



Mass General Brigham

Improving access and patient experience for Black and Hispanic patients with neurosurgical disease

UAR Symposium: October 27, 2022

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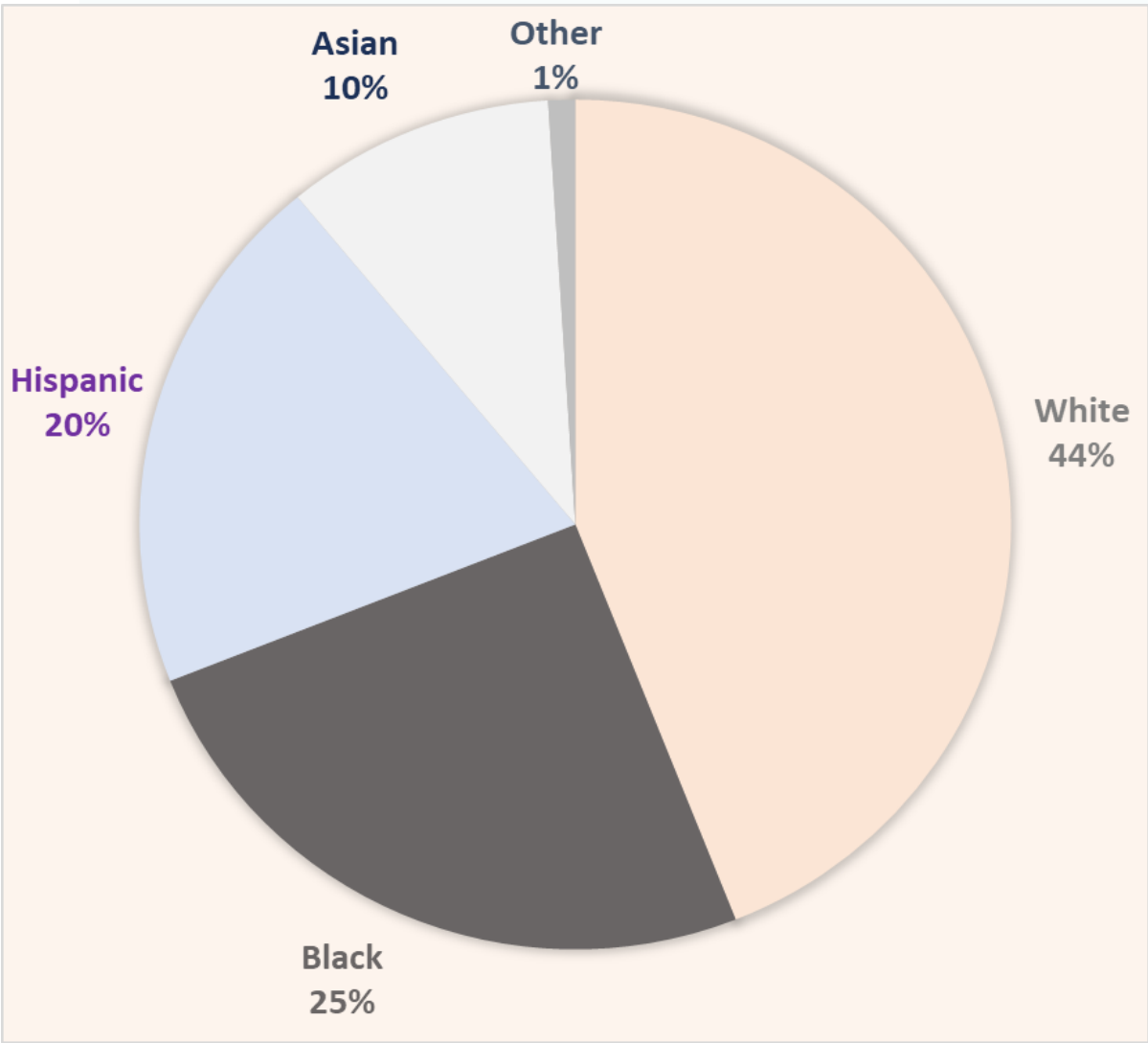
Lydia Headley; Greg Fournier; Jillian Hinkley; Jessica Fallon; Lindsey Sadler; Ron Ash
Neurosurgery, MGB

