

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

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CURRENT PORTFOLIO: RAD ONC

Radiation Oncology Pathways

Breast Cancer	Hematologic Malignancies: <ul style="list-style-type: none"> • Leukemia & transplant • Lymphoma: Hodgkin • Lymphoma: Non-Hodgkin • Multiple Myeloma & Plasmacytoma
GI Oncology: <ul style="list-style-type: none"> • Anal • Esophageal • Gastric • Liver • Pancreatic adenocarcinoma • Rectal 	Soft Tissue: <ul style="list-style-type: none"> • Sarcoma • Bone metastases
GU Oncology: <ul style="list-style-type: none"> • Bladder • Prostate • Testicular 	Skin: <ul style="list-style-type: none"> • Cutaneous (non-melanoma) • Melanoma
GYN Oncology: <ul style="list-style-type: none"> • Cervical • Endometrial/Uterine • Vaginal • Vulvar 	Thoracic: <ul style="list-style-type: none"> • Non-Small Cell Lung • Small Cell Lung
H&N: Squamous Cell Carcinoma	
Neuro-Onc: <ul style="list-style-type: none"> • Primary CNS tumor • Brain metastases 	

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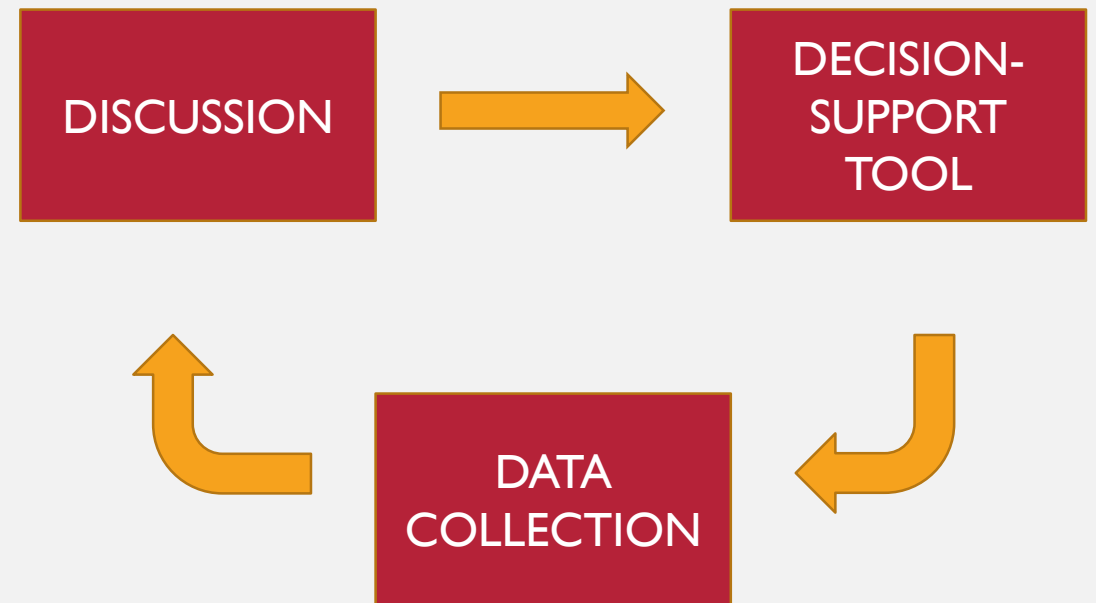
CHALLENGES IN IMPLEMENTATION

