

# CLINICAL PATHWAYS AND CANCER CARE DELIVERY

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# DISCLOSURES

- AstraZeneca
- CVS Caremark
- MOREHealth

# CONTEXTUALIZING CANCER CARE

SYSTEM

INSTITUTION

**PATIENT**

CELL

GENE

- Define best care
- Standardize and disseminate that care (and the information behind it)
- Influence and oversee care across a network
- Improve clinical trial awareness

## WHAT IS A CLINICAL PATHWAY?

- A platform that provides real-time decision-making support across the continuum of cancer care
- Reflects current standards of care
- Attempts to decrease unwarranted variation, while supporting warranted, granular variation
- Supports learning

## CURRENT PORTFOLIO: MED ONC

Heme Malignancies	Solid Tumors
Leukemia/MDS <ul style="list-style-type: none"> <li>• Chronic myelogenous leukemia</li> <li>• Myelodysplastic Syndrome</li> </ul>	Breast Cancer
Lymphoma <ul style="list-style-type: none"> <li>• Hodgkin's</li> <li>• Non-Hodgkin's               <ul style="list-style-type: none"> <li>• Burkitt's</li> <li>• CLL/SLL</li> <li>• DLBCL / double-hit lymphomas</li> <li>• Follicular</li> <li>• Mantle Cell</li> <li>• Marginal Zone</li> <li>• T-cell</li> </ul> </li> </ul>	GI Oncology: <ul style="list-style-type: none"> <li>• Colorectal</li> <li>• Gastroesophageal</li> <li>• Pancreatic adenocarcinoma</li> </ul>
Plasma Cell Dyscrasias <ul style="list-style-type: none"> <li>• Amyloidosis</li> <li>• Multiple Myeloma</li> <li>• POEMS syndrome</li> <li>• Waldenstrom's</li> </ul>	GU Oncology: <ul style="list-style-type: none"> <li>• Bladder</li> <li>• Prostate</li> <li>• Renal Cell Carcinoma</li> <li>• Testicular</li> </ul>
	GYN Oncology: <ul style="list-style-type: none"> <li>• Cervical</li> <li>• Endometrial/Uterine</li> <li>• Ovarian</li> </ul>
	H&N: Squamous Cell Carcinoma
	Melanoma
	Neuro-Onc: Glioblastoma
	Sarcoma: GI Stromal Tumor
	Thoracic: <ul style="list-style-type: none"> <li>• Non-small cell lung cancer</li> <li>• Small cell lung cancer</li> </ul>

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## CURRENT PORTFOLIO: RAD ONC

### Radiation Oncology Pathways

#### Breast Cancer

#### GI Oncology:

- Anal
- Esophageal
- Gastric
- Liver
- Pancreatic adenocarcinoma
- Rectal

#### GU Oncology:

- Bladder
- Prostate
- Testicular

#### GYN Oncology:

- Cervical
- Endometrial/Uterine
- Vaginal
- Vulvar

#### H&N: Squamous Cell Carcinoma

#### Neuro-Onc:

- Primary CNS tumor
- Brain metastases

#### Hematologic Malignancies:

- Leukemia & transplant
- Lymphoma: Hodgkin
- Lymphoma: Non-Hodgkin
- Multiple Myeloma & Plasmacytoma

