterprise is four business units working together to build healthier communities

Health Plans



Integrated Delivery Network



Diversified Businesses



Technology Solutions



Allegheny Health Network

- Formed in April, 2013 when Highmark Health acquired multiple hospitals, including the West Penn Allegheny Health System
- Currently serving a 5-state region, including PA, OH, WV, MD, and NY

Allegheny Health Network

- Current hospitals/outpatient facilities include:
 - Allegheny General Hospital (AGH), Pittsburgh, PA
 - West Penn Hospital (WPH), Pittsburgh, PA
 - Forbes Regional Hospital, Monroeville, PA
 - Jefferson Regional Medical Center, Jefferson Hills, PA
 - Saint Vincent Medical Center, Erie, PA
 - Allegheny Valley Hospital, Natrona Heights, PA
 - Canonsburg General Hospital, Canonsburg, PA
 - Health and Wellness Pavilion, Wexford, PA
 - Health and Wellness Pavilion, Peters Township, PA

Allegheny Health Network Cancer Institute Locations

(23 geographically located sites with 9 comprehensive Cancer Centers)

130,000 cancer treatments delivered
10,000 cancer patients
211 physicians, 136 surgeons, 51 medical oncologists, 24 radiation oncologists



AHN Cancer Institute Sites					
Sites	H	MO	RO	SO	CT
Allegheny General Hospital	x	x	x	x	
Allegheny Valley Hospital		x	x	x	
Bethel Park Health + Wellness Pavilion		x			
Butler Regional Cancer Center		x			
Canonsburg General Hospital			x	x	
Clarion			x	x	
Forbes Regional Hospital		x	x	x	
Grove City			x	x	
Jefferson Hospital		x	x	x	
New Castle		x			
New Kensington		x			
Ohio Valley			x		
Peters Health + Wellness Pavilion		x	x	x	
Punxsutawney		x			
Richard G. Laube Cancer Center (Kittanning)		x	x	x	
Robinson Township		x			
Somerset Oncology Center		x	x	x	
St. Vincent Hospital		x			
Tony Teramana Cancer Center (Steubenville)			x	x	
Uniontown				x	
Weirton		x			
West Penn Hospital	x	x	x	x	x
Wexford Health + Wellness Pavilion		x	x	x	

H-Hematology - 2 sites

MO-Medical Oncology - 16 sites

RO-Radiation Oncology - 14 sites

SO-Surgical Oncology - 14 sites

CT-Cellular Therapy/Transplant - 1 site

Allegheny Health Network Cancer Institute

- Key Focus Points of our Mission Vision and Values:
 - To optimize and advance cancer care
 - To keep cancer care in the community
 - To integrate community and quaternary cancer services
 - To innovate so we evolve the delivery and payment of cancer care to a better state

Allegheny Health Network Cancer Institute Expansion

- Current construction underway or planned:
 - 1 Academic Cancer Center at AGH
 - 5 new multidisciplinary, integrated regional cancer centers at
 - Butler
 - Beaver
 - Forbes
 - Hempfield
 - Saint Vincent
 - 1 full-service hospital north of Pittsburgh
 - 4 small-scale “neighborhood hospitals”

Allegheny Health Network Cancer Institute Expansion AHN Radiation Oncology:

	2017	2018	2019
Radiation Oncologists	17	23	24
Medical Physicists	16	19	21
Medical Dosimetrists	15	18	19
Radiation Therapists	34	45	54
Residents (per year)	1	1	1 RadOnc + 1 MedPhys
IT	1	1	2
Postdoctoral researchers	0	0	2
MR scientist	0	0	1

Allegheny Health Network
Department of Oncology, Cancer Institute
David Parda MD, Chair
Don McNary, MBA, VP

AHN/HM Pre- and Post-Acute Care Divisions

System Division Radiation Oncology
Russell Fuhrer, MD
Mark Trombetta, MD

System Division Hematology, Oncology

System Division Surgical Oncology
Jonathan Lee, MD

System Division Oncology Supportive Care, Navigation – Care Coordination, Quality, Program Development
Randy Hebert, MD
David Mayernik, MD
Russell Fuhrer, MD
James Betler, DO

