FRED HUTCH HICOR

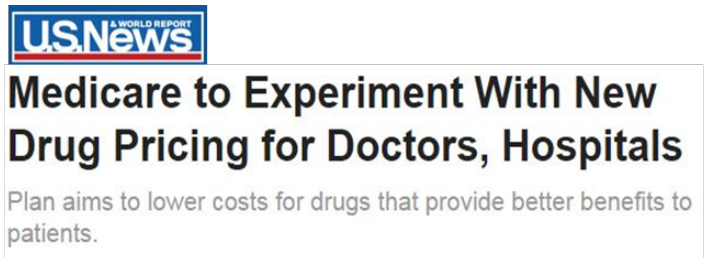
IMPROVING VALUE IN CANCER CARE: A REGIONAL EXPERIMENT

Scott Ramsey, MD, MPH
HICOR Director

Gary H. Lyman, MD, MPH, FASCO
HICOR CO-Director

Value in Cancer Care

A National Conversation



Institute of Medicine 2013

Delivering High Quality Cancer Care

....to advance high-quality cancer care, measure and assess progress in improving the delivery of cancer care, encourage public reporting of information gathered, and to develop innovative strategies to facilitate performance improvement.

Value in Cancer Care: Conceptual basis

- Health Outcome Achieved per Dollar Spent
- A multidimensional concept that considers returns for expenditure

"Price is what you pay; Value is what you get."
- Warren Buffett

Why is value a priority?

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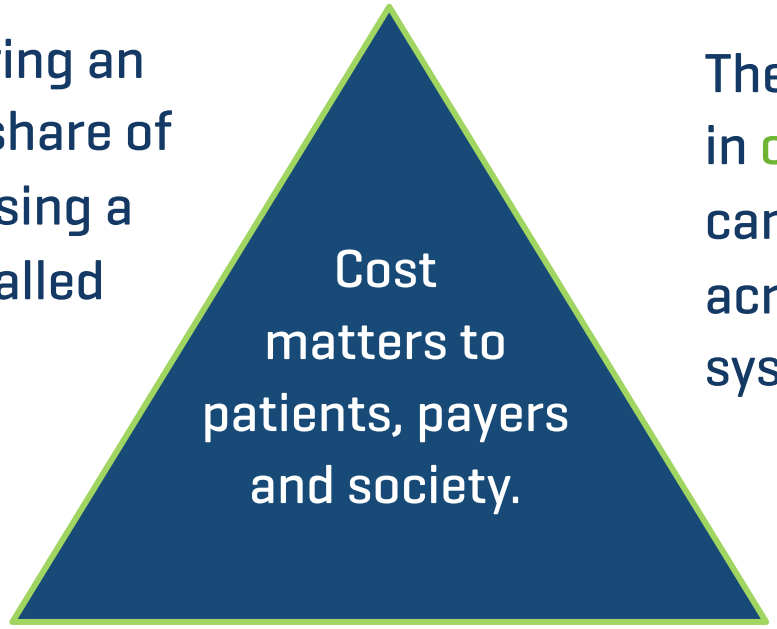
Patients are bearing an ever-increasing share of the expense, causing a new side effect called financial toxicity



There's great variability in cost and quality of cancer treatments across the health care system

Cost affects access to care, treatment decisions, and patient outcomes

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Mission

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CURES START HERE

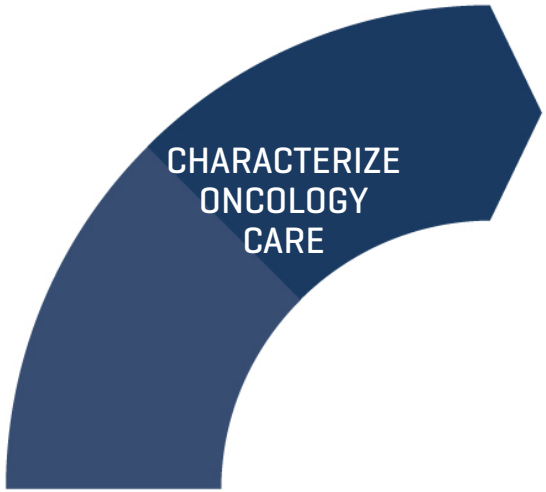
Eliminate cancer and related diseases as causes of human suffering and death.

HICOR
Hutchinson Institute for Cancer Outcomes Research

Improve the effectiveness of cancer prevention, early detection and treatment services provided to patients in ways that reduce the economic and human burden of cancer.

How we work

- Treatment patterns
- Guideline adherence
- Utilization
- Cost
- Survival
- Benchmarking relative to region



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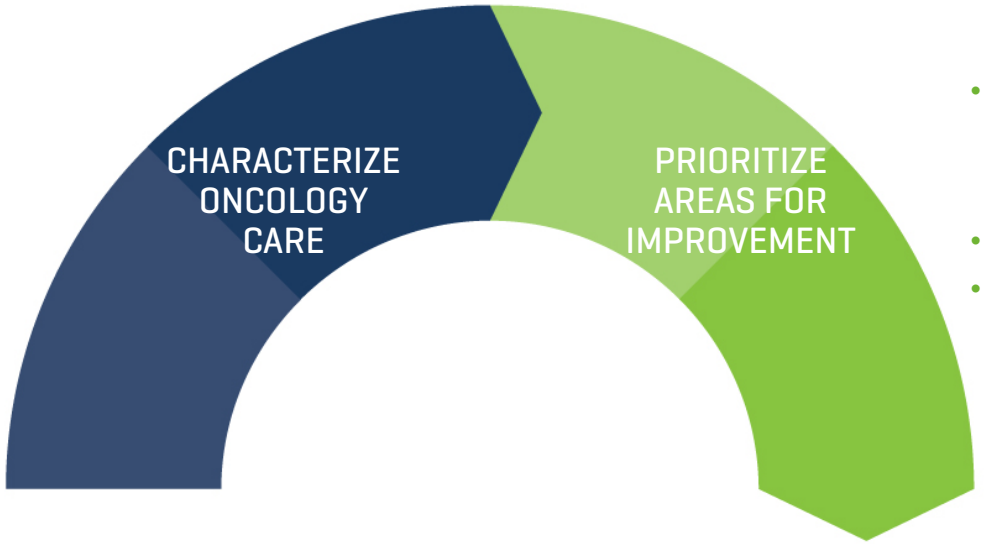

- High variation in well defined treatment settings
- Low-value care
- Poor patient outcomes

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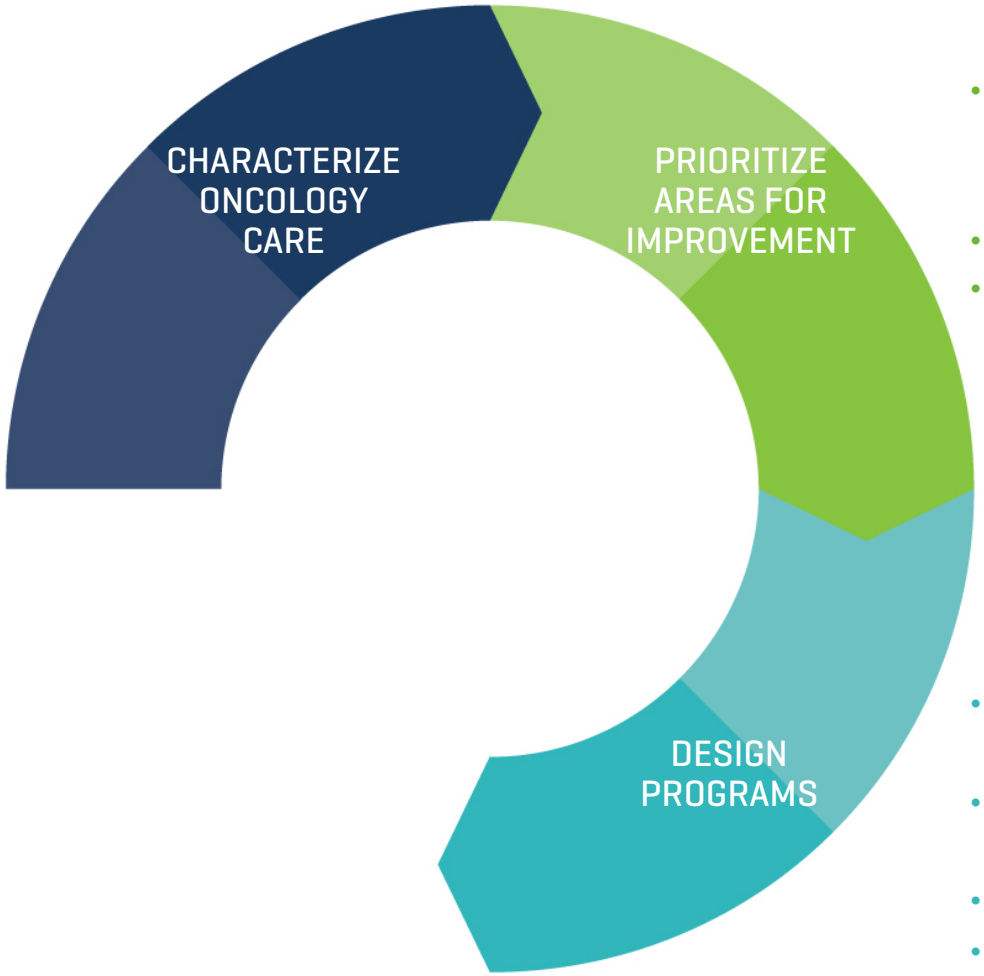

- High variation in well defined treatment settings
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- Provider & patient behavior change
- Delivery system process change
- Financing models
- Incentives

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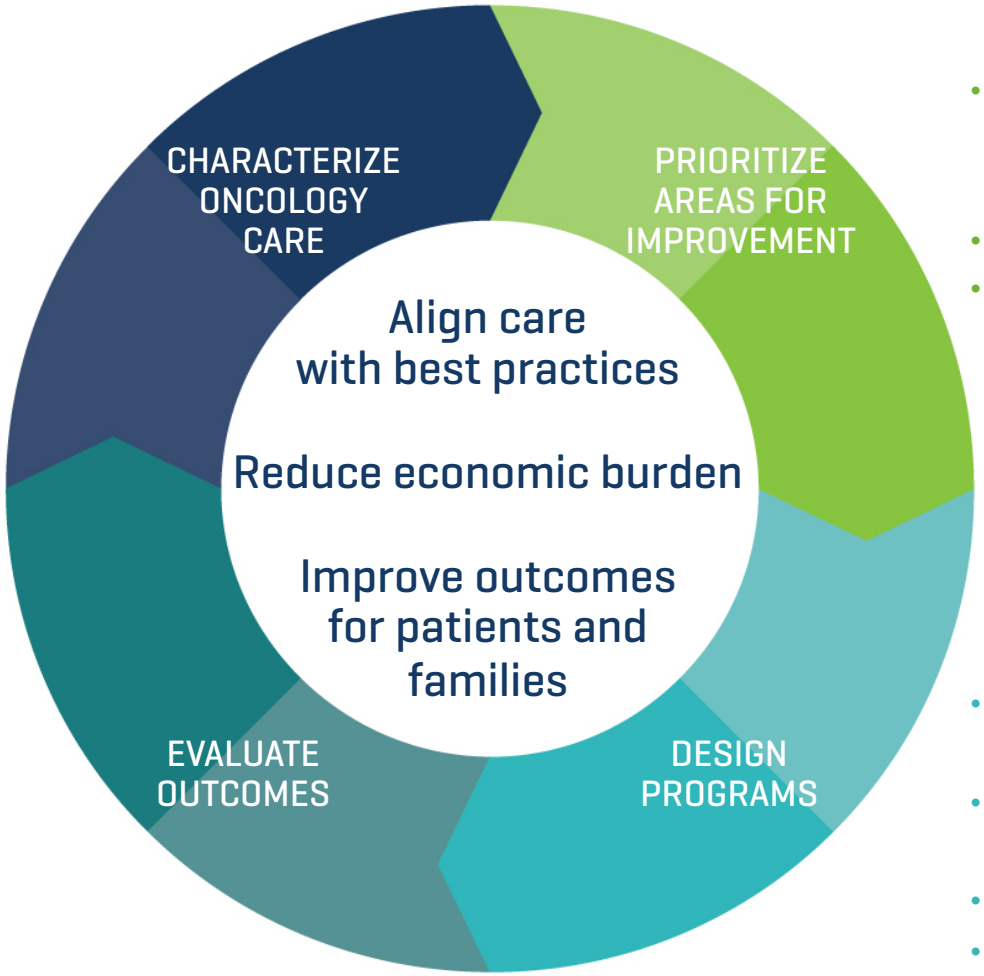

- High variation in well defined treatment settings
- Low-value care
- Poor patient outcomes

- Evaluate expected change in practice patterns, patient outcomes, costs, and value

- Provider & patient behavior change
- Delivery system process change
- Financing models
- Incentives

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Process for success

Build a regional **consortium of stakeholders** invested in improving value in cancer care

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Support a regional **learning cancer care system**

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Drive **value concepts** into the process