#### Soft Tissue:

- Sarcoma
- Bone metastases

#### Skin:

- Cutaneous (non-melanoma)
- Melanoma

#### Thoracic:

- Non-Small Cell Lung
- Small Cell Lung

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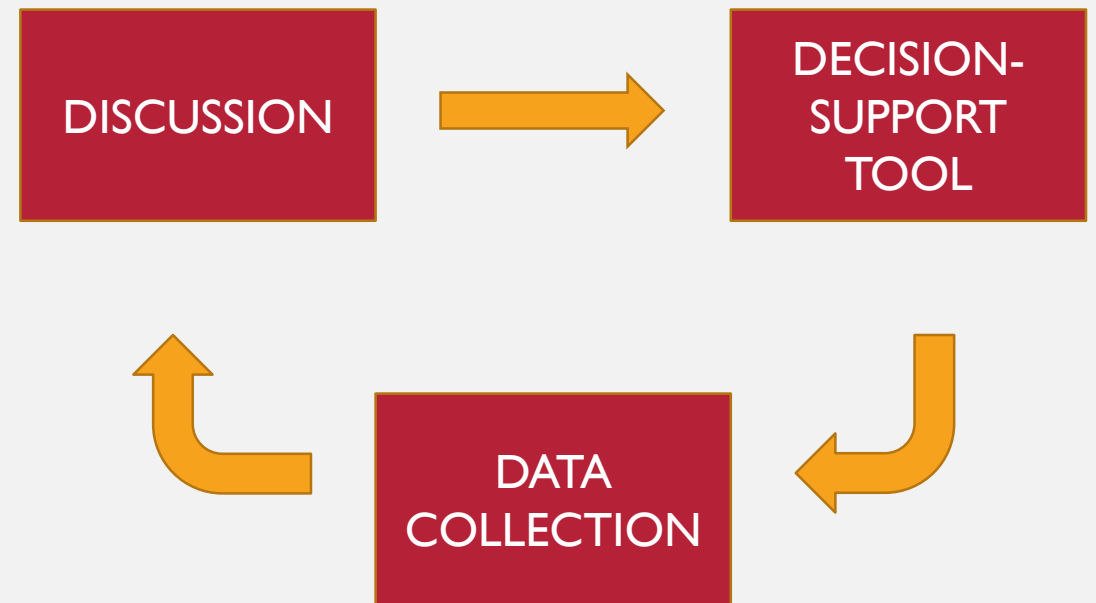
## CHALLENGES IN IMPLEMENTATION

- Role of pathways for expert users?
- Cancer care should not be one-size-fits-all
- Impact on workflow
- Pathways are too cost-driven

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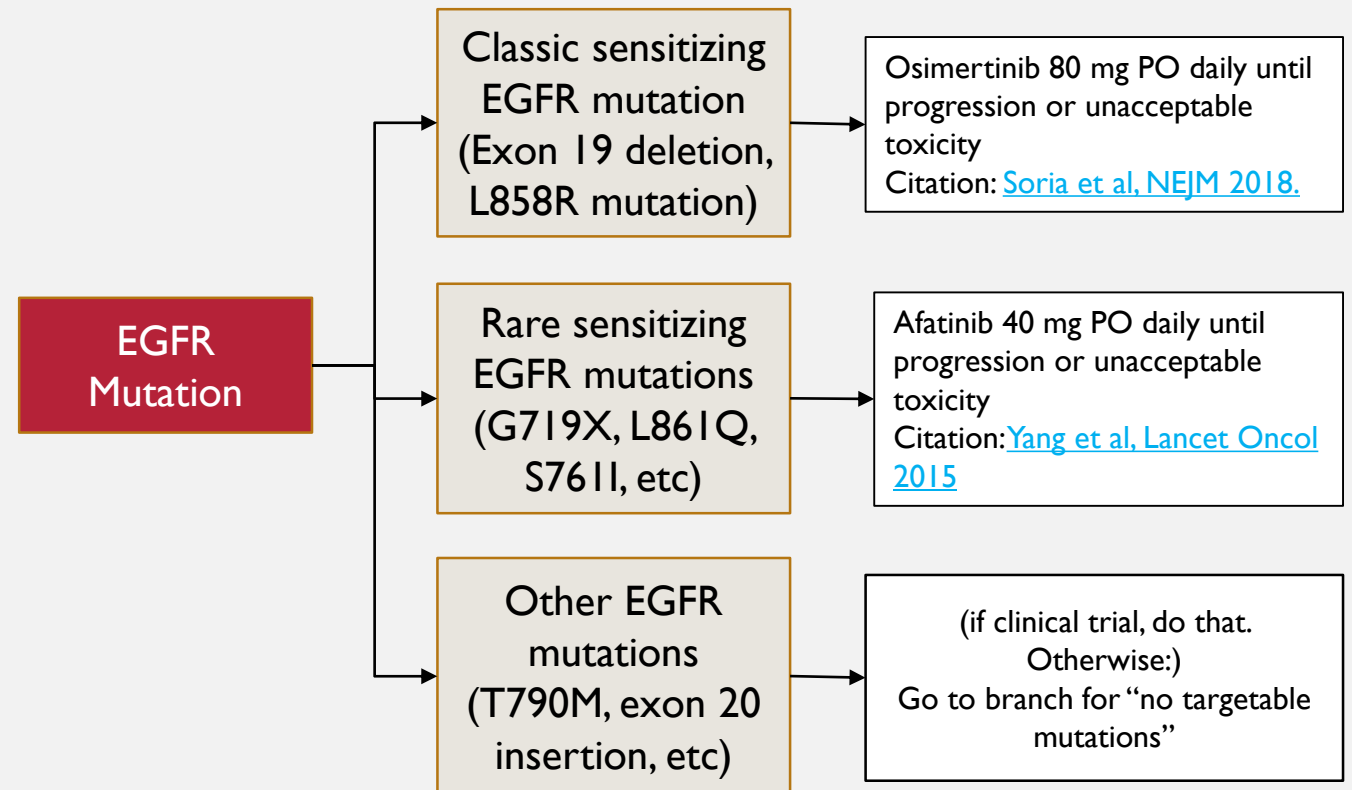
## CHALLENGE: ROLE OF PATHWAYS FOR EXPERT USERS