- 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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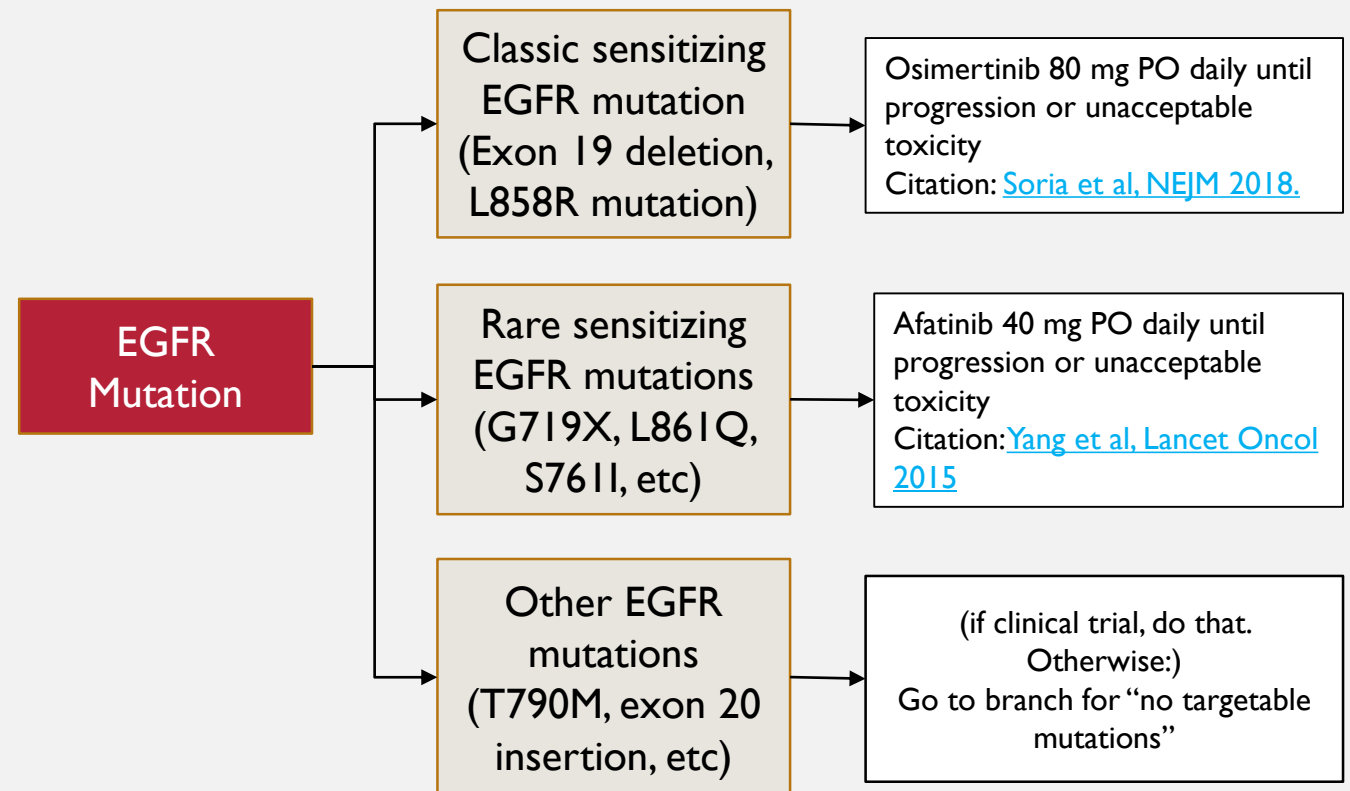
CHALLENGE: ROLE OF PATHWAYS FOR EXPERT USERS