Facilitate **community-based research** to learn what works

Embed **transparency** into all aspects

National and regional efforts to enhance each other

NATIONAL EFFORTS

Value in Cancer Care Task Force

National and International recognition and credibility

Interaction with high level policy makers and supporters

Dissemination of evidence

REGIONAL EFFORTS

HICOR Value in Cancer Care Initiative

National and regional efforts to enhance each other

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Operationalize goals

Ground level, grassroots, granularity of implementation

Development and testing of scalable implementation models

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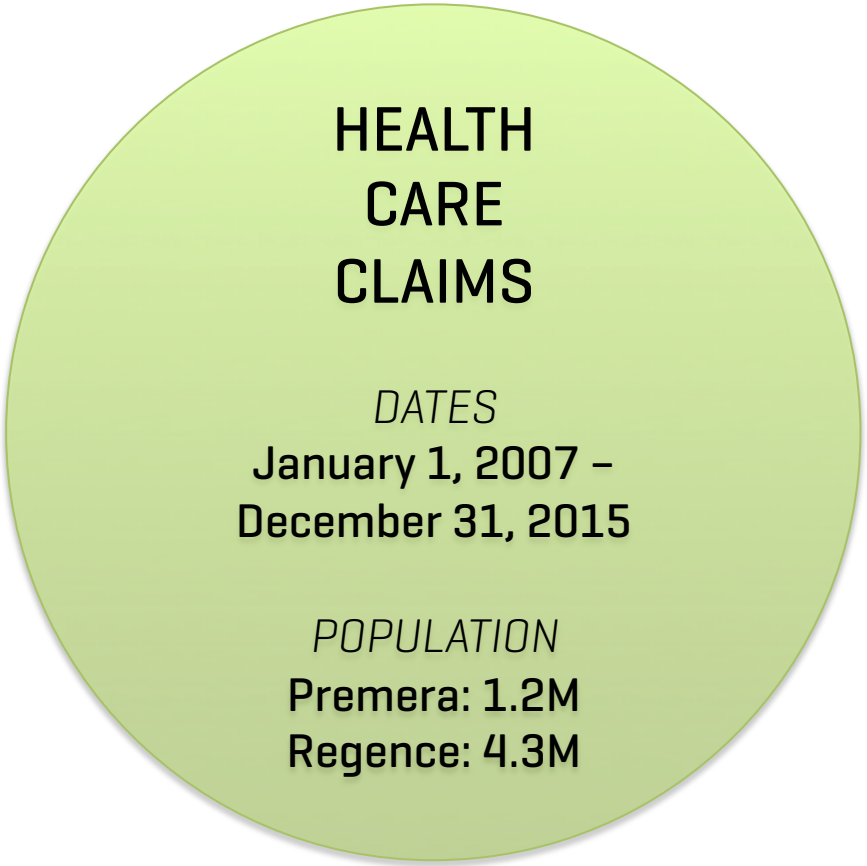
Regional leadership

Opportunity to drive change

Linking Data Sources

The Database



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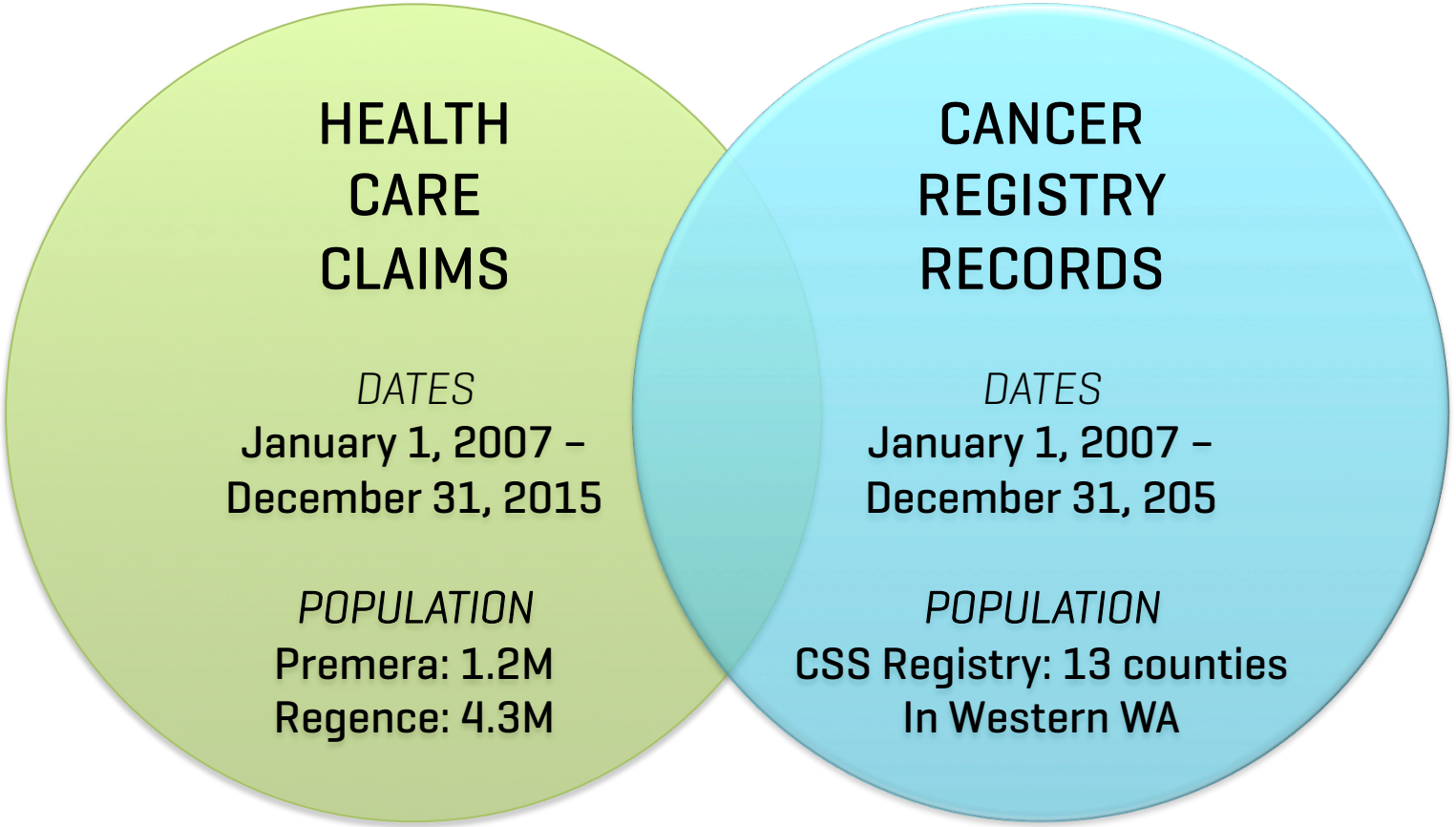

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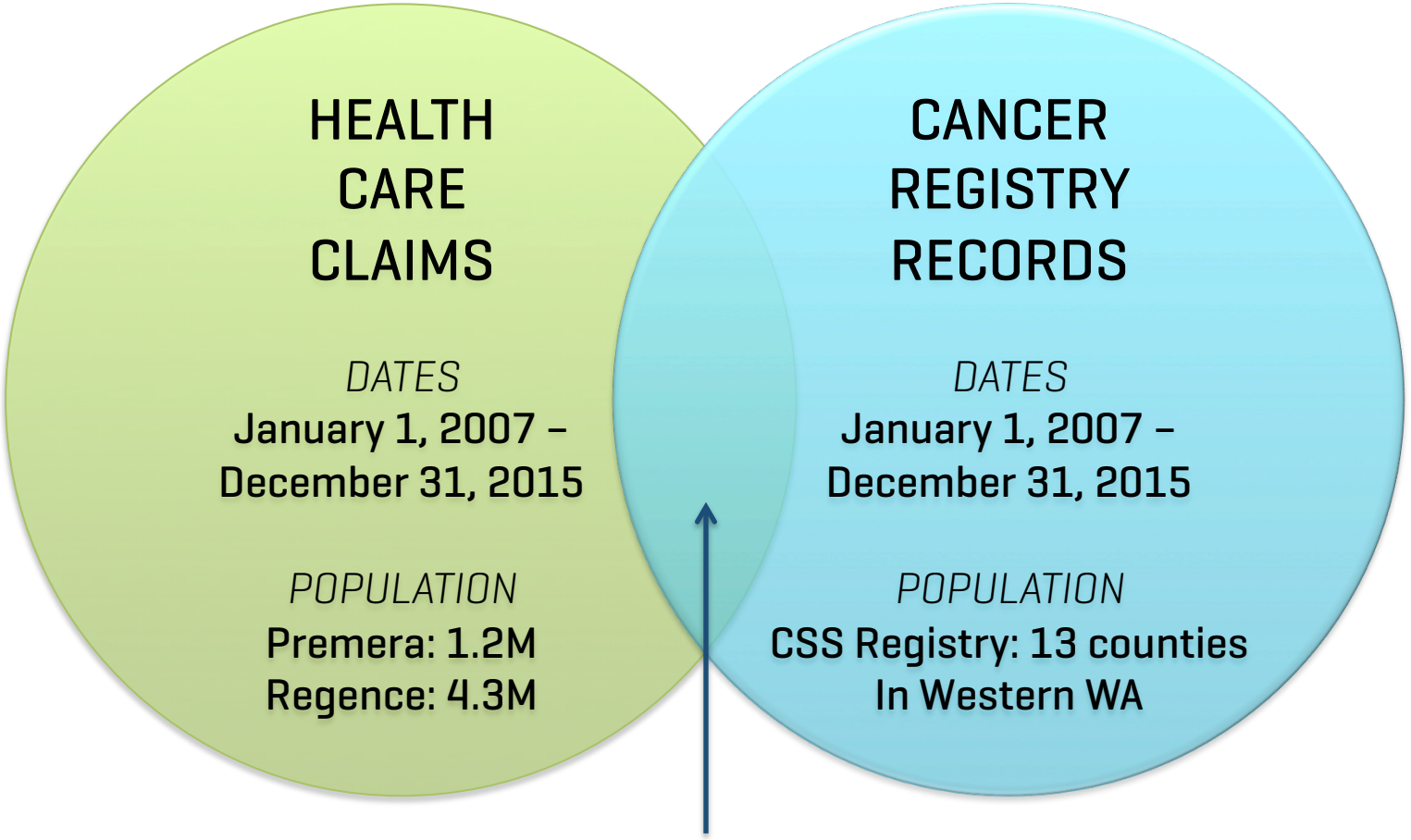


66,000+ cancer patients **linked** between the two data sources

Almost **25,000** patients enrolled at time of diagnosis

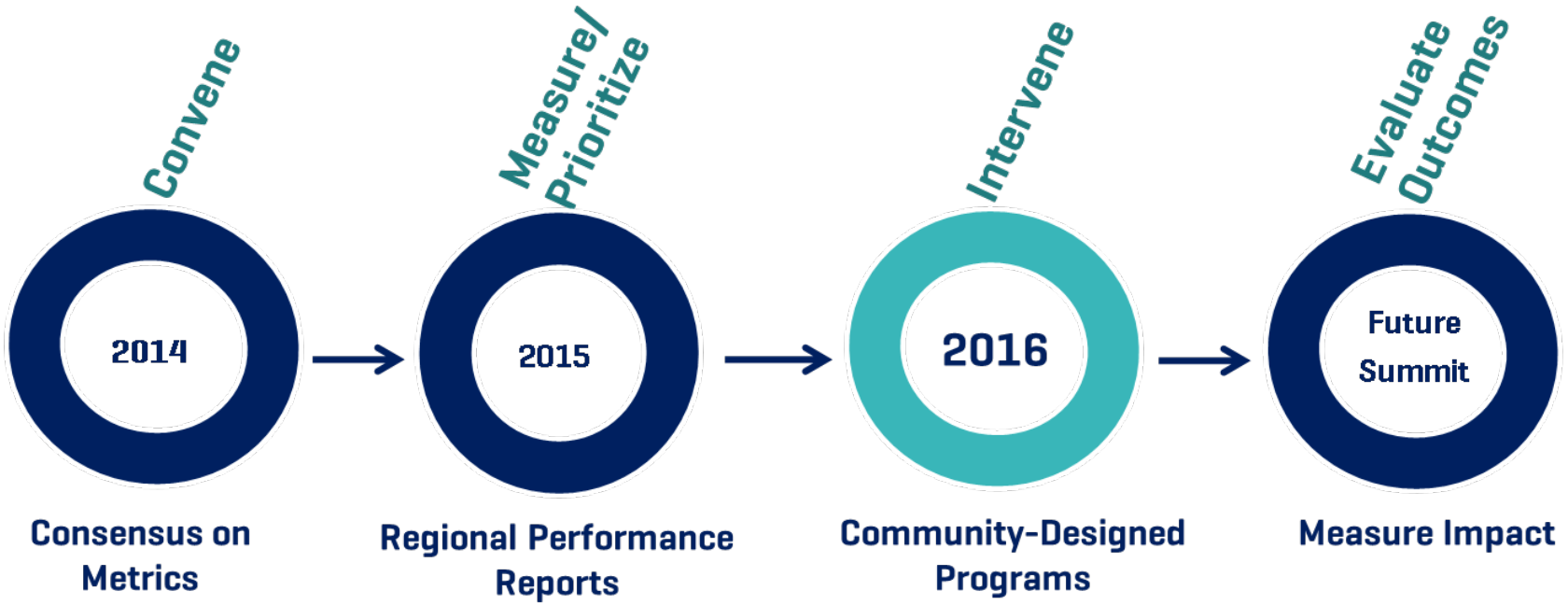
Value in Cancer Care Summit

HICOR at FRED HUTCH

A forum for individuals from across the healthcare spectrum to convene and collaborate on ways to improve the value in cancer care