Problem Statement

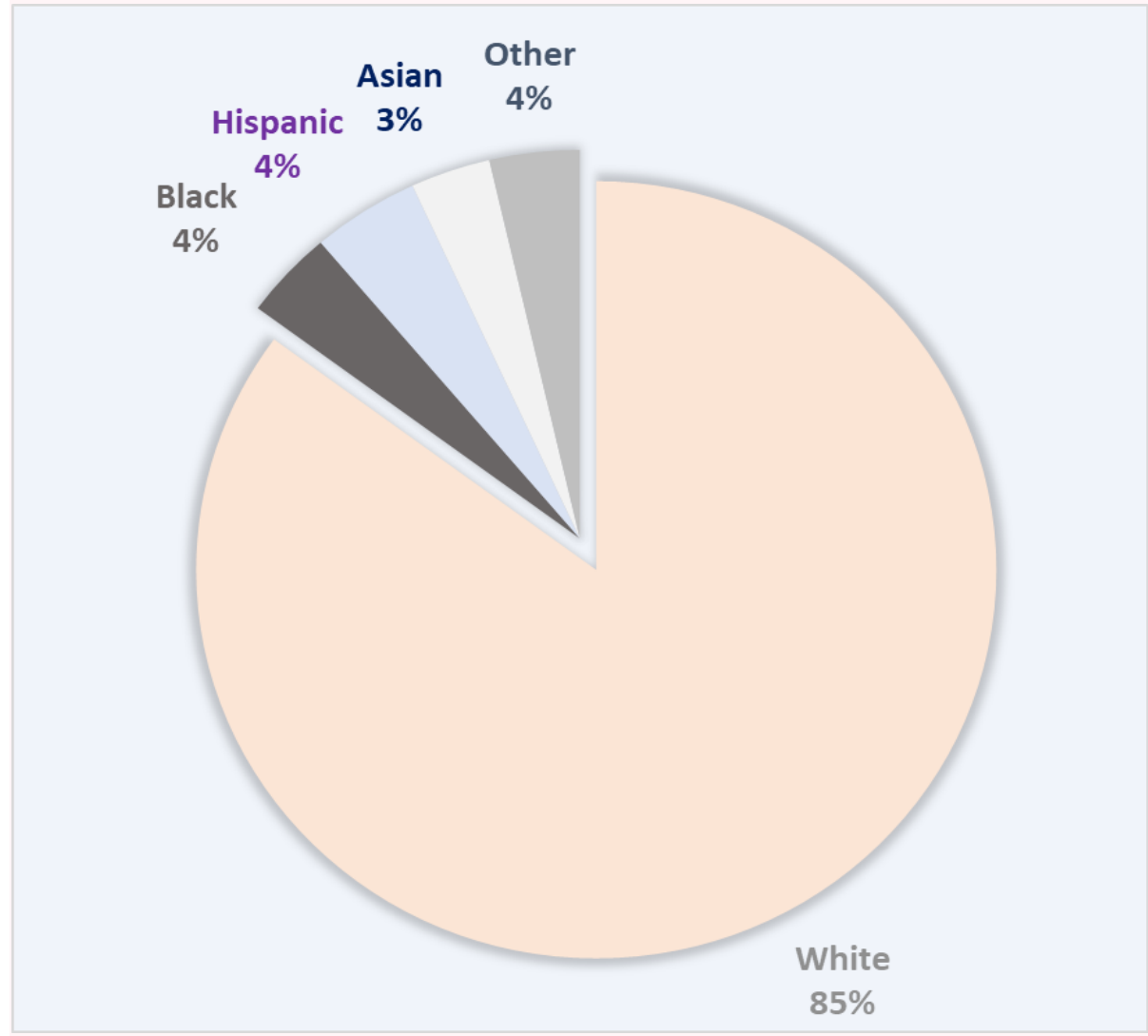
- MGB Neurosurgery is an international leader in neurosurgical disorders.
- Neurosurgical oncologists at MGB evaluate and treat a disproportionately low number of Black and Hispanic patients.
- Barriers to access are multi-factorial: systemic and patient-related.
- Establishing equitable access is critical to improving outcomes for all patients with CNS neoplasms.



Boston Census, 2020



MGB Brain Tumor Outpatient Encounters 2021



Aim Statement(s) and Changes

Previous Aim Statement: We will increase the percentage of Black and Hispanic patients with brain and spinal tumors who are evaluated at MGB from 12% to 15% by September 1, 2022.