System Division Breast Imaging
Robin Sobelowski, MD

System Division Cancer Research and Clinical Trials
Normal Wolmark, MD
Tom Julian, MD
Gene Finley, MD
Tom Colonias, MD
Thomas Krivak, MD
Blair Jobe, MD
John Lister, MD
James McCormick, DO
James Betler, DO
Larisa Greenberg, MD

System Division Medical Oncology
Scott Long, MD, PhD
Gene Finley, MD

System Division Hematology and Cellular Therapy, Transplantation
John Lister, MD

Cancer Institute Physician Leads

Institute Chair
Dr. Parda

Physician Leads

Medical Operations Officer
Dr. Long

Patient Experience Officer
Dr. Mayernik

Quality Officer
Dr. Fuhrer

Network Outreach Officer
Dr. Trombetta

Academic Officer
Dr. Finley

Program Leads

Breast
Dr. Keleher

Lung
Dr. Finley

Esophageal/Gastric
Dr. Jobe

GI/Colorectal
Dr. McCornick

GI/Liver
Dr. Kirichenko

GI/Pancreatic Biliary
Dr. Monga

Gyn Oncology
Dr. Krivak

Hematology & Cellular
Dr. Lister

Head & Neck
Dr. Arshoun
Dr. Grennberg

Neuro Oncology
Dr. Ranjan

Prostate/GU
Dr. Mao

Skin/Melanoma
Dr. Edington

Sarcoma
Dr. Ercolano
Dr. Schiffman

Collaboration and Teaching:



The Sidney Kimmel Comprehensive Cancer Center

- Access to over 200 clinical trials
- Academic affiliation with Drexel University College of Medicine with AGH a primary clinical campus
- Radiation oncology residency & medical oncology fellowship training programs



ikm



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**Allegheny Health Network Cancer Institute
Two Story Community Cancer Center Prototype**

AHN Radiation Oncology: Existing Clinical Suite Cancer Institute

- 15 Linacs (9 Elekta, 2 Siemens, 2 Varian)
- 32 Treatment planning systems (Monaco, Elements, GammaPlan, Oncentra, VariSeed, and GammaPod TPS)
- 5 Flexitron HDR Units
- 1 Novoste Beta-Cath System for IVBT
- Radiation Oncology OIS (MOSAIQ)
- Network EMR (EPIC)

AHN Radiation Oncology: Expanding our Cancer Institute

- 6 Linacs (Elekta)
- 1 Elekta (Unity) MR Linear Accelerator
- 1 Gamma Knife
- 1 GammaPod
- 2 MR Sims (1 clinical, 1 research)
- 1 ExacTrac BrainLab/Elements

AHN Radiation Oncology: Challenges

Expanding our Cancer Institute

- **Lack of Investment**
- **Size and Geography of Network**
- **Managing Multiple, Disparate Affiliations**
 - **Owned and Affiliated Cancer Centers**
 - **Hospitals**
 - **Different Organizations**
- **Multiple Projects Happening Simultaneously**
- **Two EMR Systems**

AHN Radiation Oncology: Solutions to Challenges

- **Lack of Investment**
 - Moved from Operational Turnaround to Transforming Care in the Region
 - \$280 Million Investment in the Cancer Institute
 - Highmark Parent Company is a \$17.7 Billion Business

AHN Radiation Oncology: Solutions to Challenges

- **Size and Geography of Network**
 - Standardization of Processes, Policies, Procedures
 - 120 Care plans
 - 800+ IQ Scripts
 - EMR Technology
 - EPIC “Record of Clinical Truth”
 - MOSAIQ “Record of Radiation Truth”
 - Packaged vendor solutions to equipment platforms
 - Accelerator Platform Expandable
 - Previous Radiation EMR work not lost