Value in Cancer Care Summits

HICOR at FRED HUTCH



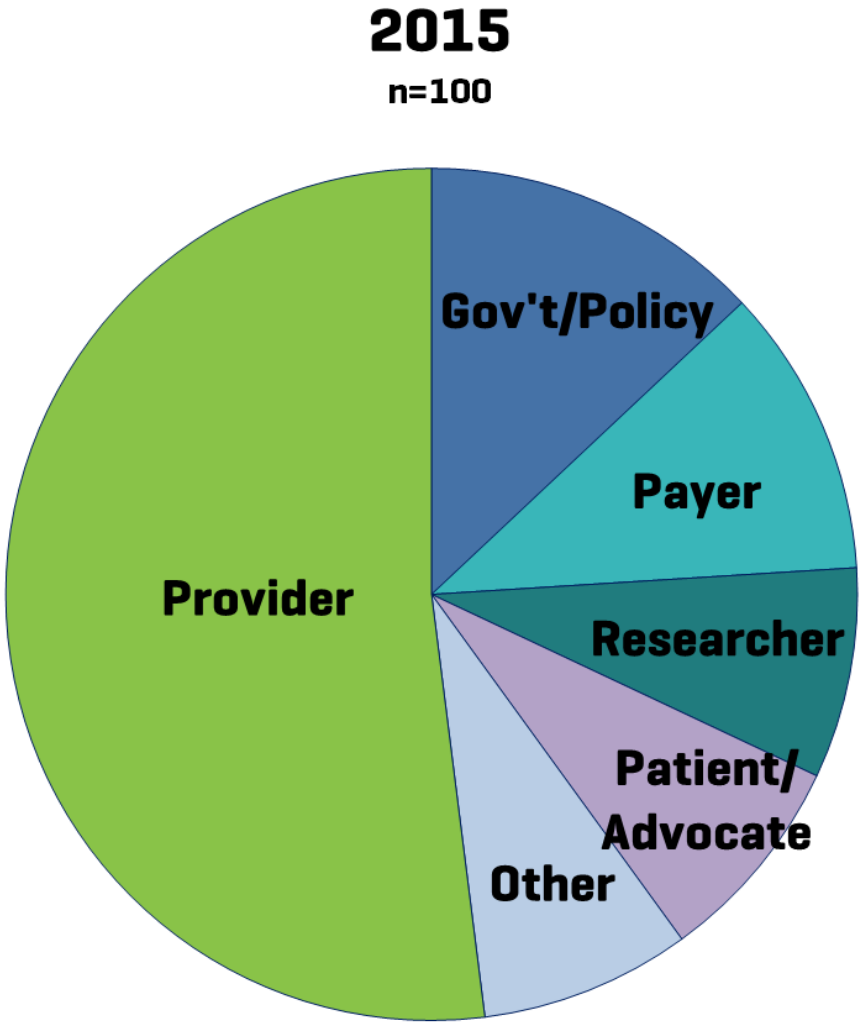
Collaborate across traditional boundaries

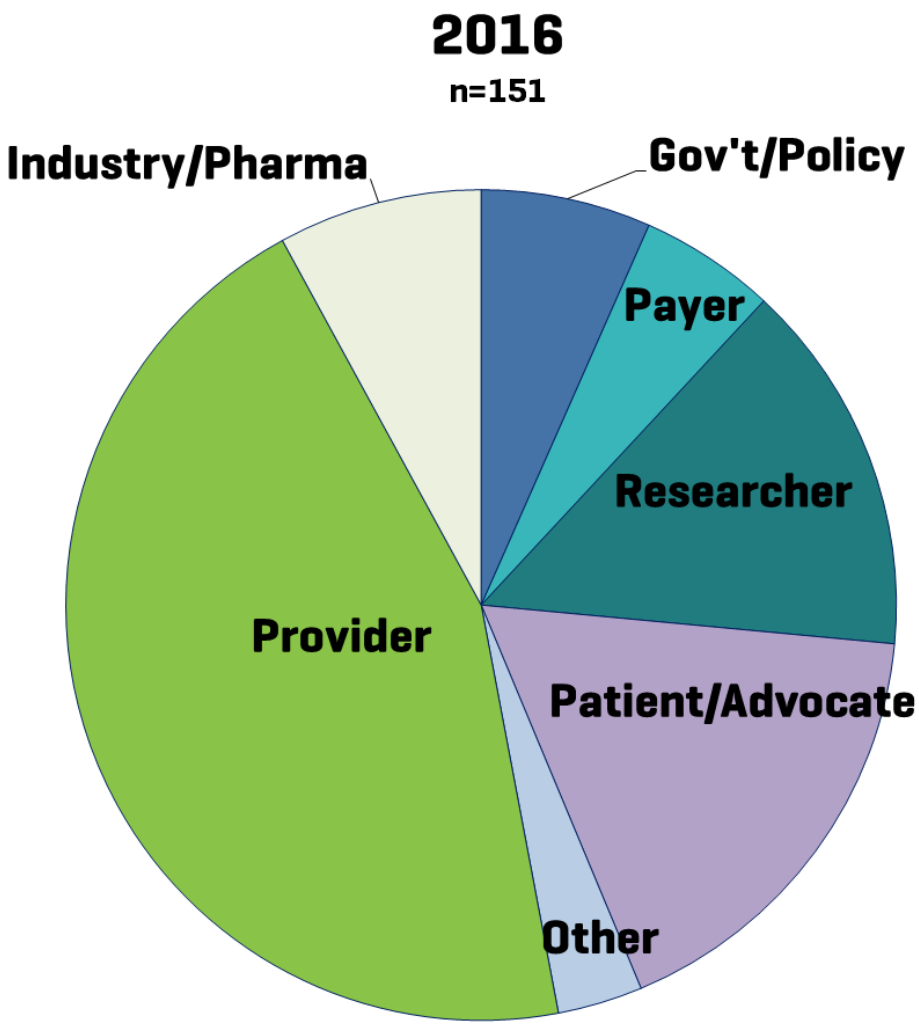
Assemble transparent and actionable **data portfolio**

Develop shared solutions to common challenges

Value in Cancer Care Summit

Our Stakeholder Community





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VALUE IN CANCER CARE SUMMIT / 2014

CONSENSUS METRICS

How we generated our metrics

JANUARY 2014: VCC Summit

Brainstorm, prioritize & build consensus around areas of interest & metrics

MAY 2014: Town Hall

Broad community input to refine metrics

FALL 2014: DATA

Pilot data collection and reporting;
Data integration and report generation

MARCH 2015: VCC Summit

Reporting & community review
Discuss opportunities for improvement

Metric Domains Across Phases of Care

Diagnosis

Prostate:
Advanced imaging for staging [*Choosing Wisely*]

Breast:
Advanced imaging for staging [*Choosing Wisely*]

Treatment

Colony Stimulating Factor (CSF) use [*Choosing Wisely*]

Hospital use during chemotherapy or radiation therapy

Hospital use following surgery

Continuing Care

Breast: Advanced imaging and tumor marker testing in surveillance [*Choosing Wisely*]

End-of-Life

Use of:
- Chemo/Radiation
- Advanced imaging
- Hospital use
- Hospice use

Place of death

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VALUE IN CANCER CARE SUMMIT / 2015

ONCOLOGY METRIC REPORTING

Technical Overview

Metric development

Pragmatic interpretation

Algorithm development

Measurement in claims-registry linked database

Technical Overview

Metric development

Pragmatic interpretation

Algorithm development

Measurement in claims-registry linked database

Preliminary provider review

Clinical & expert review

Technical Overview

Metric development

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Algorithm development

Measurement in claims-registry linked database

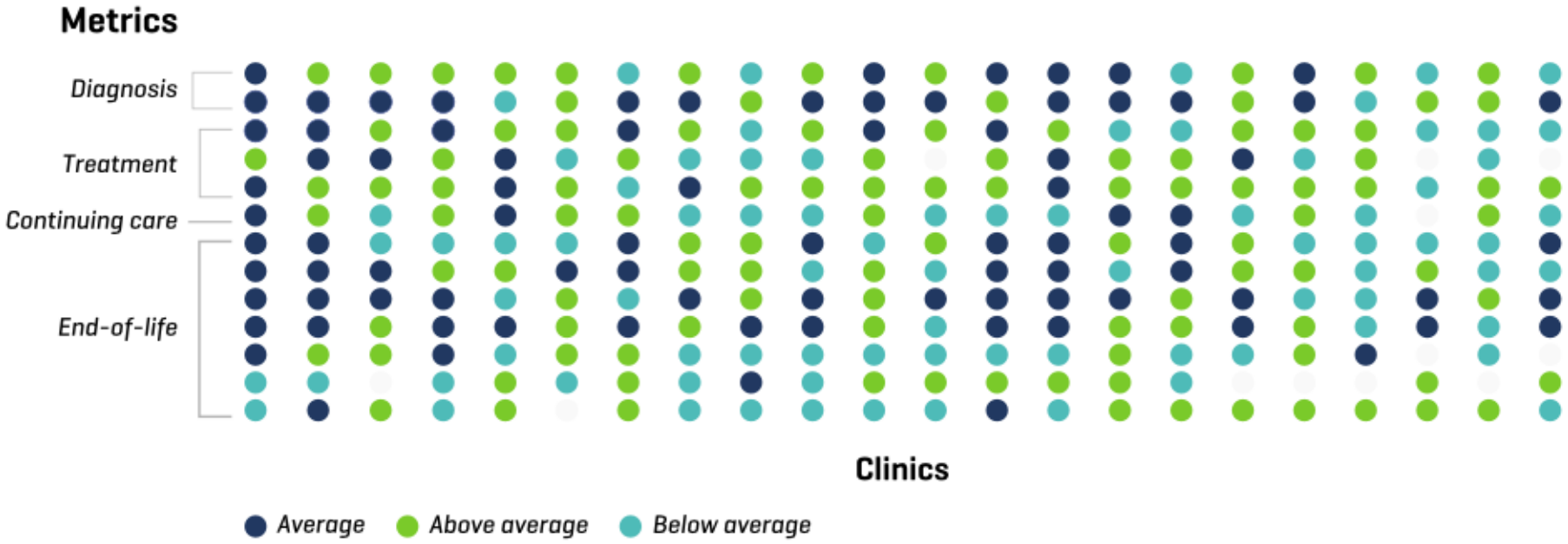
Preliminary provider review

Clinical & expert review

Reporting for stakeholder review

Opportunity to learn from each other

Across 13 separate metrics, no one clinic was consistently above average or below average in all areas



Note: Clinics defined as average are those that fall within + or - 3 % points of the regional average.

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VALUE IN CANCER CARE SUMMIT / 2014

Interventions

Results:

Treatment Phase

Regional results for metrics from the treatment phase

Hospital inpatient admissions during chemo or radiation therapy

Emergency department visits during chemo or radiation therapy

Hospital inpatient admissions following surgery

Emergency department visits following surgery

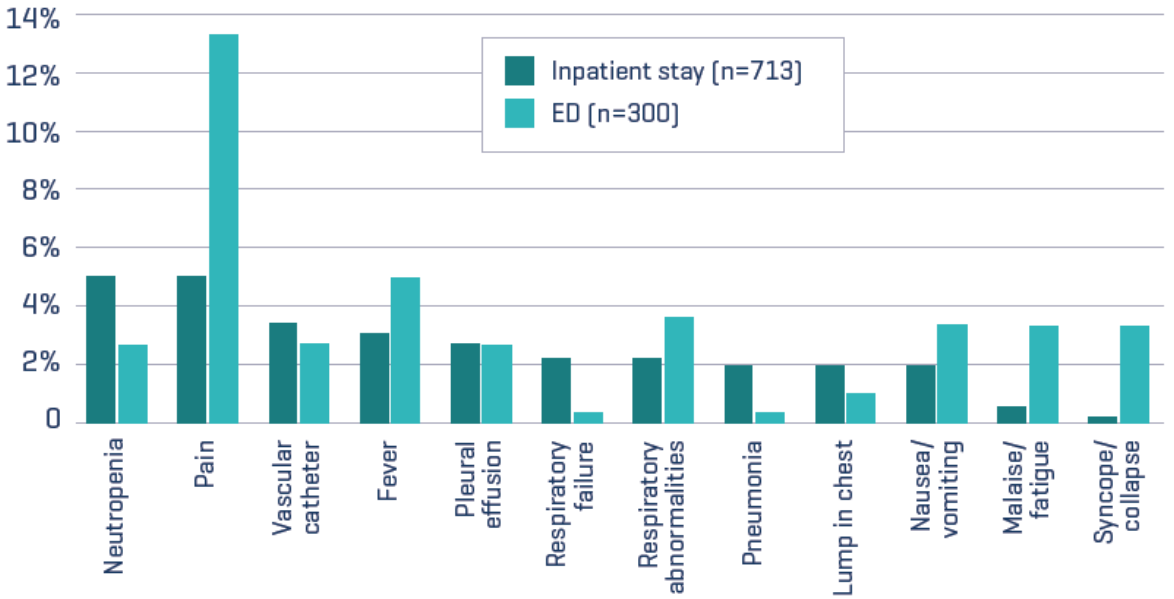
Intervention Working Group Process

The working group met over teleconference for several months prior to the 2016 Value Summit

Unplanned ED/Hospital Intervention Working Group: Data Review

Based on HICOR data, some of the most frequent diagnoses during inpatient and ED visits may be preventable.