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## CHALLENGE: CANCER CARE SHOULD NOT BE ONE-SIZE-FITS-ALL

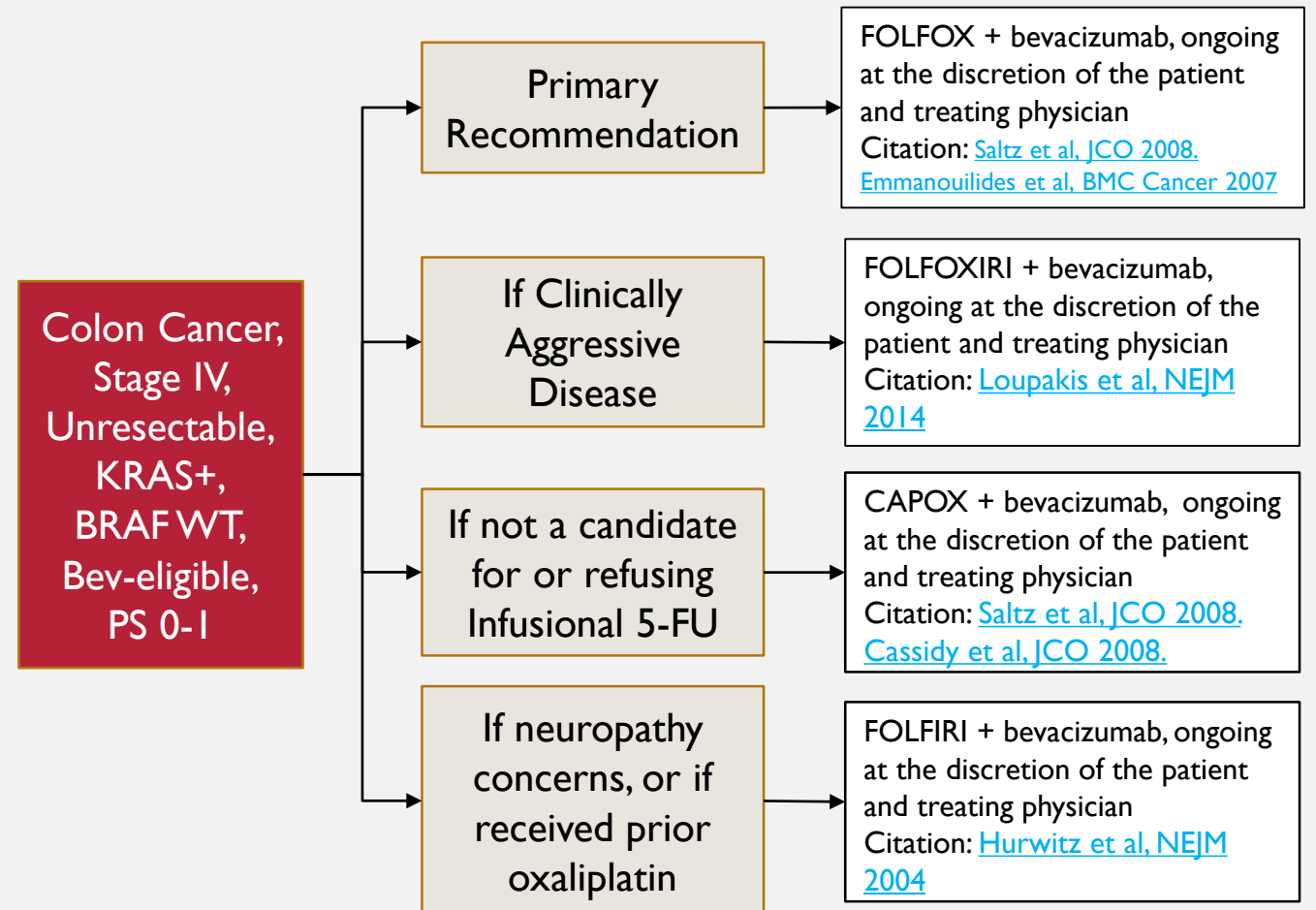




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## CHALLENGE: CANCER CARE SHOULD NOT BE ONE-SIZE-FITS-ALL

- **MESSAGING and INCENTIVES**
  - Support physicians to provide the best care for the patient in front of them
  - Incentives: System usage, not on-pathway rate
  - System usage supports learning

