

Penn Medicine
Lancaster General Health

Incorporating Integrated Diagnostics into Precision Oncology

Session 6: Community-Based Settings of Care

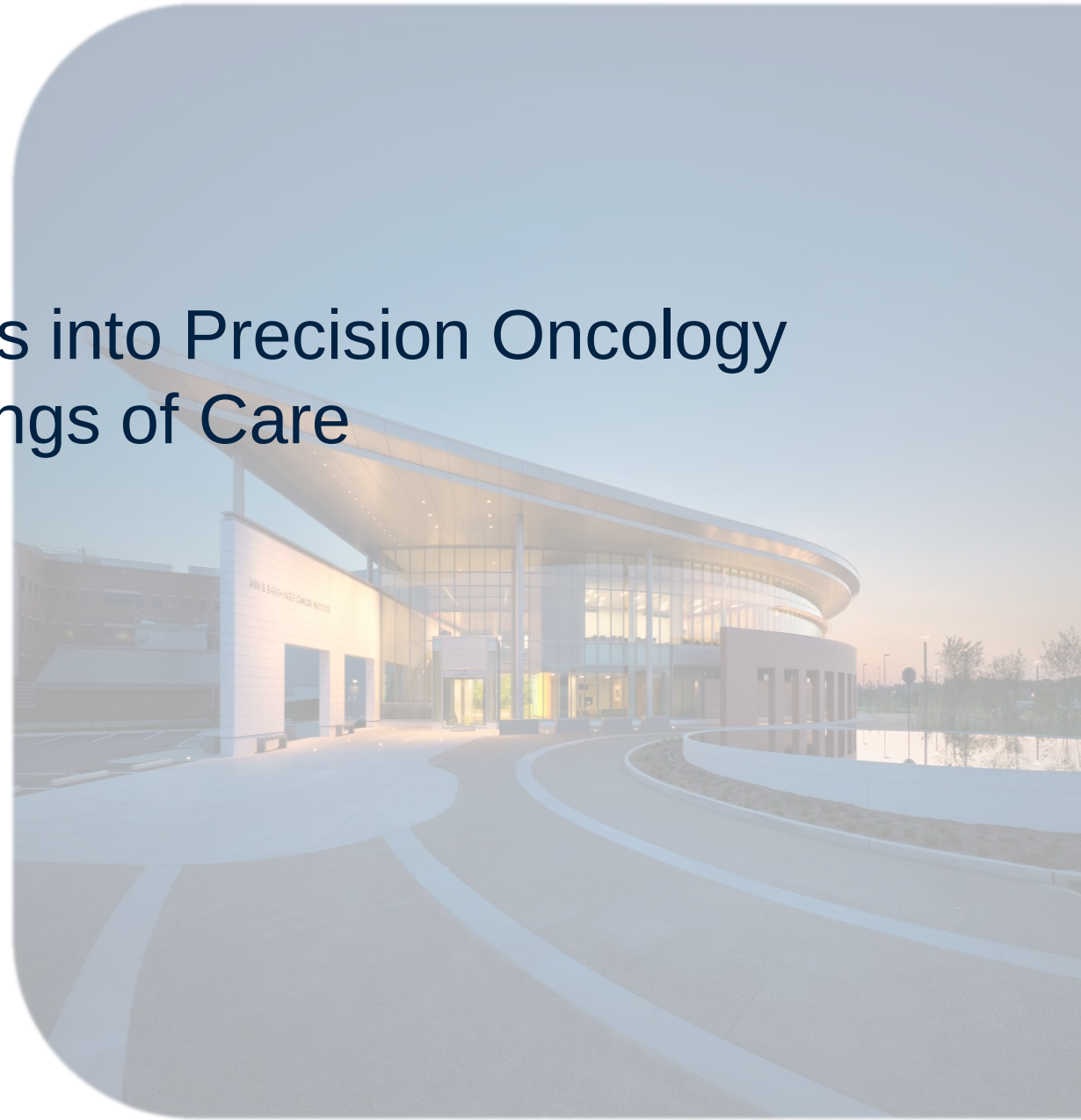
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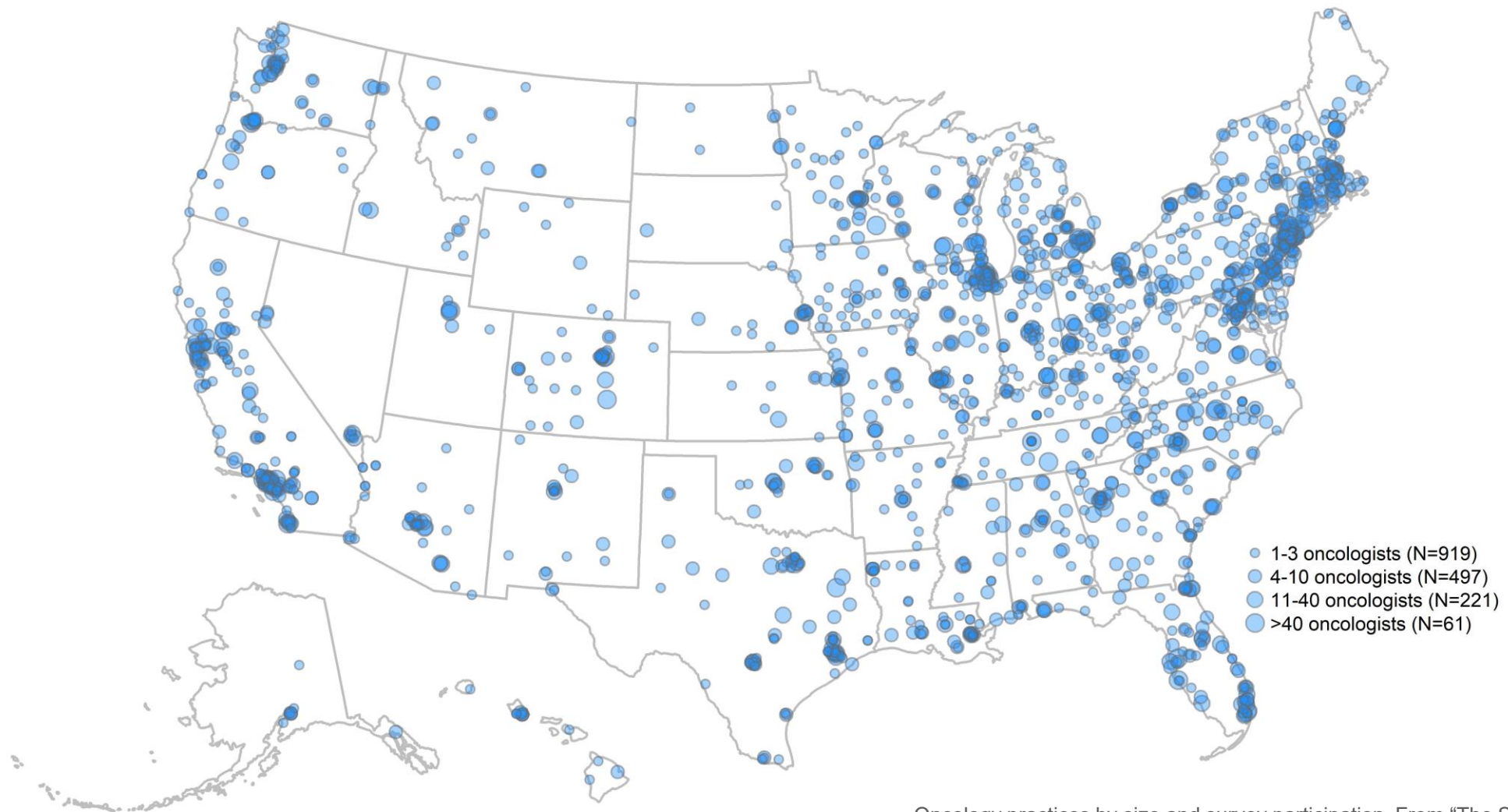
University of Pennsylvania Health System