Most Frequent Non-Cancer Diagnosis Codes 90 Days Post Chemo/Radiation Initiation



Initial Analysis:

N=Unique non-cancer diagnosis codes recorded during an inpatient stay or emergency department visit 90 days from treatment initiation

Sample=4,473 Patients; 12% had an Inpatient stay; 11% had an Emergency Department visit

Interventions to Reduce Unplanned ED/ Hospital Visits:

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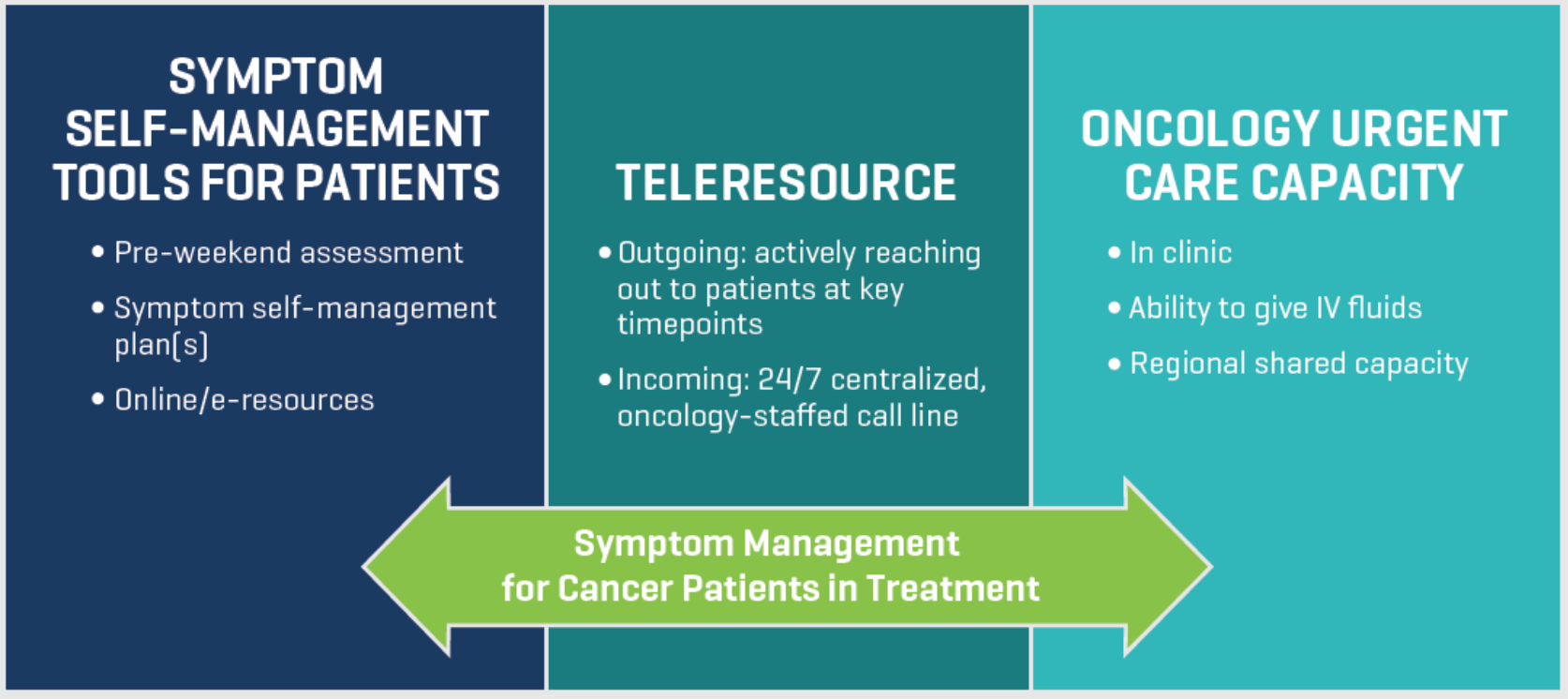


Clinics can develop one or more of these tools, based on clinic resources, to help patients with common symptoms related to cancer treatment find suitable care.

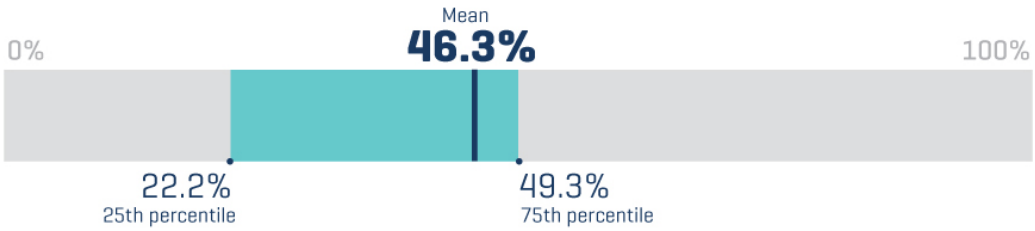
The tools are placed in order of ease of implementation.

Results:

Continuing Care Phase

Regional results for metrics from the continuing care phase

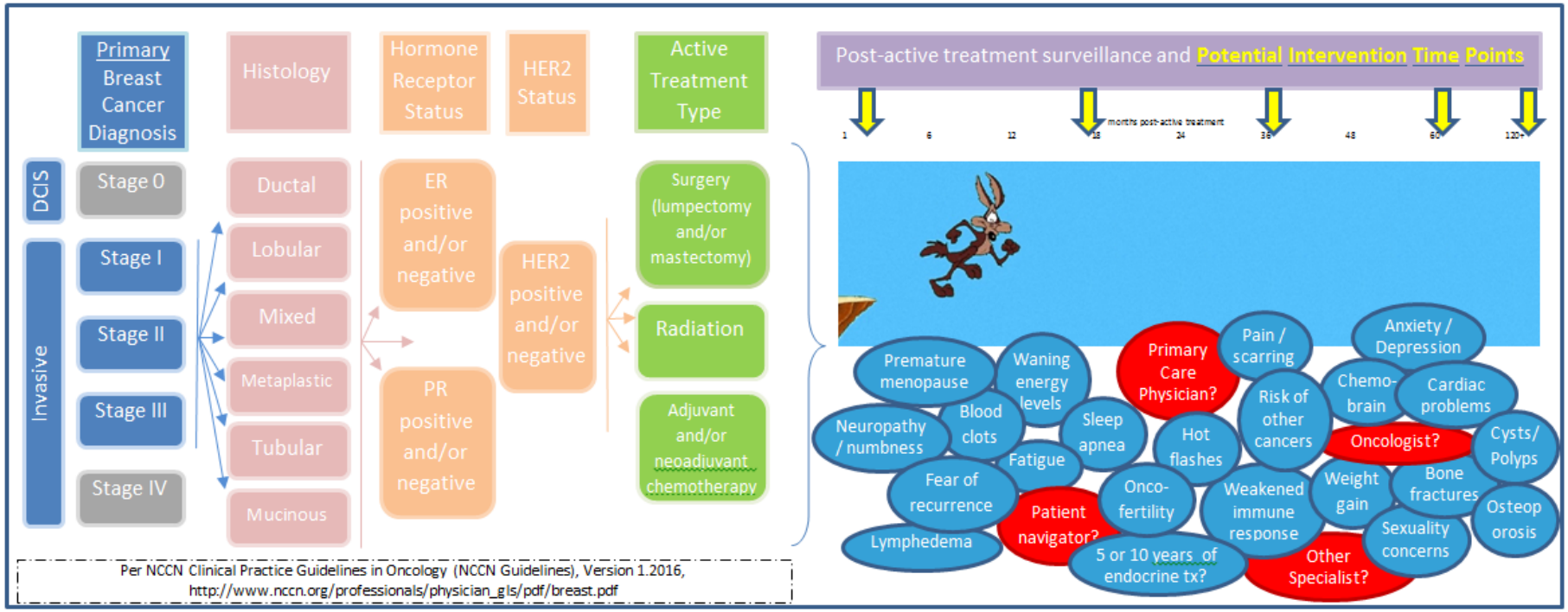
Use of advanced imaging* and tumor marker testing** for early stage breast cancer patients who have been treated with curative intent



*Advanced imaging = PET, CT, or radionuclide bone scans

** Tumor marker testing: CEA, CA15-3, and CA27.29

Patient Perspective on Post-Active Treatment:



From order (to dis-order)

Patient Perspective on Post-Active Treatment:

"To the patient, the body has become a mystery of weird symptoms and changes … Not knowing why your body is having pain or doing the crazy things it is doing also leads to patient anxiety, especially when you don't know why something hurts or doesn't work the way it used to work. Add to that the general real fear of recurrence."

Breast Cancer Surveillance Intervention:

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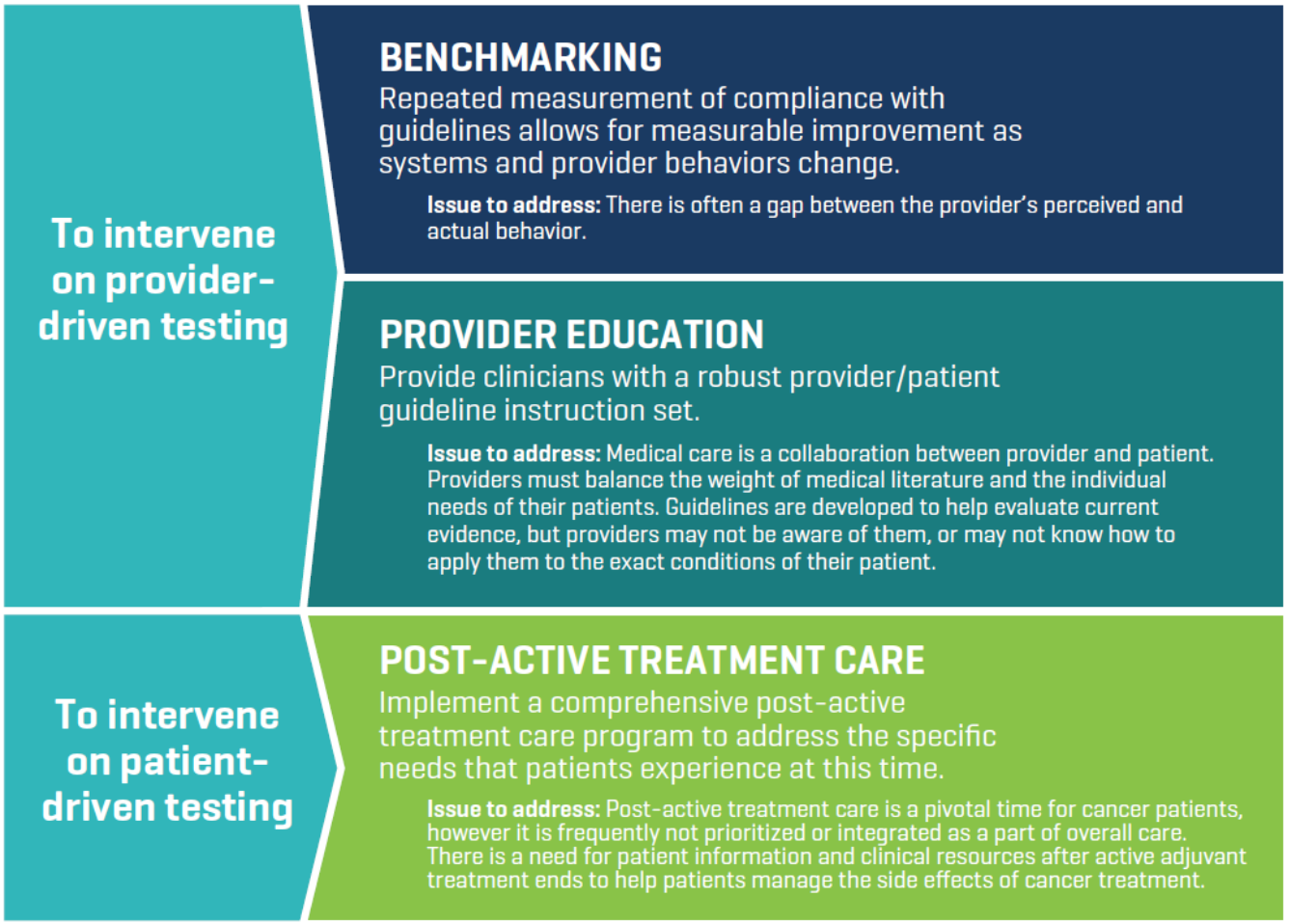
To respond to:

Provider-driven testing:

- Benchmarking
- Provider Education on Guidelines

Patient-driven testing:

- Post-Active Treatment Care

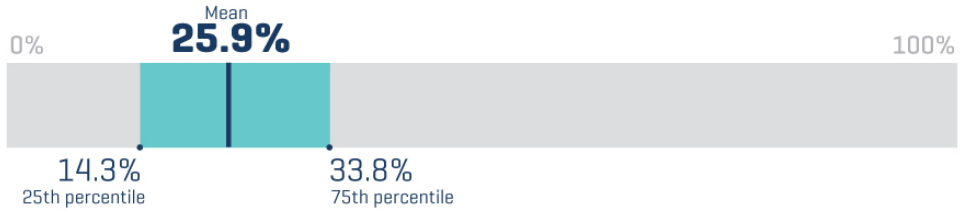


Results:

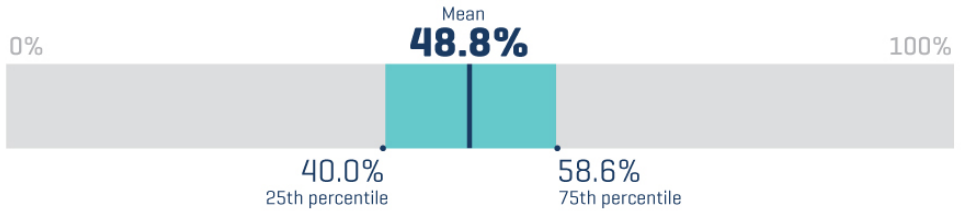
End of Life Phase

Regional results for metrics from the end of life phase

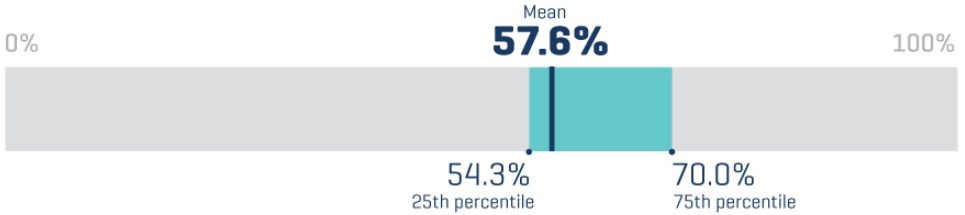
Use of chemotherapy or radiation therapy in last 30 days of life



Use of advanced imaging in the 30 days of life



Inpatient admissions in last 30 days of life



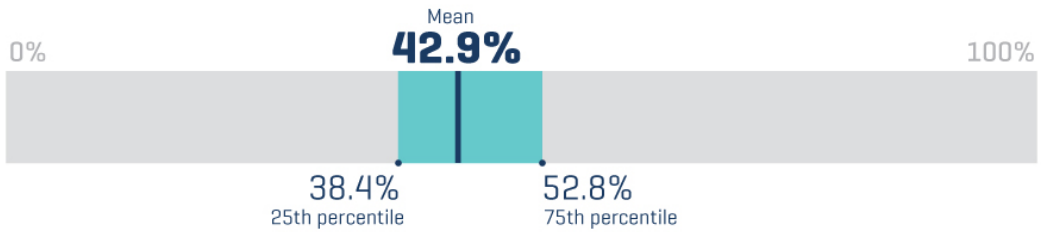
Emergency department visits in last 30 days of life

Results:

End of Life Phase

Regional results for metrics from the end of life phase

Use of hospice services at least 3 days prior to death



Place of death

Intervention Working Group Process:

Why Goals of Care discussion?