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## CHALLENGE: **WORKFLOW**

- **Click reduction**
  - Minimizing navigation
  - What can be imported?
- **Other opportunities for efficiency**
  - Embedded resources
    - Clinical trial links
    - Side effects / Chemo consent
    - Patient education sheets
    - Citations
  - Educational opportunities:
    - Minutes
    - Network Updates

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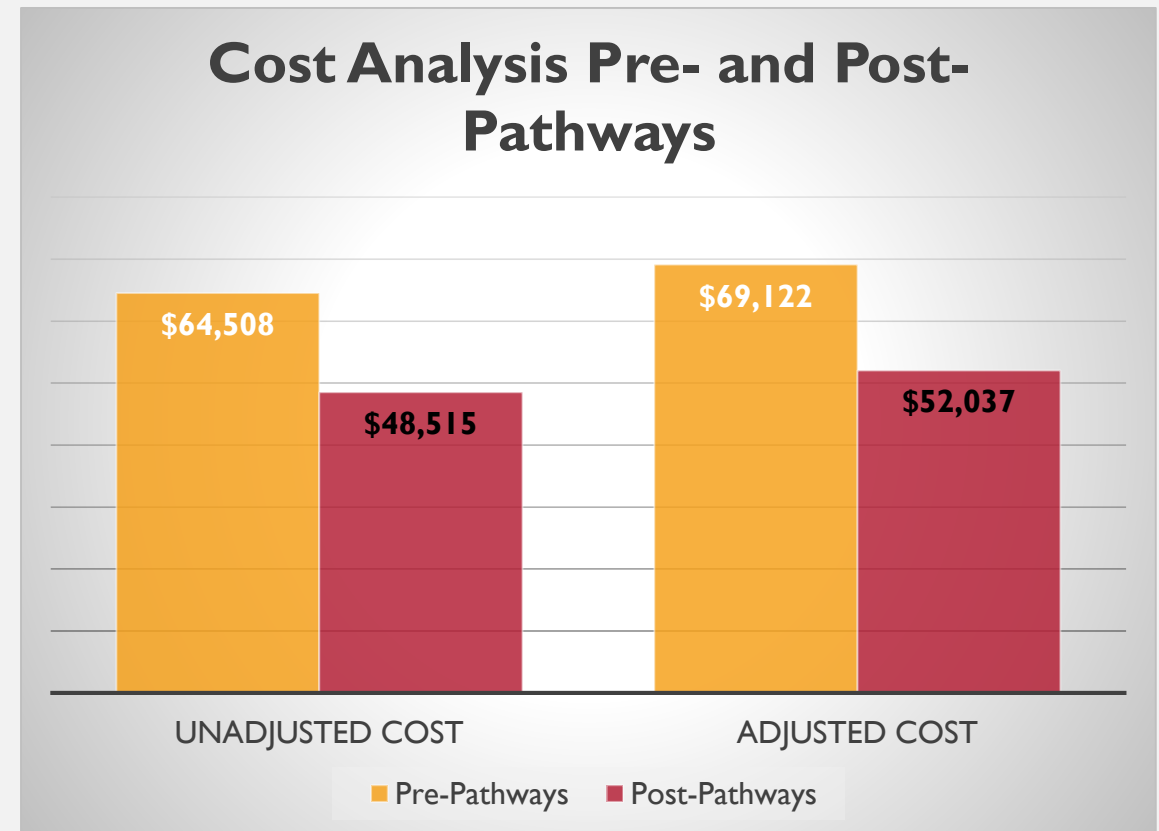
## CHALLENGE: PATHWAYS ARE TOO COST DRIVEN