March 7, 2023





NCI-Designated Cancer Centers. National Cancer Institute.
<https://www.cancer.gov/research/infrastructure/cancer-centers/find>



Oncology practices by size and survey participation. From “The State of Oncology Practice in America, 2018: Results of the ASCO Practice Census Survey” by M. K. Kirkwood, A. Hanley, S.S. Bruinooge, E. Garrett-Mayer, L.A. Levit, C. Schenkel, J.E. Seid, B.N. Polite, and R.L. Schilsky, 2018, *Journal of Oncology Practice*, 14:7, e412-e420



Settings of Cancer Care in the U.S.

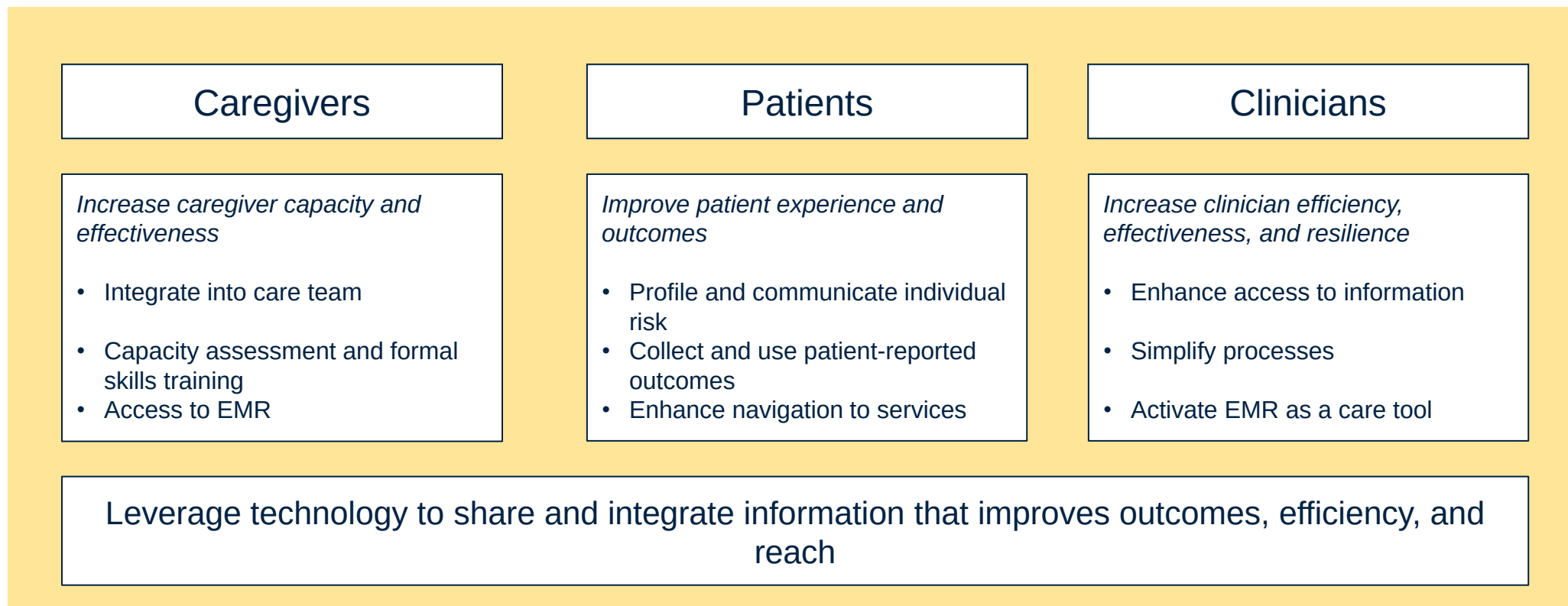
	ACADEMIC/RESEARCH	COMMUNITY PRACTICE	SMALL / PRIVATE	GOVERNMENT
MISSION	• Cure • Research • Teaching • Patient care	• Population health • Patient care	• Patient care • Financial stability	• Total care for beneficiaries
SERVICES (Majority)	• Clinical trials • Cancer care • Technology	• Cancer care spectrum • Clinical trials	• Medical oncology	• Basic cancer care
WORKFORCE	• Basic & clinical researchers	• Oncology clinicians	• Medical oncologists	• Oncology clinicians
PATIENTS	• Ability to travel • Activated	• Entire spectrum	• Privately insured	• Government benefit / insurance
HIGHLIGHTS	• Super specialized cutting-edge care	• Continuum of care close to home	• Familiar doctor-patient relationship	• Defined benefits
LIMITATIONS	• Distance • Capacity • Timeliness	• Depth of specialization • Availability of clinical trials	• Specialties beyond medical oncology • Availability of clinical trials	• Timeliness • Availability of services

The Challenge...

- ▶ It is estimated that <15% of research is translated into practice, and the mean time lag required to translate research into practice is 17 years
 - Dissemination of knowledge
 - Training of practitioners
 - Translation across organizations
 - Operationalization within locations