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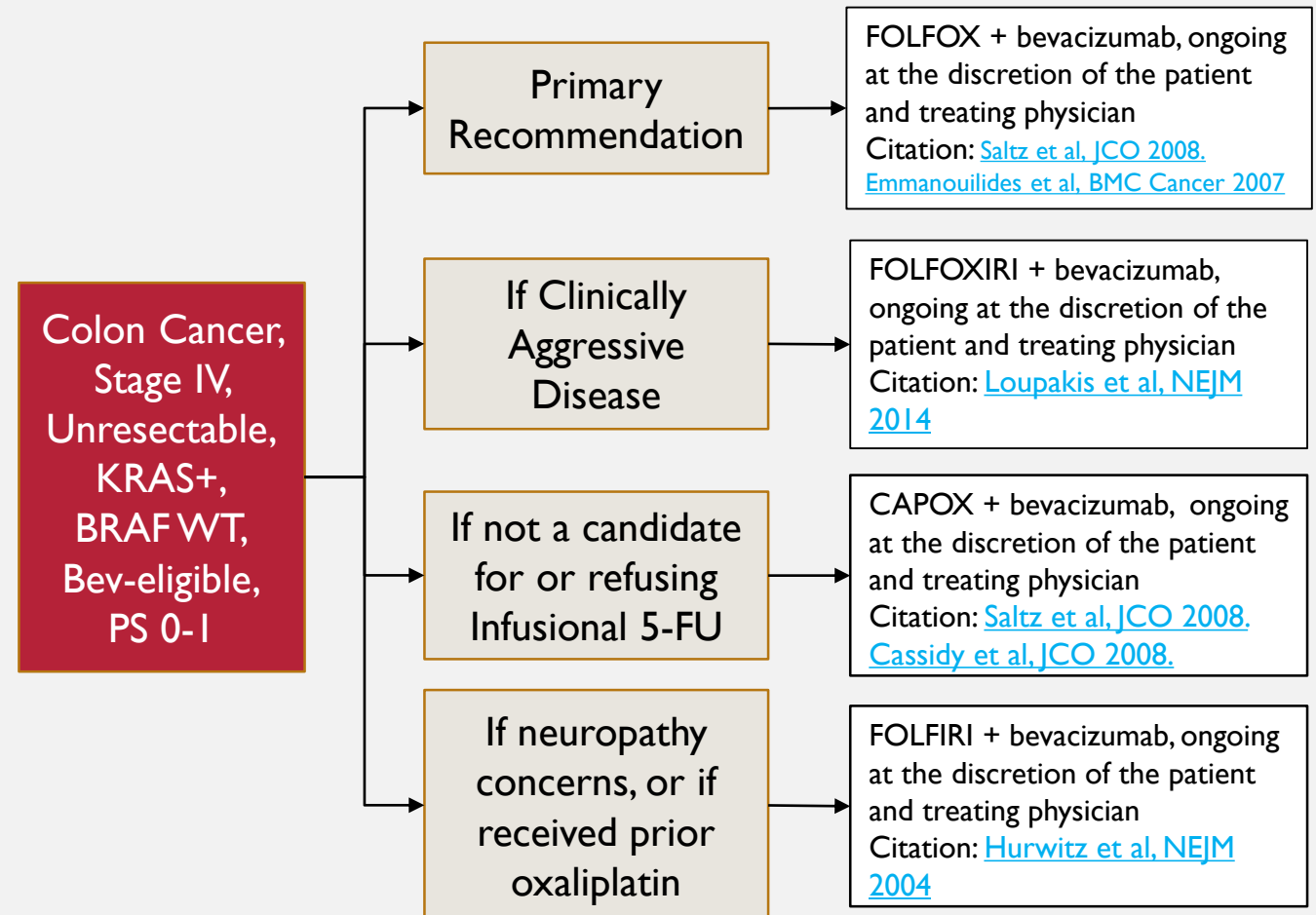
CHALLENGE: CANCER CARE SHOULD NOT BE ONE-SIZE-FITS-ALL