- **Costs: Inclusion and Messaging**
  - Make cost a routine part of discussion
    - Medicare allowables – drug cost
    - Never margin/reimbursement
- **Opportunities for Cost Containment**
  - Prior Authorization
  - Cost-conscious pathway choices where appropriate

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Jackman et al. JOP 2017. 13(4): e346-e352

## SCOPE OF EFFORT

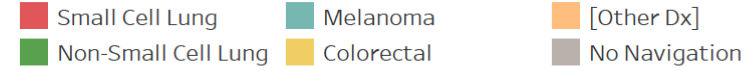
### **Prior state (Content Development, Program maintenance)**

- Leadership: Operations Director, Medical Director
- Pathways Team: Program Manager, 3 project managers, data analyst, IT project manager
- Pharmacy: Lead pathways pharmacist, 6 other pharmacists
- MD champions: 28 Med Oncs, 16 Rad Oncs
- 12 disease center research coordinators

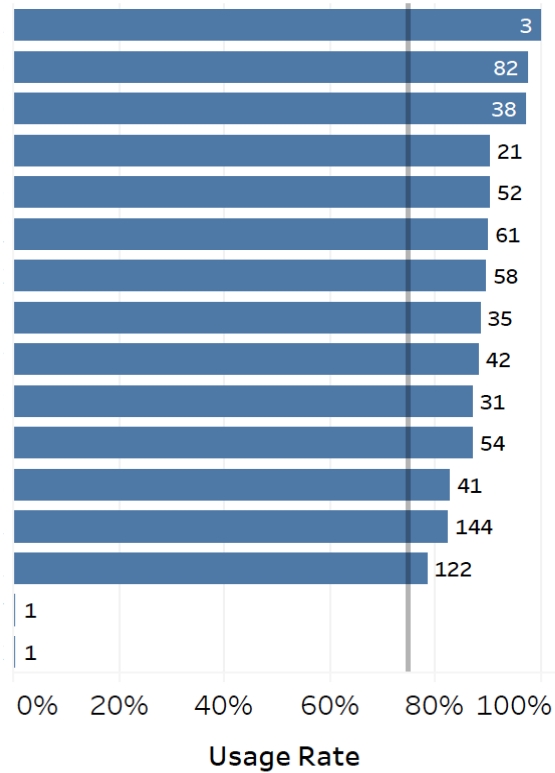
# PATHWAYS AS LEARNING TOOL

# USAGE RATE AND DISTRIBUTION

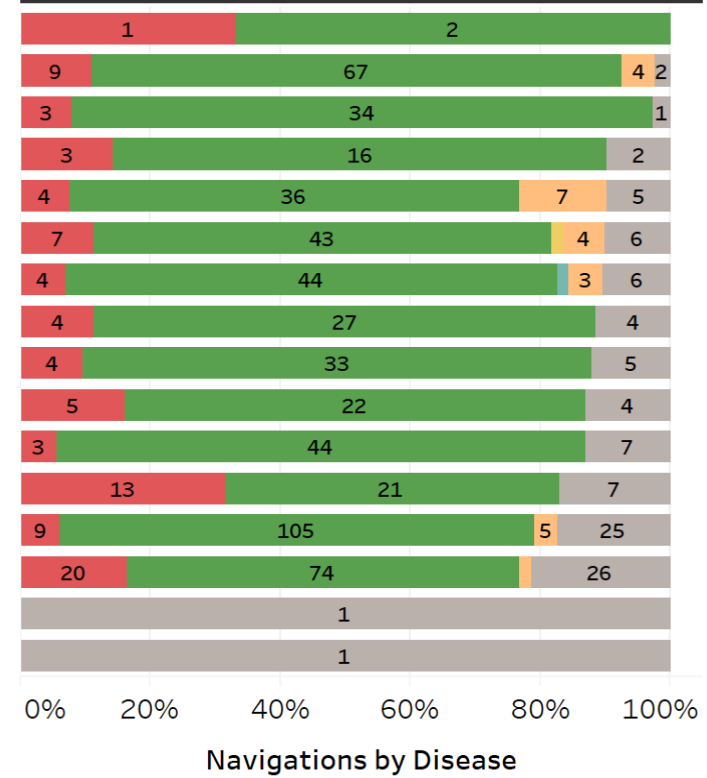
## Pathways Name



### TOP Usage Rate by Provider for AY 2018

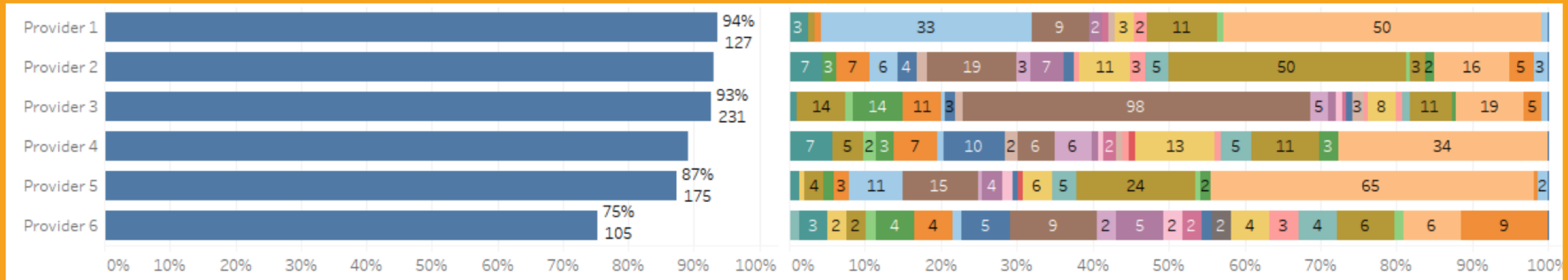


### Navigations by Disease



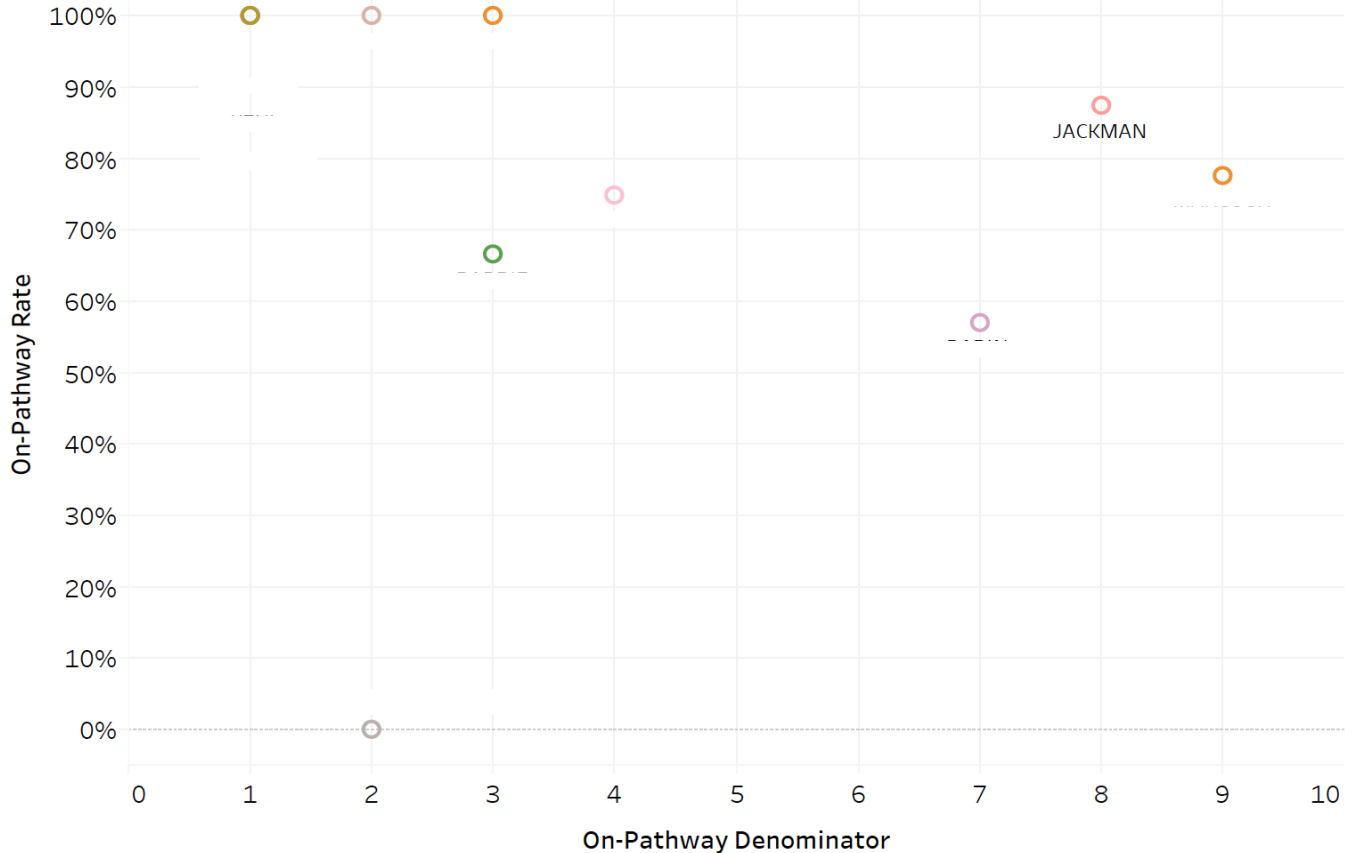


# USAGE RATE AND DISTRIBUTION



# ON-PATHWAY RATE BY PROVIDER

On-Pathway Rate by Provider