Current Aim Statements:

- 1. MGB Neurosurgery will increase Black and Hispanic outpatient visit volume from 8% to 10% by September 2022.**
- 2. MGB Neurosurgery will increase Black and Hispanic patient resource access/utilization 40% by September 2022.**

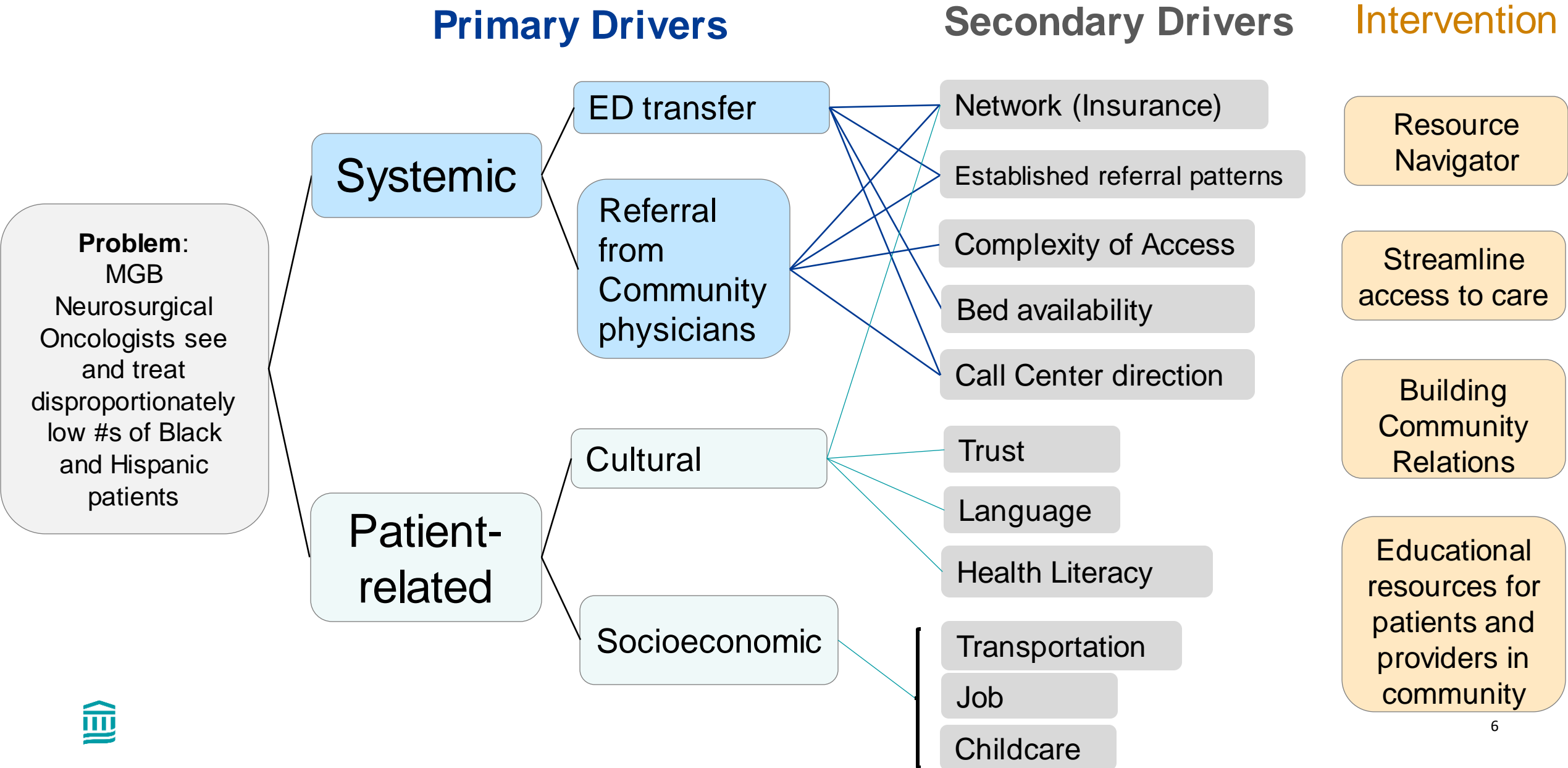


Intervention: Expected Impact on Patient Care and Physician/Clinician Practice & Physician/Clinician Participation