AHN Radiation Oncology: Solutions to Challenges

- **Managing Multiple, Disparate Affiliations**
 - Owned and Affiliated Cancer Centers
 - Hospitals
 - Different Organizations
 - Building the AHN Cancer Institute, our programmatic backbone, regardless of affiliation
 - System Administration Support of Institute Model
 - Creating Proper Management and Functional Teams

AHN Radiation Oncology: Solutions to Challenges

- **Creating Proper Management and Functional Teams**
 - Service Line Director, Physician Division Directors, and Physics Chief
 - Responsible for oversight of all staff, programs, and sites within each service division
 - Site Physician Medical Directors, Administrative Directors, and System Managers
 - Responsible for each site or functional section within the system
 - Regional Practice Managers
 - Responsible for a specific site
 - Senior Leads/Coordinators/Regional Leads
 - Responsible for leading specific sections, based upon job type and/or geographic region

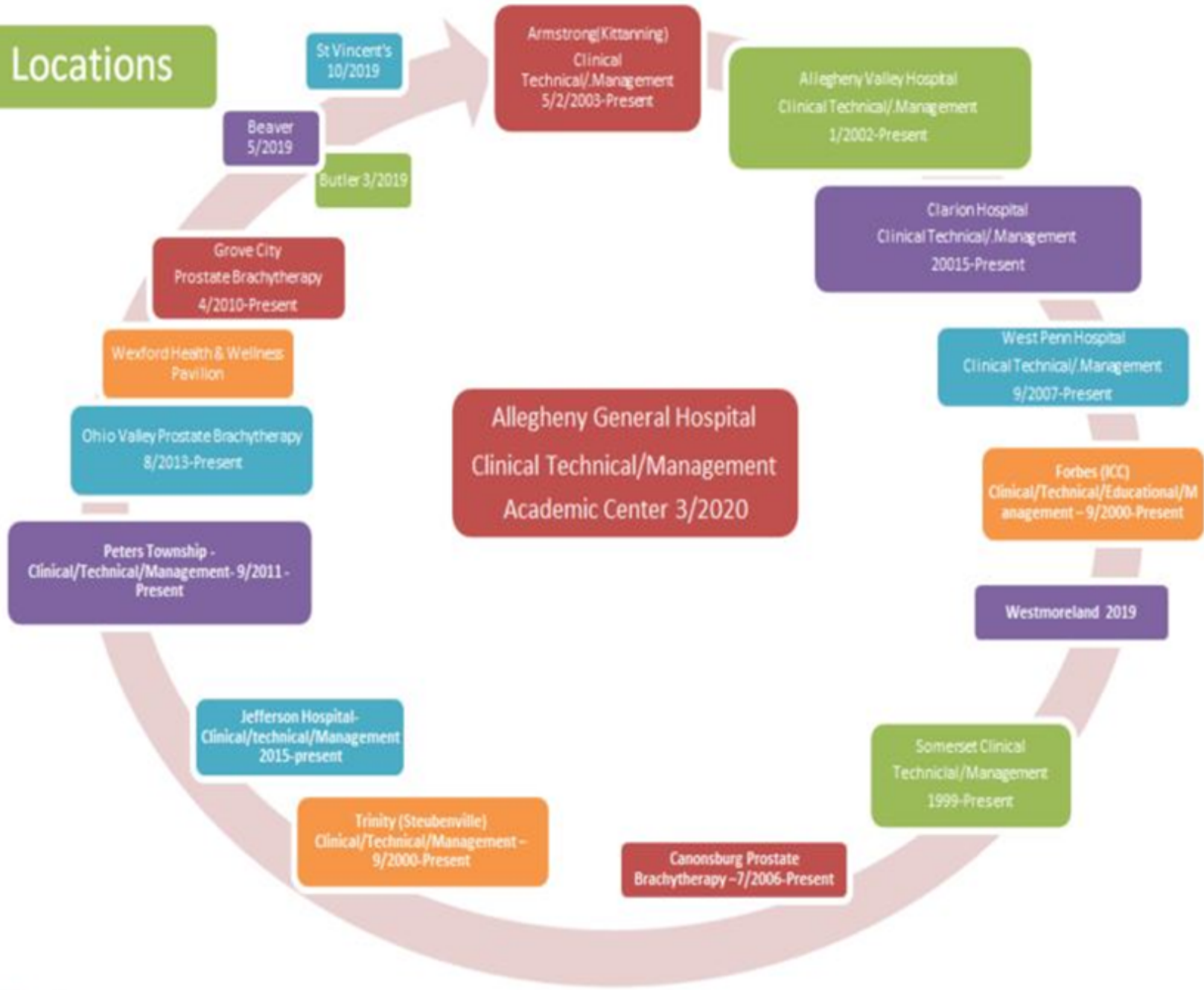
AHN Radiation Oncology: Solutions to Challenges