Several studies show that some patients are:

- not adequately aware of their prognosis
- often confused about the intent of treatment
- want to hear about their prognosis,

but these conversations are not happening often enough.

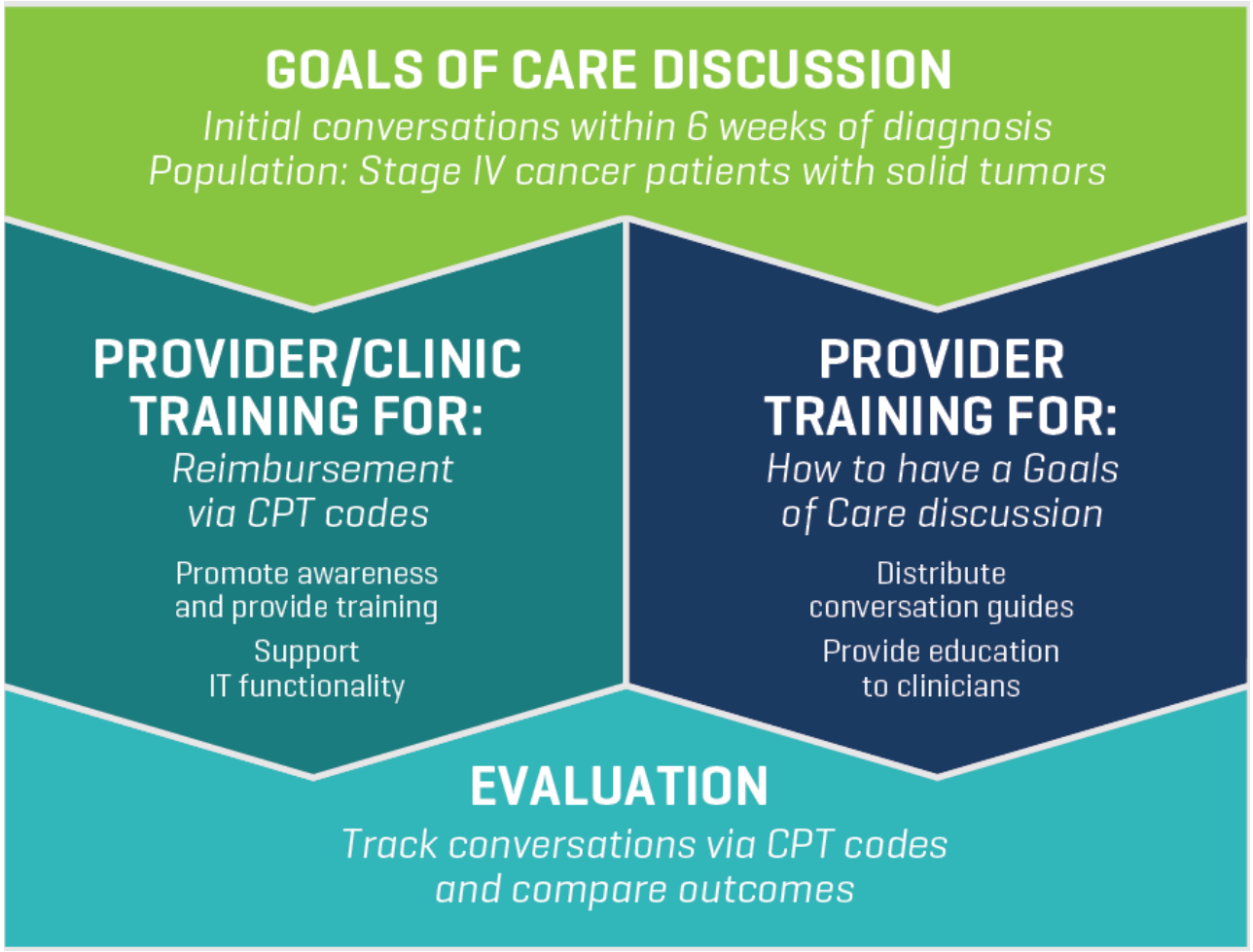
Source: Prigerson et al (2016)

- Goals of Care discussions are associated with
  - better quality of life,
  - reduced use of non-beneficial medical care near death,
  - enhanced goal-consistent care,
  - positive family outcomes, and
  - reduced costs.

Source: Bernacki et al (2014)

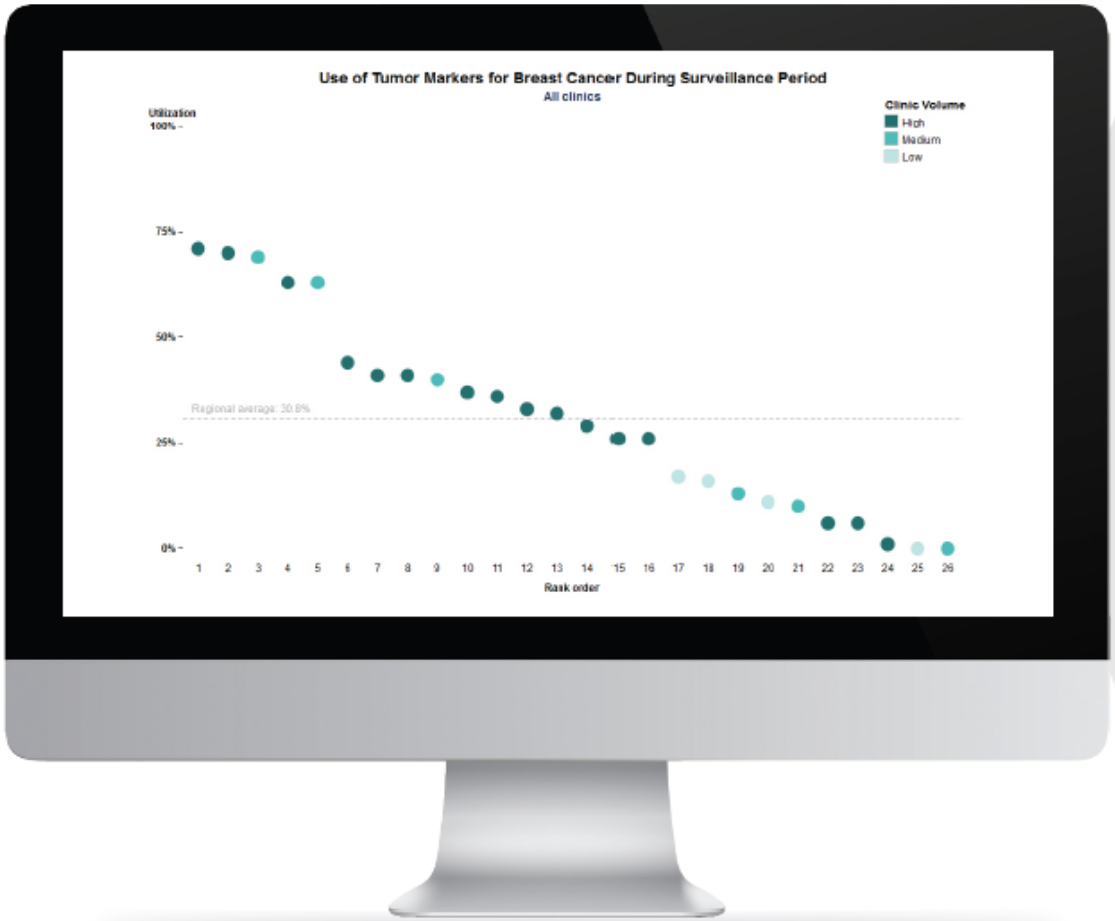
End of Life Care Intervention:

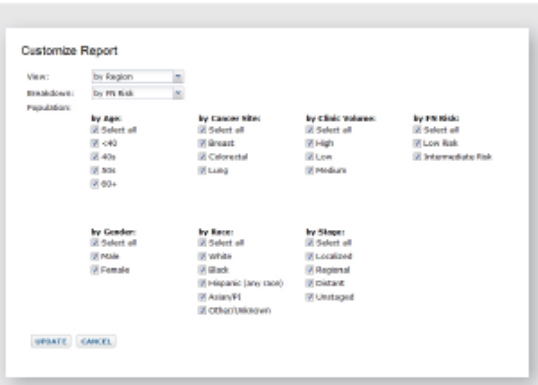
- Focus on **Goals of Care** discussion
- Promote use of new reimbursement codes
- Provide training and resources to clinicians

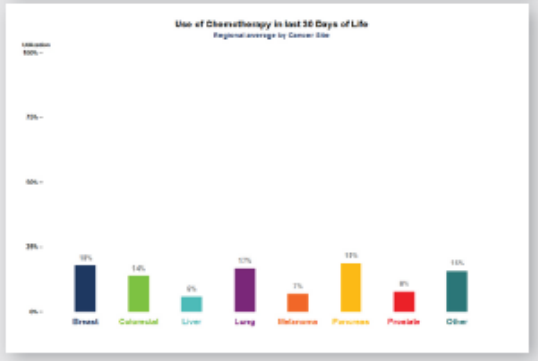


Community Reporting

HICOR IQ







Other screen views

HICOR IQ

Regional Oncology Informatics Platform

Allows regional payers, providers and patient advocates to view and interact with community-prioritized metrics.

Homepage

HICOR IQ

Search HICOR IQ

Help

Regional Oncology Informatics Platform

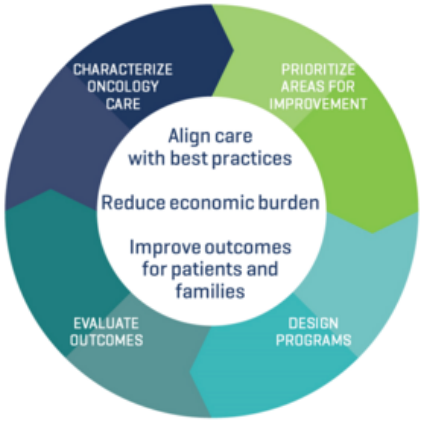
Home | Reports | The Database | Contact Us

Vision

Provide patients, payers, providers and health systems with transparent information to support decision-making in cancer care. We view performance reporting as a first step in a community process to improve value in cancer care.

View Reports

The current launch includes the set of regional performance reports based on ASCO/ABIM 2012 Choosing Wisely Recommendations and community prioritized metrics from prior year's Value and Cancer Care Summits. The metrics are generated from the HICOR cancer registry-health insurance claims linked Database.



Links

- Home
- Reports
- The Database
- Contact Us

HICOR IQ Projects

SCCA CHOOSING WISELY

New in 2016

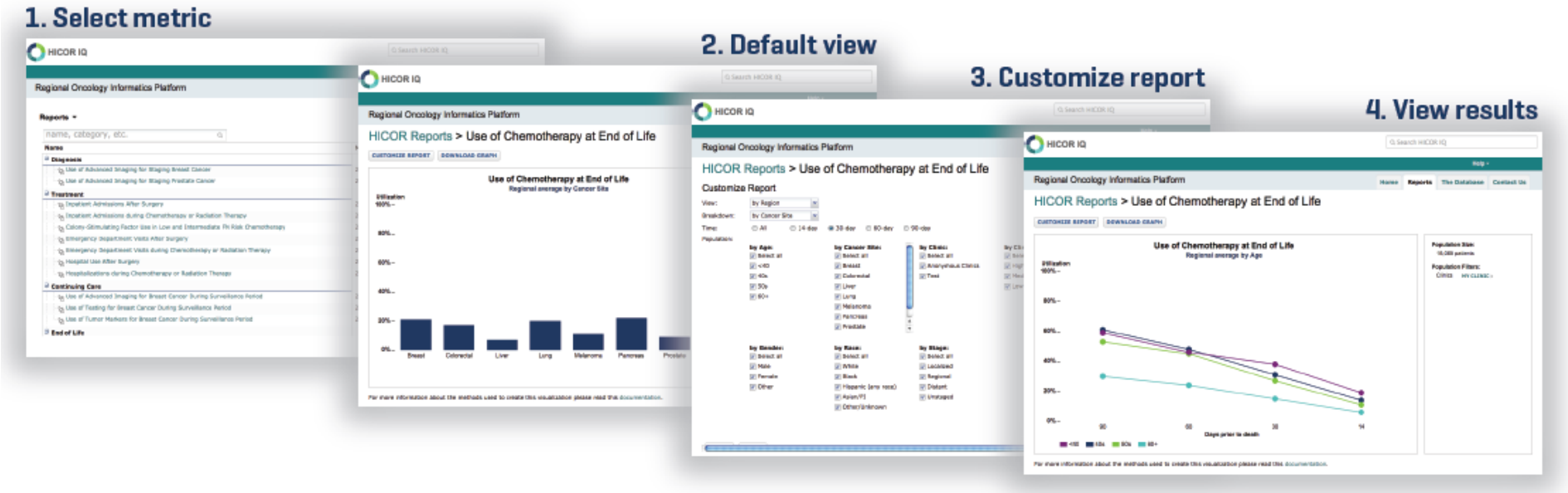
- Up to date metrics and reporting (results through the end of 2015 coming soon)
- For providers: Ability to see and filter your clinic's results
- Ability to focus on varying time periods of interest
- Partner-specific access that allows for customized data view and monitoring of research or quality programs

Future HICOR IQ iterations will include:

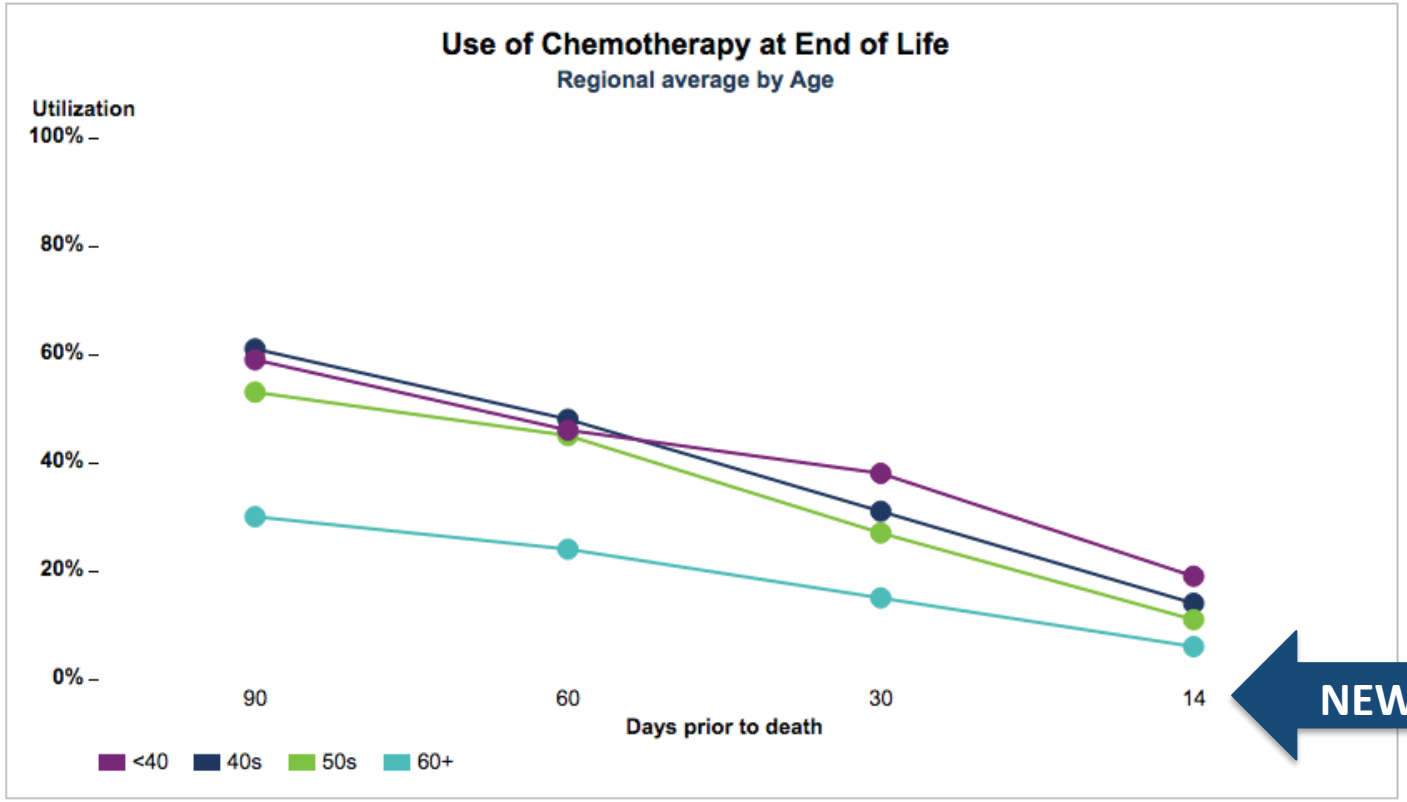
- Additional data providers – payers, health systems and registries
- Expanded set of performance measures based on regional consensus
- Expanded data source types including electronic medical records

HICOR IQ

Metric selection and customization



Time Point Customization

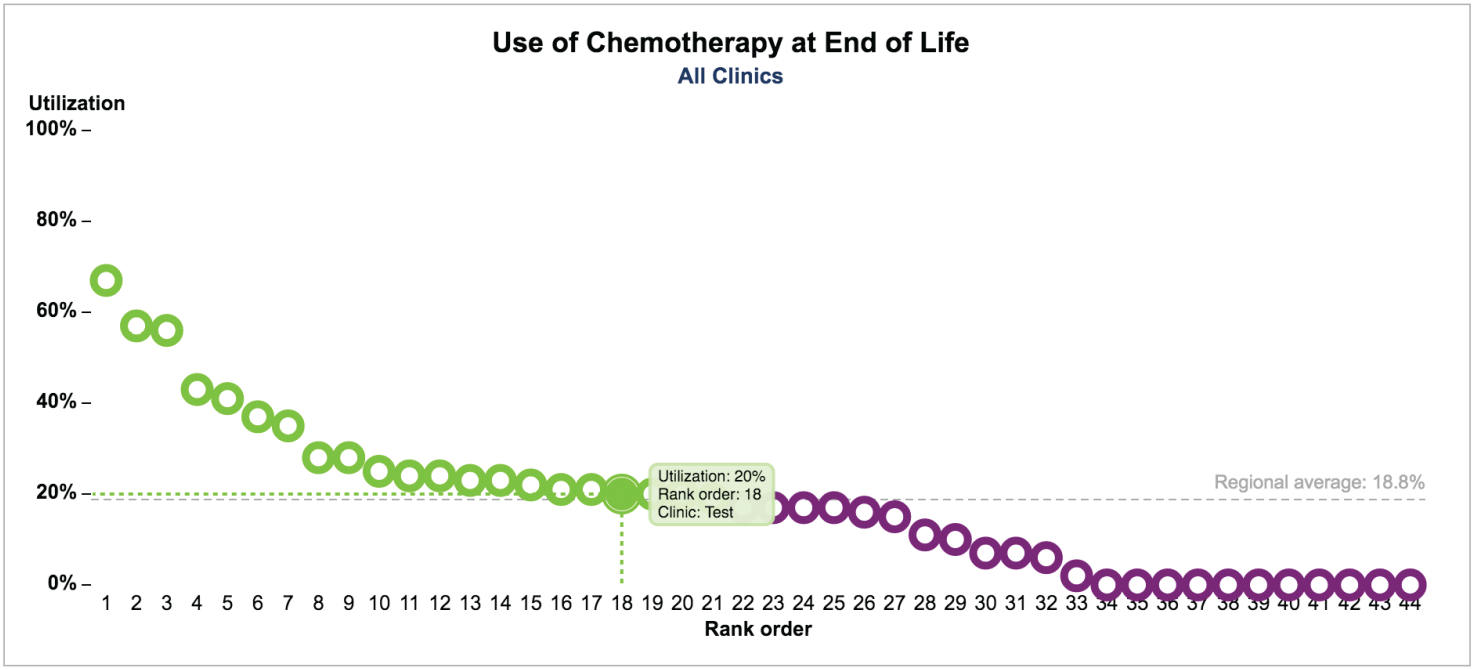


NEW

Population Size:
18,068 patients

Population Filters:
Clinics MY CLINIC

Clinic Identification



Population Size:

4,450 out of 4,517 patients

Population Filters:

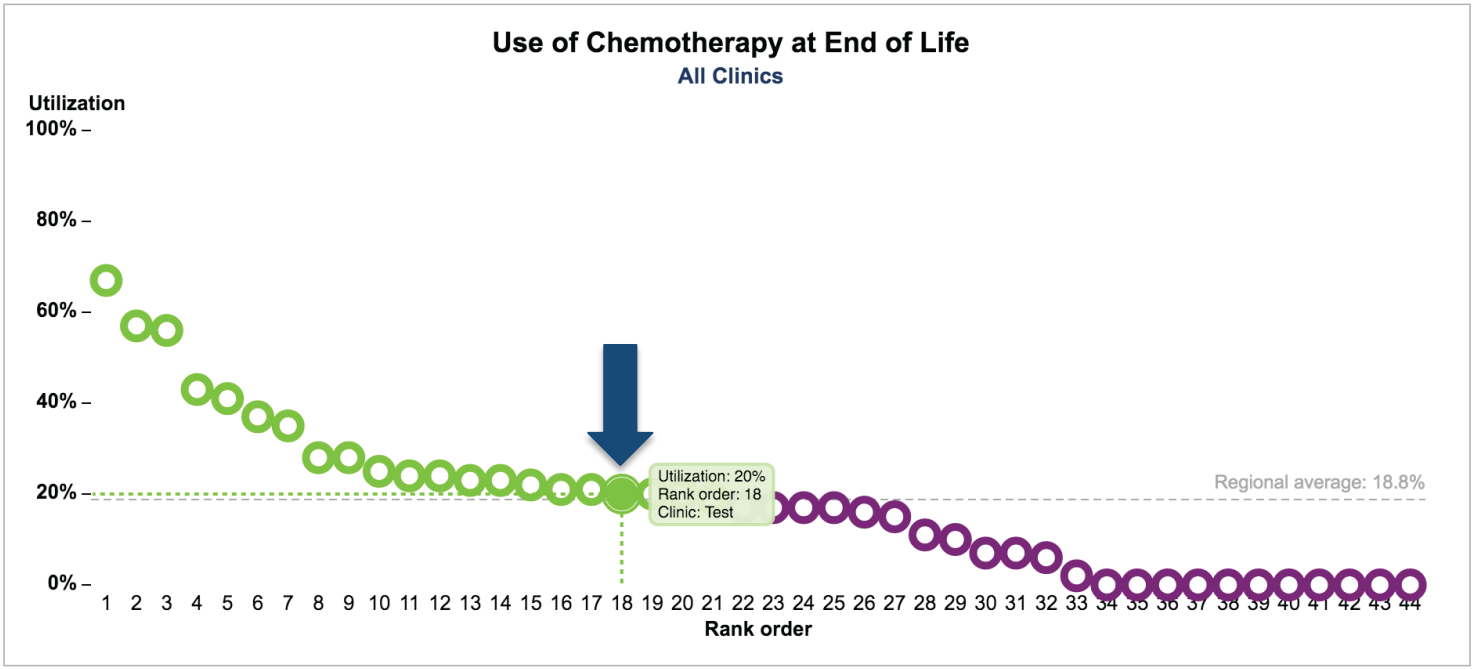
Clinics MY CLINIC

Time - 30 Days

Number of applicable clinics: 77

- 33 excluded due to population size restrictions

Clinic Identification



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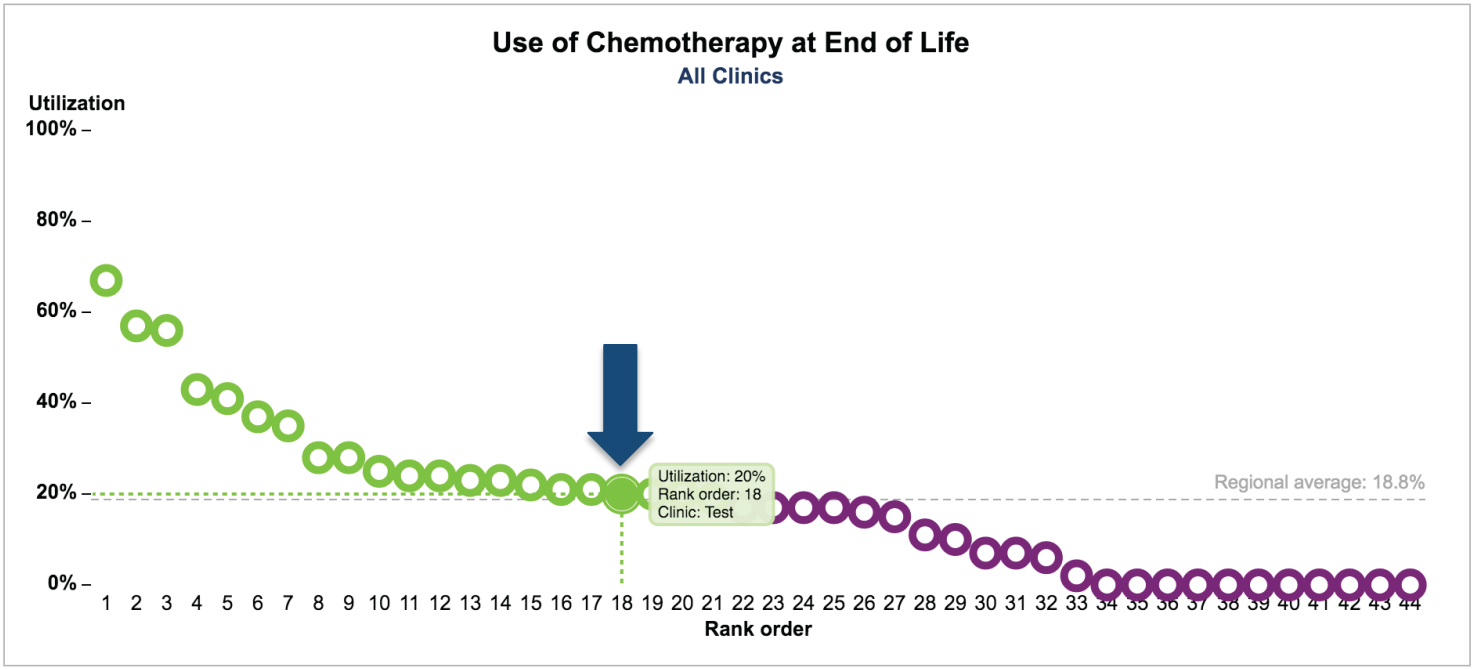
Clinic Identification