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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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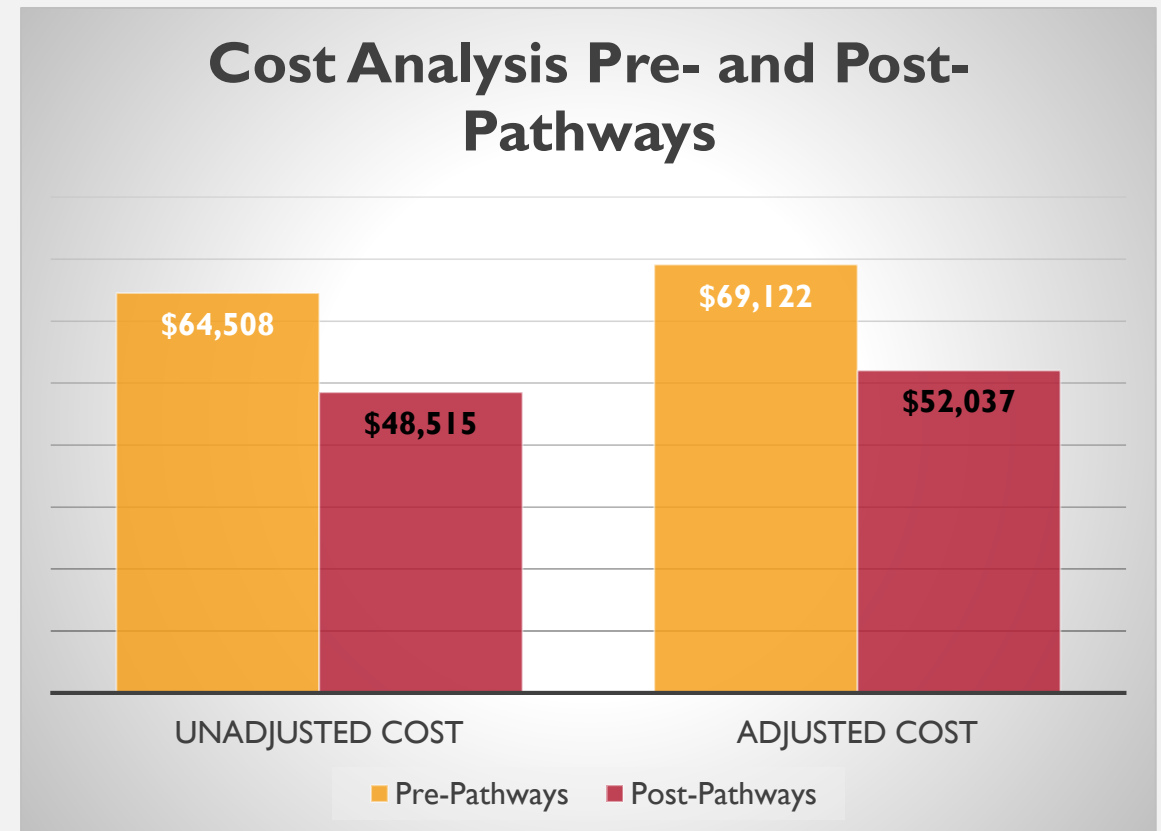
CHALLENGE: PATHWAYS ARE TOO COST DRIVEN

- **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

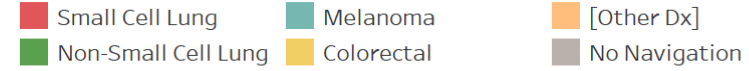
Prior state (Content Development, Program maintenance)