- **Multiple Projects Happening Simultaneously**
 - Establish Good Vendor Relationships
 - Annual assessment of our direction and our collaborative partners
 - Monthly touch point meetings to organize all on-going activity
 - Leverage Management Structure to Maximize Meeting Presence
 - Don't try to control everything
 - Trust your team and partners
 - Know there will be bumps in the road
 - Patience is necessary

AHN Radiation Oncology: Solutions to Challenges

- **2 EMRs: Understand EPIC ↔ MOSAIQ Mapping**
 - **System Inpatient/Ambulatory**
 - **Hospital/Satellite**
 - **AHN/Non-AHN**

Locations





MOSAIQ OIS teams with Epic to focus on radiation oncology workflows

The integration of an enterprise-wide EMR with the radiation oncology department OIS can be a daunting task. However, staff at Jefferson Health System's radiation oncology department (Philadelphia, Pennsylvania) rose to the challenge, collaborating with both Elekta and Epic personnel to ease the transition, facilitating a successful MOSAIQ-Epic integration. The results are a 30 percent decrease in paper use, dramatic reduction in phoned-in information requests and improved MOSAIQ workflows...

[READ MORE](#) 



Care plans and MOSAIQ IQ Scripts bring new order to organization's RT workflows

Improved standardization and organization are possible when adding automation to many processes, including the radiotherapy workflow. The staff at Allegheny Health Network (AHN, Pittsburgh, Pennsylvania) set about to implement care plans and MOSAIQ IQ Scripts. Today, more than a year into its care plan/MOSAIQ IQ Scripts environment, AHN is reaping major efficiency and financial benefits...

[READ MORE](#) 

AHN Radiation Oncology: Solutions to Challenges

- **Compromise: There Is Not One Perfect Solution**
 - EPIC “Record of Clinical Truth”
 - MOSAIQ “Record of Radiation Truth”

AHN Radiation Oncology: Solutions to Challenges

- **Interfaces are necessary and important for workflow**
 - **ADT interface EPIC to MOSAIQ**
 - Initial Consults start the patient journey in EPIC
 - **Bi-directional Scheduling capability**
 - Initial Consults in EPIC to auto-populate demographics in MOSAIQ via ADT interface
 - **Documents Interface**
 - Consult and Follow up documents moved to MOSAIQ from EPIC
 - **Billing/Ancillary Results Interface**
 - Moves radiation tx info to EPIC
 - Tx Charges to EPIC via ADT

AHN Radiation Oncology: EMR Future

- AHN as Elekta EPIC ↔ MOSAIQ Resource
 - Continued refinement
- Early-Adopter Vendor Solutions
- Structured Data Extraction
- Personalized Medicine Innovator

AHN and the Cancer Institute Expansion

Managing and Expanding a Large Radiation Oncology Network Conclusions

- **Our team does this work for patients, and that is our focus**
- **Our 3-Year Expansion is being done rapidly and on a large scale**
- **It requires a great team, structure, and support**
- **Relationships are paramount between owned, affiliated, and vendor partners**
- **Understand necessary compromise v. forced acceptance of poor solutions**
- **Have patience, and know the process is not perfect**

Collaborative and Collegial Teamwork Improves Healthcare Outcomes, Experience, and Value



Thank You