# DECISIONS BY BRANCH

## Navigation Type by Disease, Includes All Locations

Pathways Name	Patient Presentation 1	Patient Presentation 2	On-Pathway	Off-Pathway	Off-Treatment
<b>Non-Small Cell Lung</b>	Local Recurrence	Unresectable		1	
	Stage III	Potentially Resectable	1		
		Resected	3		
		Unresectable	2		
	Stage IV Metastatic	Non Squamous	31	14	
		Squamous	4		
<b>Small Cell Lung</b>	First Line	Extensive Stage	4		
	Second Line	Relapse 3 - 6 Months		1	
		Relapse < 6 Months	4		1
		Relapse ≥ 6 Months	1		
	Third Line and Beyond	No CNS Metastases or CNS Metastases Can Be Controlled by Local Therapy	1		

# SPECIFIC DECISIONS BY BRANCH

Metastatic, Clear Cell

			Decision Type (group) 1					
			■ On-Pathway OR Clinical Trial	■ Off-Pathway				
<b>Metastatic</b>	<b>Systemic Therapy Indicated</b>	<b>Clear Cell</b>	<b>First Line</b>	<b>On-Pathway OR Clinical Trial</b>	Cabozantinib (tablet)	6.45%	2	
					Other Trial - 15-592	3.23%	1	
					Other Trial - 17-397	3.23%	1	
					Pazopanib	19.35%	6	
					Trial 15-592: Atezolizumab + Bevacizumab In nccRCC	3.23%	1	
					Trial 17-038: Lenvatinib + Everolimus or Pembrolizumab VS Sunitinib in RCC	22.58%	7	
					Trial 17-064: Nivolumab in Renal Cell Carcinoma	16.13%	5	