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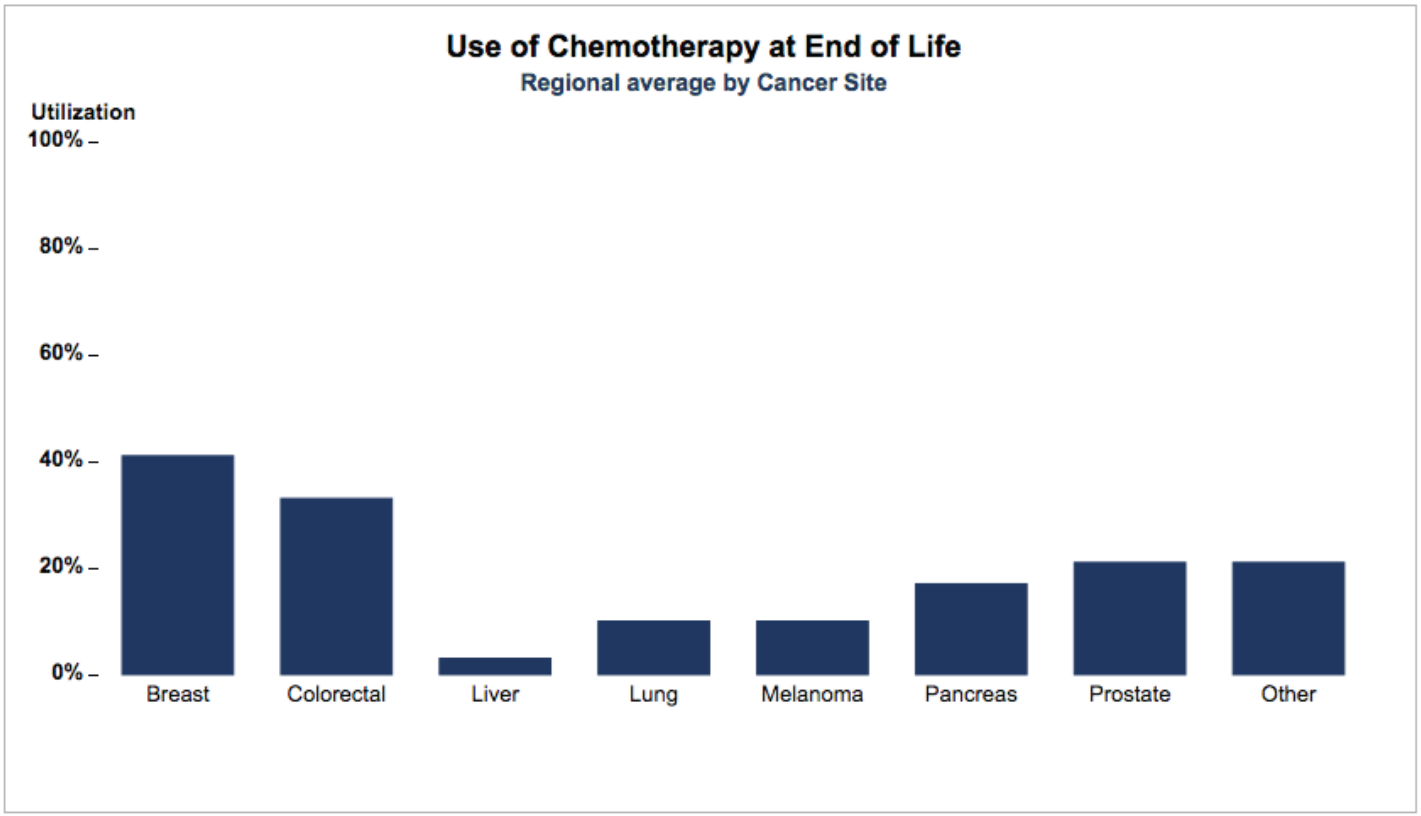
Clinic Filtering

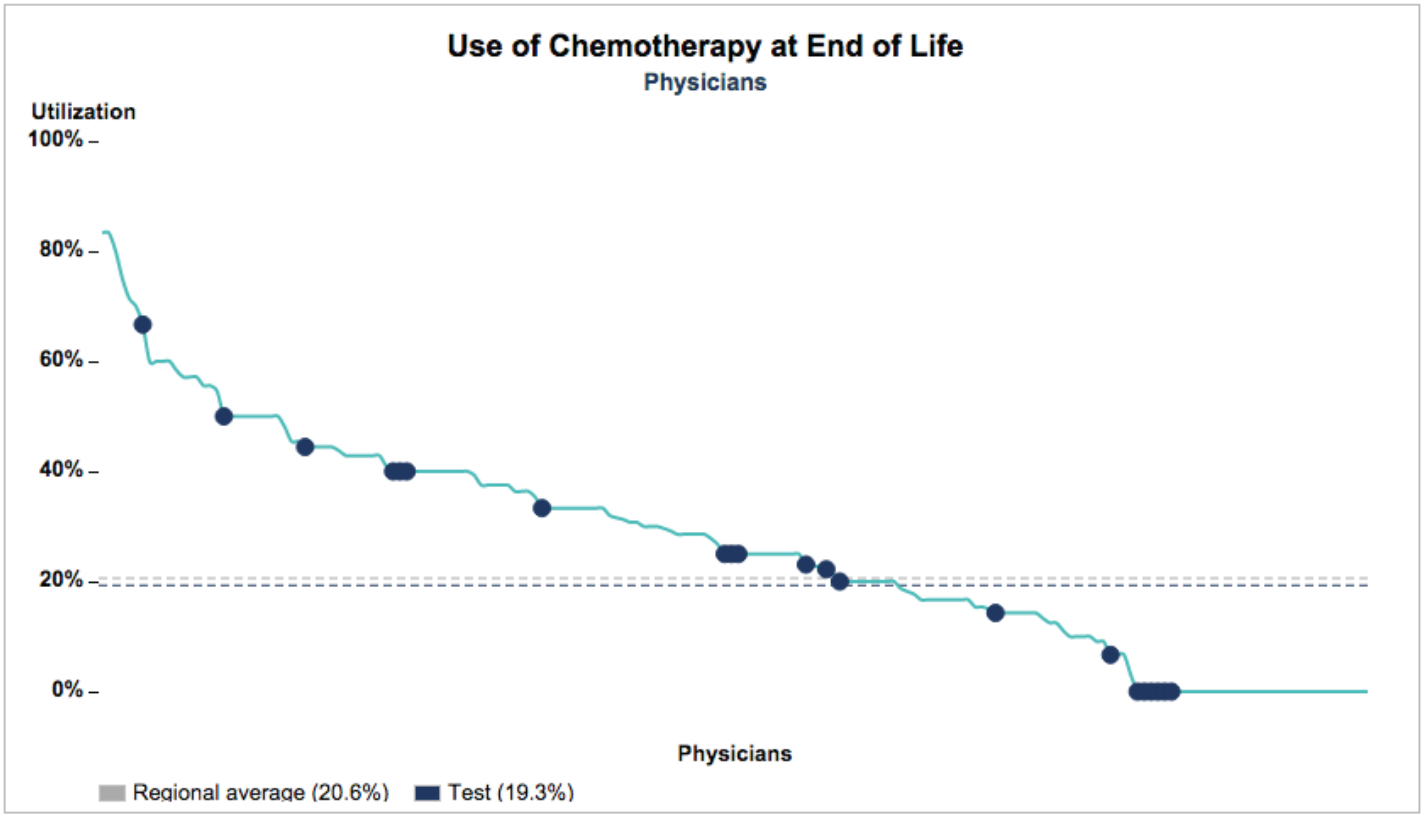


Population Size:
536 out of 4,517 patients

Population Filters:
Clinics
- Test
Time - 30 Days

NEW

Physician Reporting



Population Size:
2,411 out of 4,517 patients

Population Filters:
Clinics MY CLINIC
Time - 30 Days

Number of applicable physicians: 1,718
- 1,530 excluded due to population size restrictions

Thank You

HICOR
Regional Cost Report
FRED HUTCH
CURES START HERE™

Cancer Patients in the Cost Analysis

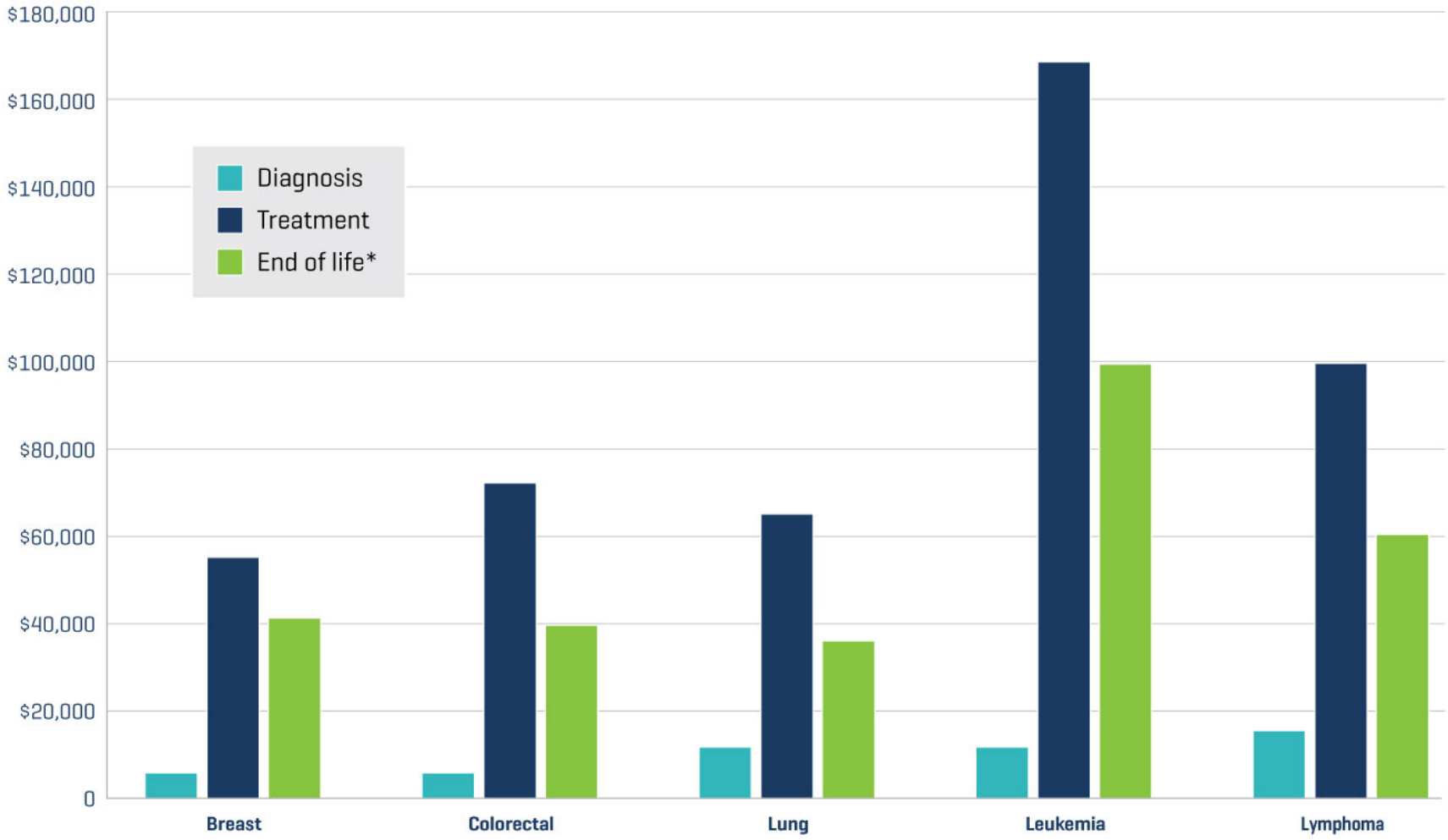
- Age 18+
- Cancer: Breast, colorectal, non-small cell lung, leukemia, lymphoma
- First and only cancer
- Enrolled with a single (participating) insurance plan over the phase of care
- Database: January 2007 – December 2015

Clinic Cost Profiles

- Oncology clinics in Western Washington
- Included in the comparison if the clinic had at least 30 patients with that cancer type in our dataset

Cost of Care by Phase

Average cost



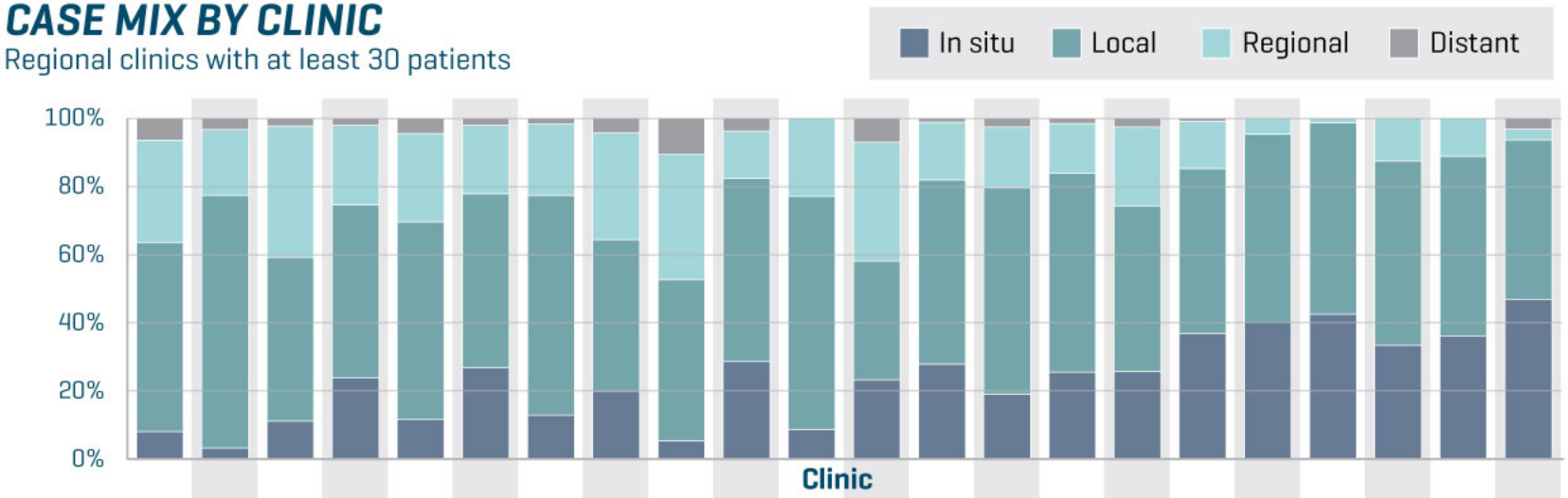
** For some patients the end of life phase overlaps with the treatment phase.*