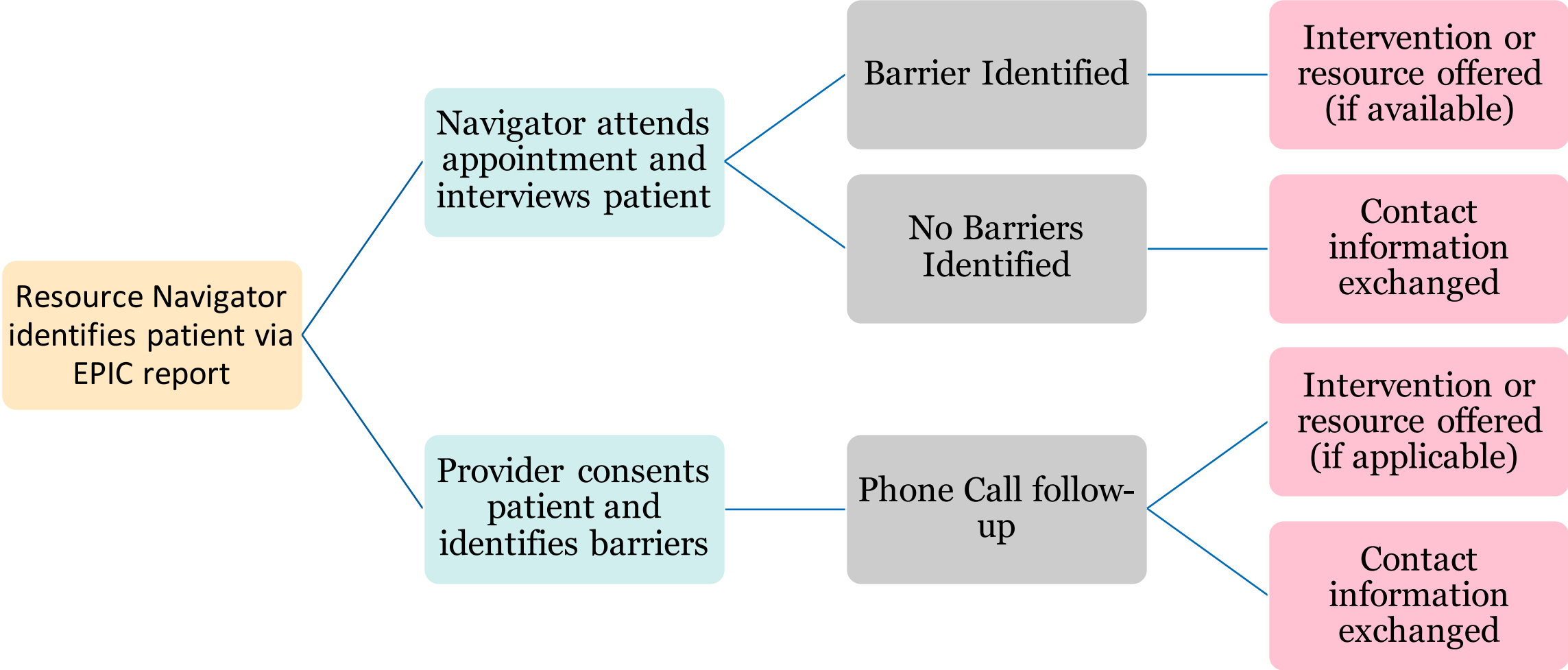
Intervention Type	How will this impact patient care?	How will this impact physician/clinician practice	Direct Physician/Clinician Role
Hire Resource Navigator	Improve patient experience; Streamline access	Increase diversity of patient population; expand partnerships with community providers;	Clinicians will collaborate with Resource Navigator and community physicians to improve access for Black and Hispanic patients to neurosurgical care



Driver Diagram: Change Implemented



Resource Navigator Process Map



Year 1 Accomplishments - Qualitative

- **Improved knowledge of institutional and community resources** within BWH and MGH Neurosurgery
- **Identified major barriers to care for current patient population**
 - Insurance Coverage
 - Transportation/Travel (Domestic and International)
 - Housing/Lodging while undergoing treatment
 - Behavioral and Mental Health treatment needs
 - Language Barrier (In office translator, telephone communication delays and disconnects, patient knowledge of how to obtain a translator)
 - OR and Bed availability
- Develop network of internal and community resource connections
- Interface community providers