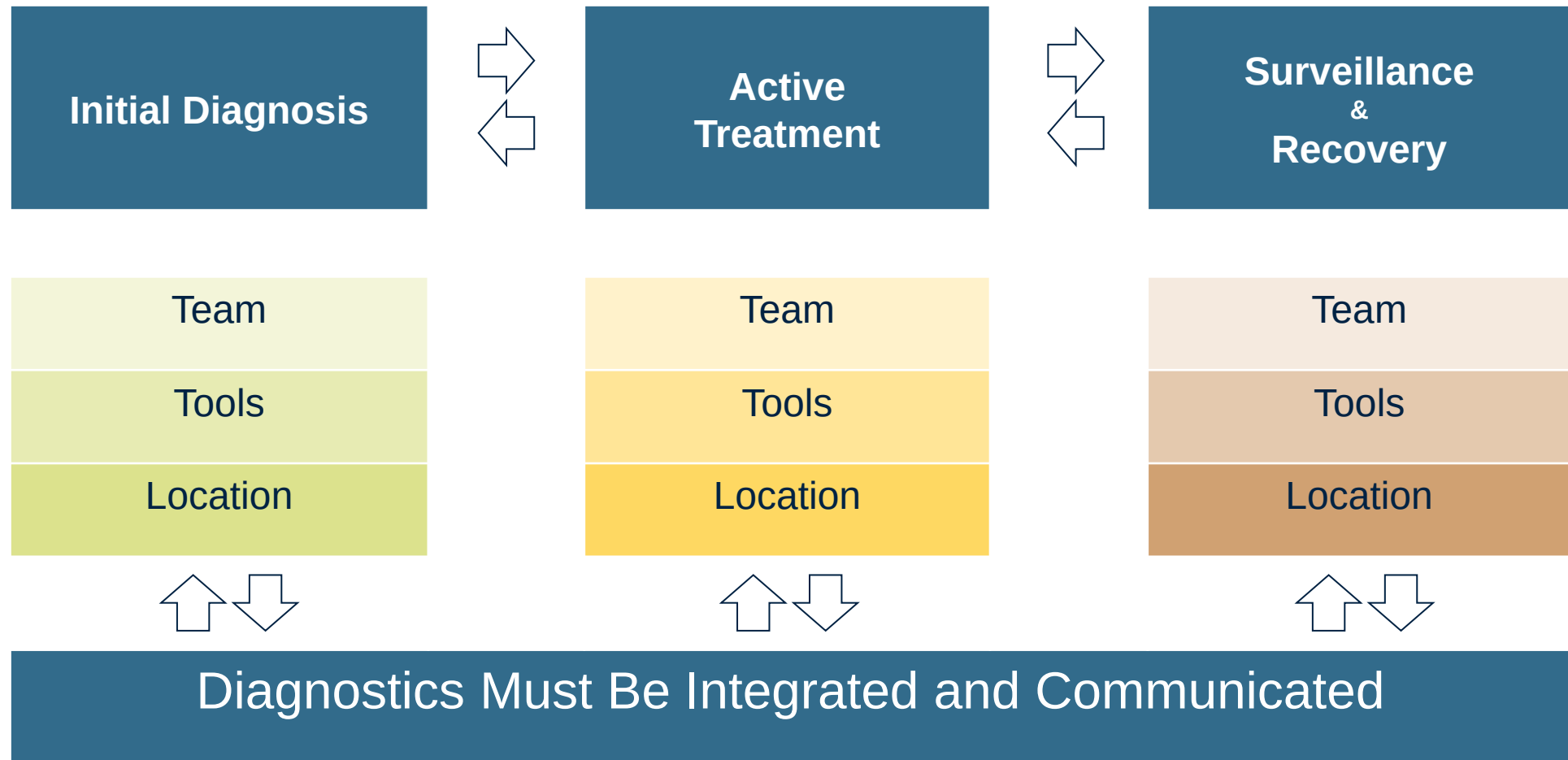
Jan Trøst Jørgensen. (2020) Companion and complementary diagnostics: an important treatment decision tool in precision medicine. Expert Review of Molecular Diagnostics 20:6, pages 557-559.

The Challenge of the Complex Cancer Careforce



Adapted from Takvorian SU, Balogh E, Nass S, Valentin VL, Hoffman-Hogg L, Oyer RA, Meropol NJ, Sheldon LK, Shulman LN. Developing and sustaining an effective and resilient oncology careforce: Opportunities for action. J Natl Cancer Inst. 2019. PMID: 31868912.

The Challenge of the Continuum of Oncology Care



► To activate integrated diagnostics in community settings

- Networks of care must share competence and collaboration across locations
- Infrastructure must be built for cancer imaging networks to share expertise
- Reports to clinicians must be timely, understandable, and useable in the clinic and at the bedside
- Integrated diagnostic reports must be seamlessly incorporated into the EMR and automatically interfaced with widely available and widely used cancer care guidelines
- We must all do our part to build knowledge by collecting and sharing patient data, creating a data bank similar to the collection of tissue for a tissue bank

Recommendations from the Community Perspective

Equitable access to precision diagnosis and clinical trials that improve outcomes for every cancer patient in every community

Recommitment of Congress and NCI to establish hub and spoke delivery regions

Congressional mandate for EHR interoperability using minimum common oncology data elements (mCODE)

Expand the capacity and representativeness of the oncology workforce including diagnosticians

Adapted from Gluck, A. R., Fuchs, C. S., Rusyn, E., Mukherjee, S., Oyer, R. A., Aakhus, E. O., Yabroff, K. R., Benz, E. J., McAneny, B., Nguyen, M. K., Brawley, O. W., Polite, B. N., Wiley, L. F., Irwin, M. L., Friedman, A. S., Deziel, N. C., M., N. L., Goodman, N., Lansing, S., ... Golden, R. A. (2021). A View from the Ground: The Changing Landscape of Cancer Care. In A New Deal for Cancer: Lessons from a 50 year war. essay, Public Affairs.



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