Clinic Profiles: Breast Cancer

HICOR at FRED HUTCH

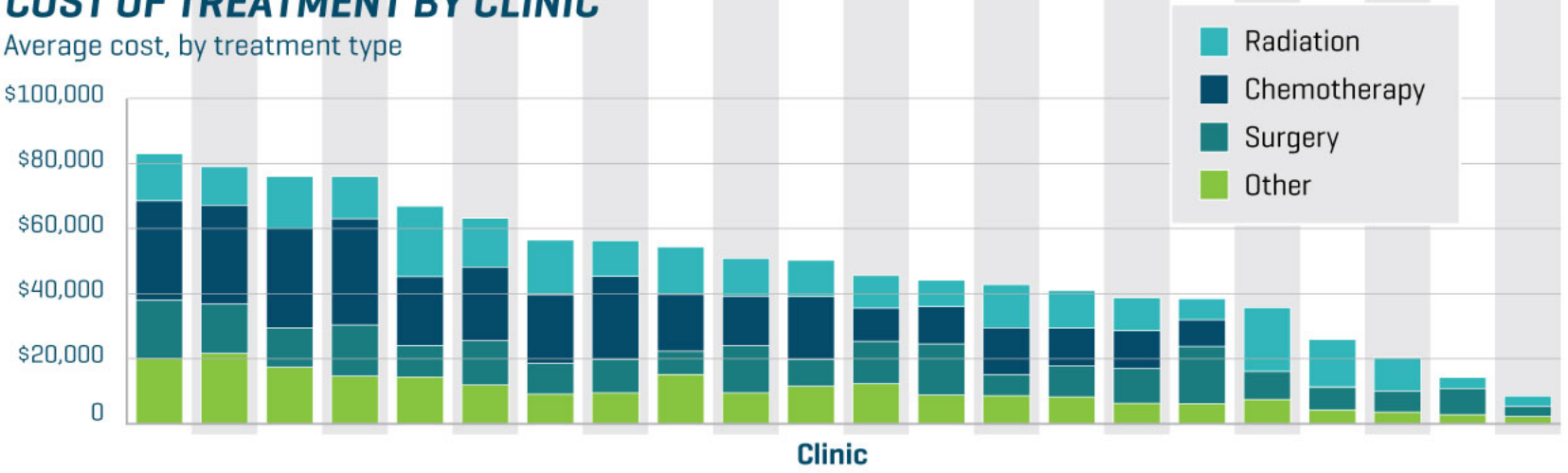
CASE MIX BY CLINIC

Regional clinics with at least 30 patients



COST OF TREATMENT BY CLINIC

Average cost, by treatment type

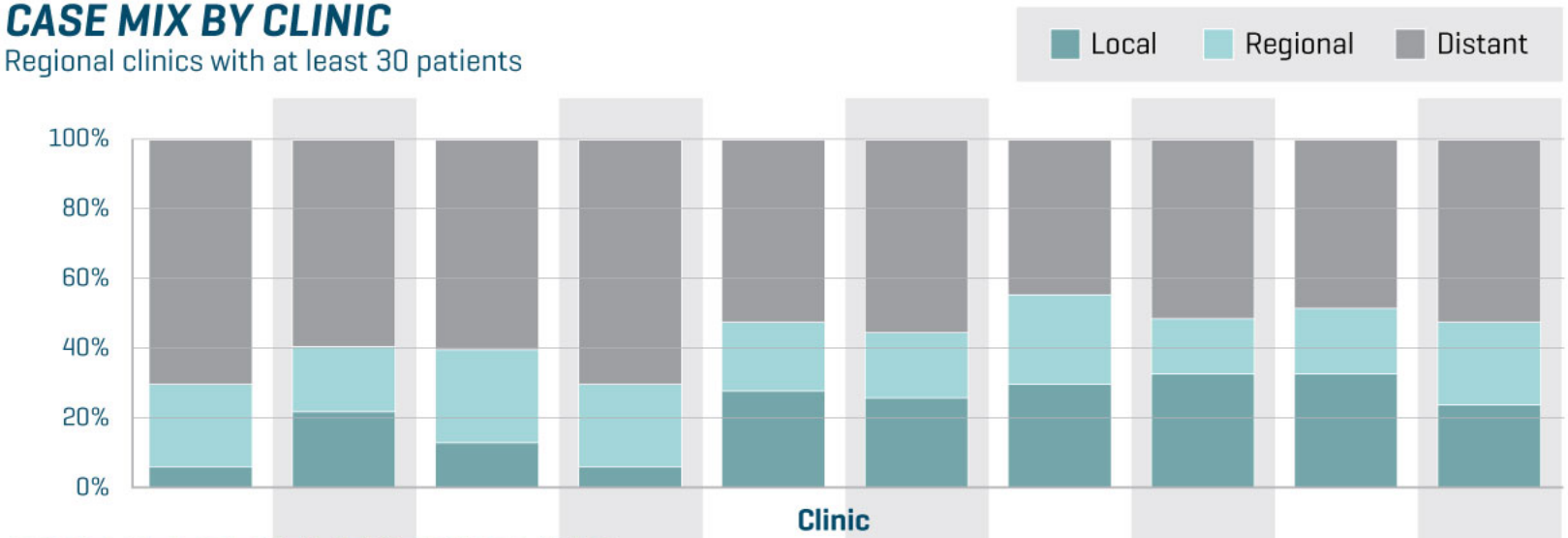


Clinic Profiles: Lung Cancer

HICOR at FRED HUTCH

CASE MIX BY CLINIC

Regional clinics with at least 30 patients



COST OF TREATMENT BY CLINIC

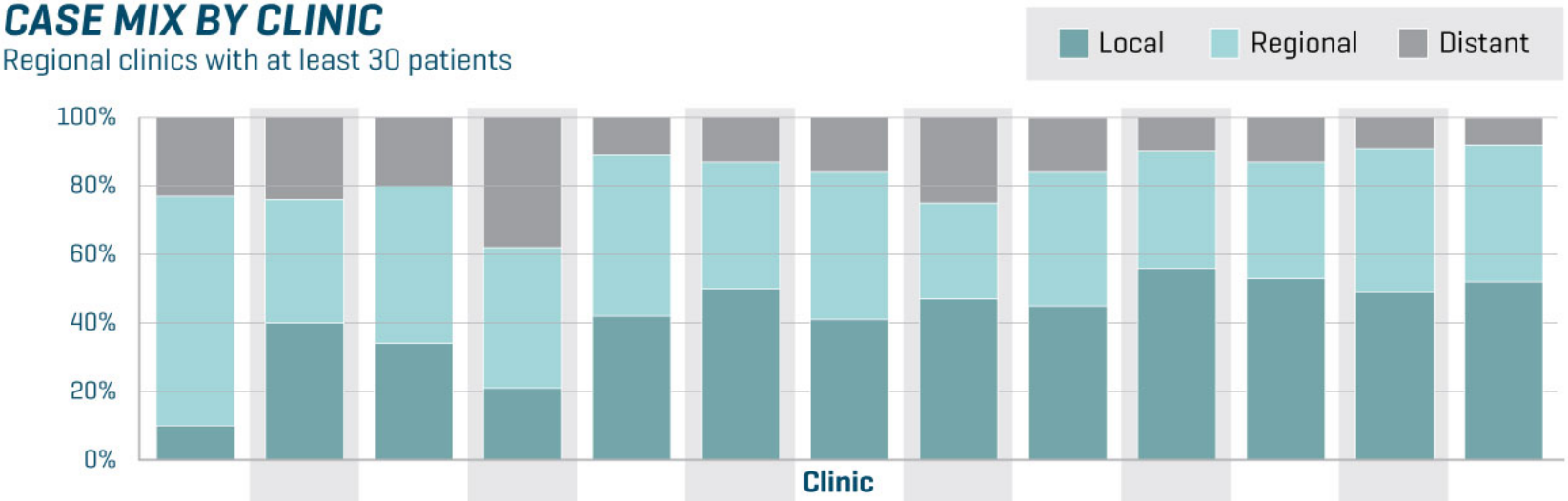
Average cost, by treatment type

Clinic Profiles: Colorectal Cancer

HICOR at FRED HUTCH

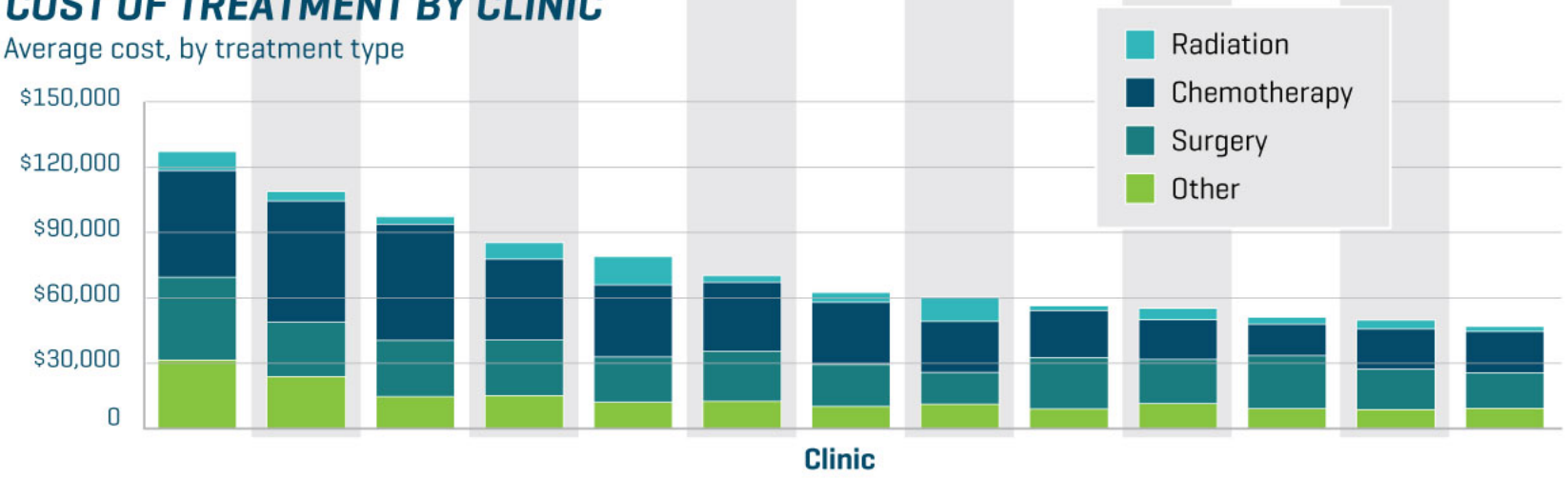
CASE MIX BY CLINIC

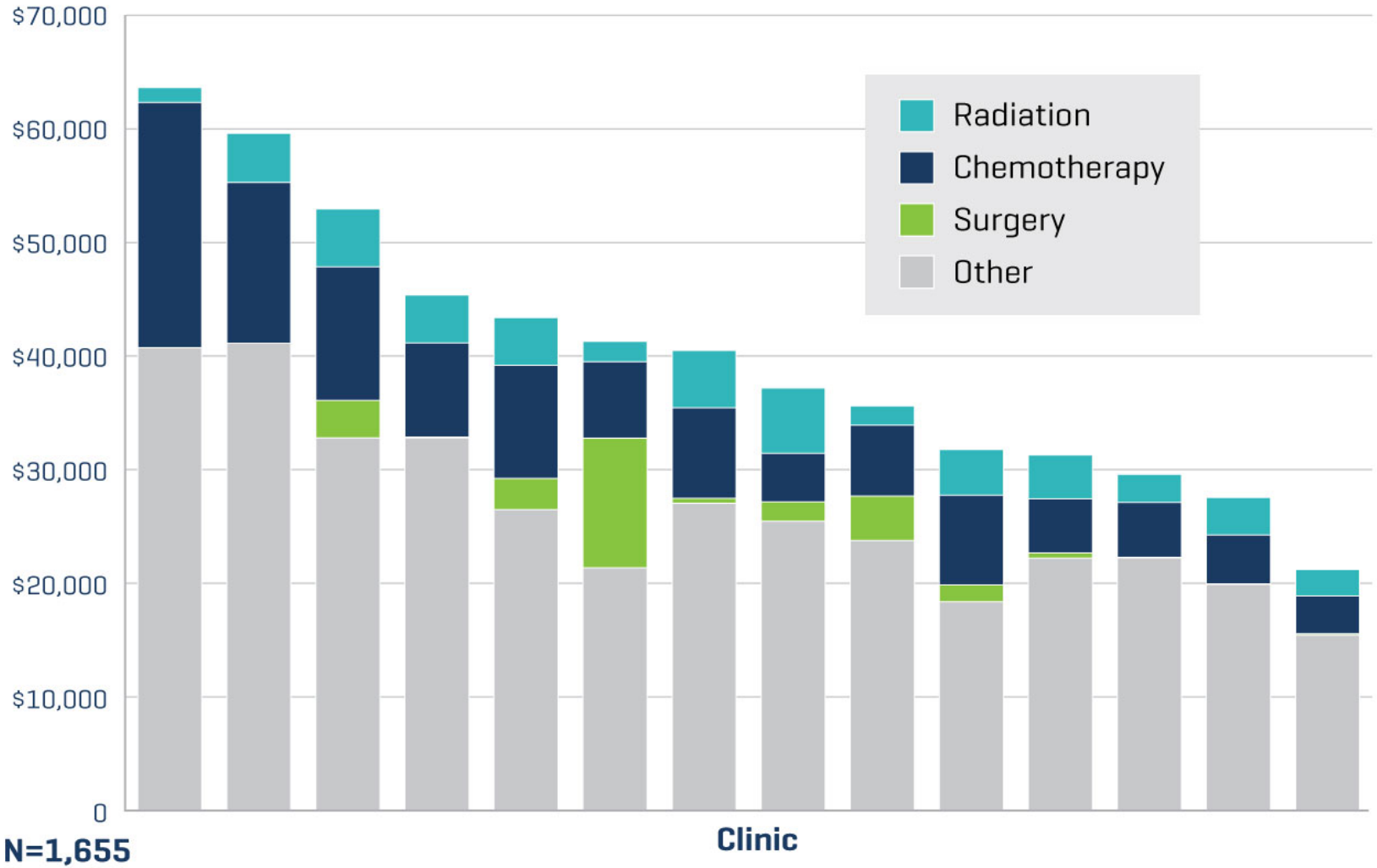
Regional clinics with at least 30 patients



COST OF TREATMENT BY CLINIC

Average cost, by treatment type



End-of-Life

Average cost, solid tumors only, last 90 days