					<b>Off-Pathway</b>	Cabozantinib (tablet)	9.68%	3
						Nivolumab	3.23%	1
						Nivolumab, Ipilimumab, Nivolumab	9.68%	3
		Radiation	3.23%	1				
		<b>Clear Cell</b>	<b>Second Line</b>	<b>On-Pathway OR Clinical Trial</b>	Cabozantinib (tablet)	29.41%	5	
					Nivolumab	23.53%	4	
			<b>Third Line</b>	<b>On-Pathway OR Clinical Trial</b>	Trial 17-064: Nivolumab in Renal Cell Carcinoma	47.06%	8	
					Axitinib	11.11%	1	
					Cabozantinib (tablet)	55.56%	5	
					Trial 15-569: GS-16C3F vs Axitinib In Metastatic Renal Cell Carcinoma	11.11%	1	
				<b>Off-Pathway</b>	Trial 16-527: TAK-228 in Renal Cell Carcinoma	11.11%	1	
					Cabozantinib (tablet)	11.11%	1	
					<b>Fourth Line and Beyond</b>	<b>On-Pathway OR Clinical Trial</b>	Axitinib	33.33%
Everolimus, Lenvatinib	33.33%						2	
Other Trial - 17-634	16.67%	1						
Trial 17-084: Combination Therapies in RCC	16.67%	1						

## FUTURE STATE: WHERE DO PATHWAYS FIT

**DISCUSSION**



**DECISION-  
SUPPORT  
TOOL**

### INTEGRATION

- To improve the decision-support tool
- To facilitate data collection & analysis
- To reduce inefficiencies



**DATA  
COLLECTION**



# ACKNOWLEDGEMENTS

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