- 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

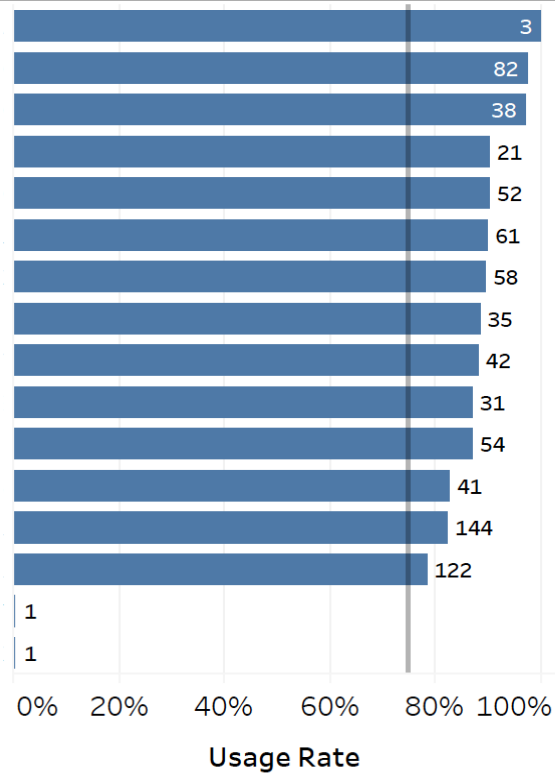
PATHWAYS AS LEARNING TOOL

USAGE RATE AND DISTRIBUTION

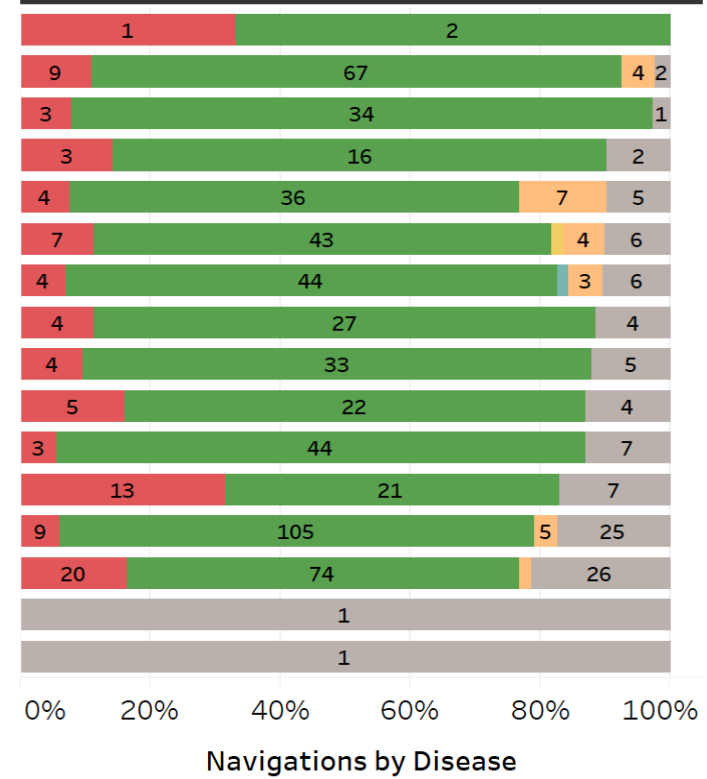
Pathways Name



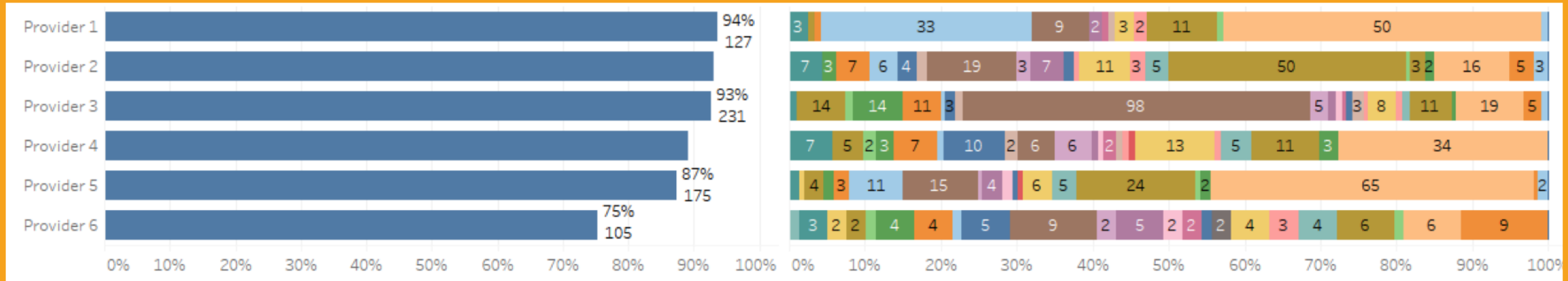
TOP Usage Rate by Provider for AY 2018



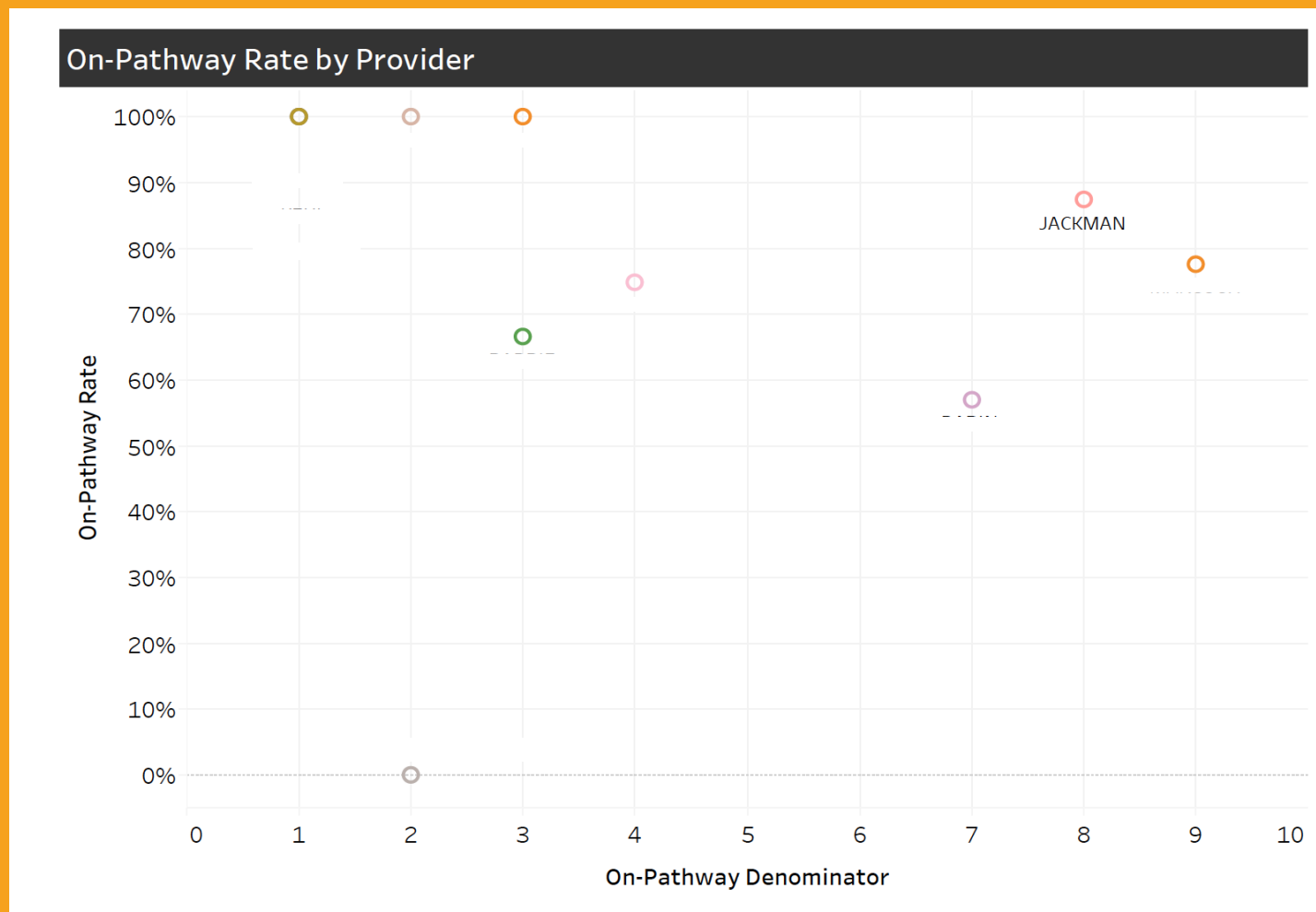
Navigations by Disease



USAGE RATE AND DISTRIBUTION



ON-PATHWAY RATE BY PROVIDER



DECISIONS BY BRANCH

Navigation Type by Disease, Includes All Locations

Pathways Name	Patient Presentation 1	Patient Presentation 2	On-Pathway	Off-Pathway	Off-Treatment
Non-Small Cell Lung	Local Recurrence	Unresectable		1	
	Stage III	Potentially Resectable	1		
		Resected	3		
		Unresectable	2		
	Stage IV Metastatic	Non Squamous	31	14	
		Squamous	4		
Small Cell Lung	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			
Metastatic	Systemic Therapy Indicated	Clear Cell	First Line	On-Pathway OR Clinical Trial	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	
				Off-Pathway	Cabozantinib (tablet)	9.68%	3
				Nivolumab	3.23%	1	
				Nivolumab, Ipilimumab, Nivolumab	9.68%	3	
			Radiation	3.23%	1		
			Second Line	On-Pathway OR Clinical Trial	Cabozantinib (tablet)	29.41%	5
			Nivolumab	23.53%	4		
			Trial 17-064: Nivolumab in Renal Cell Carcinoma	47.06%	8		
			Third Line	On-Pathway OR Clinical Trial	Axitinib	11.11%	1
			Cabozantinib (tablet)	55.56%	5		
			Trial 15-569: GS-16C3F vs Axitinib In Metastatic Renal Cell Carcinoma	11.11%	1		
			Trial 16-527: TAK-228 in Renal Cell Carcinoma	11.11%	1		
			Off-Pathway	Cabozantinib (tablet)	11.11%	1	
			Fourth Line and Beyond	On-Pathway OR Clinical Trial	Axitinib	33.33%	2
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**



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