Year 1 Accomplishments - Qualitative

- **Engage League of Community Health Centers**
 - Approved CME series, with first event being held in December 2022
 - Events to be held quarterly
- Track patient data
 - Acquired access to Epic Data Warehouse and National Research Corporation (NRC) Health data
 - Standard Operating Procedure document
 - Developed criteria to track patients through Epic reports
- **Identify available resources**
 - Streamlined access to resources for 20 patients
 - Creation of resource folder
- **Patient Satisfaction Survey** to be coupled with NRC monthly data pulls
 - Available in 4 language: English, Spanish, Portuguese, Haitian Creole



Project Measurements

Process Metrics

Outcome Measures

Balancing Measures

A measure to ensure the process is being followed

A measure to ensure the goal is being achieved

A measure to track unintended results

How many patients did the Resource Navigator interact with?

How many black and Hispanic patients needed and were given resources?

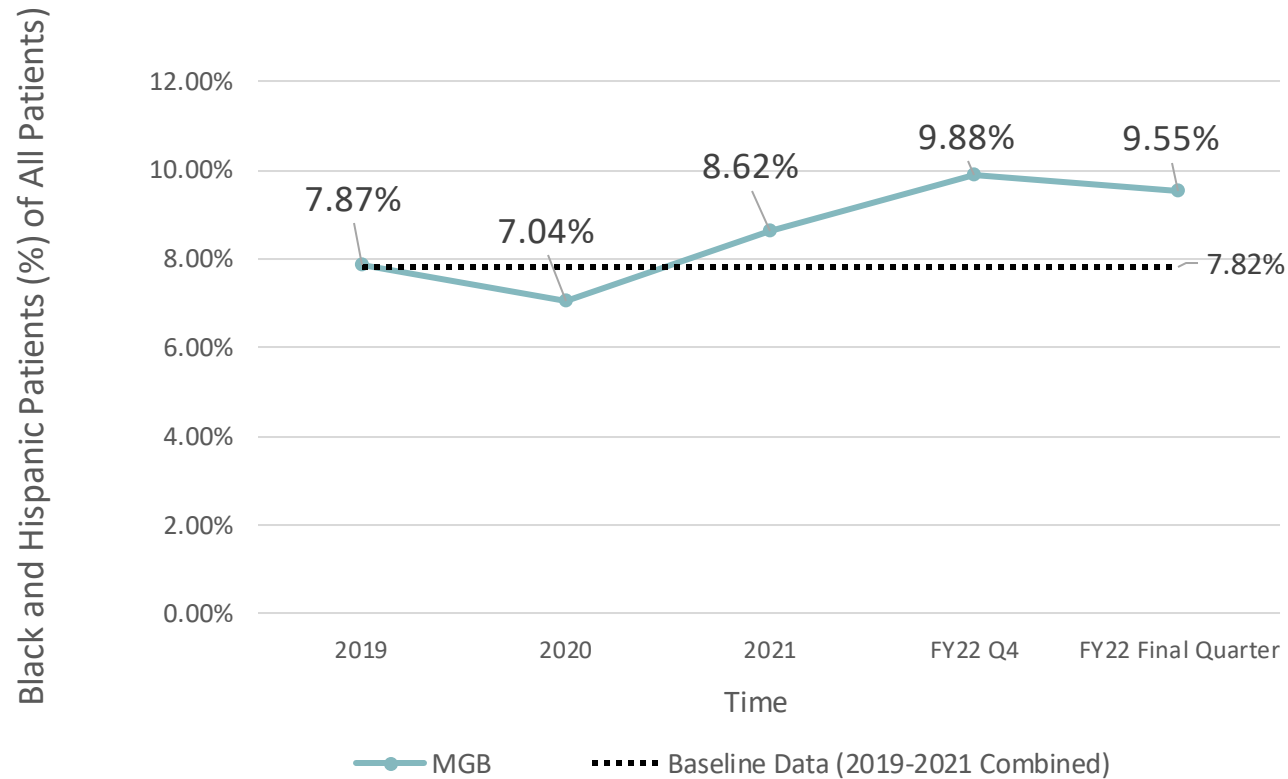
NRC Data
Patient Satisfaction Survey (4 languages)

Have we increased our Black and Hispanic patient numbers? By how much?



MGB Percentage of Unique Black and Hispanic Patients (Outpatient Services)

Percent of MGB Unique Brain Tumor Patients who are Black or Hispanic

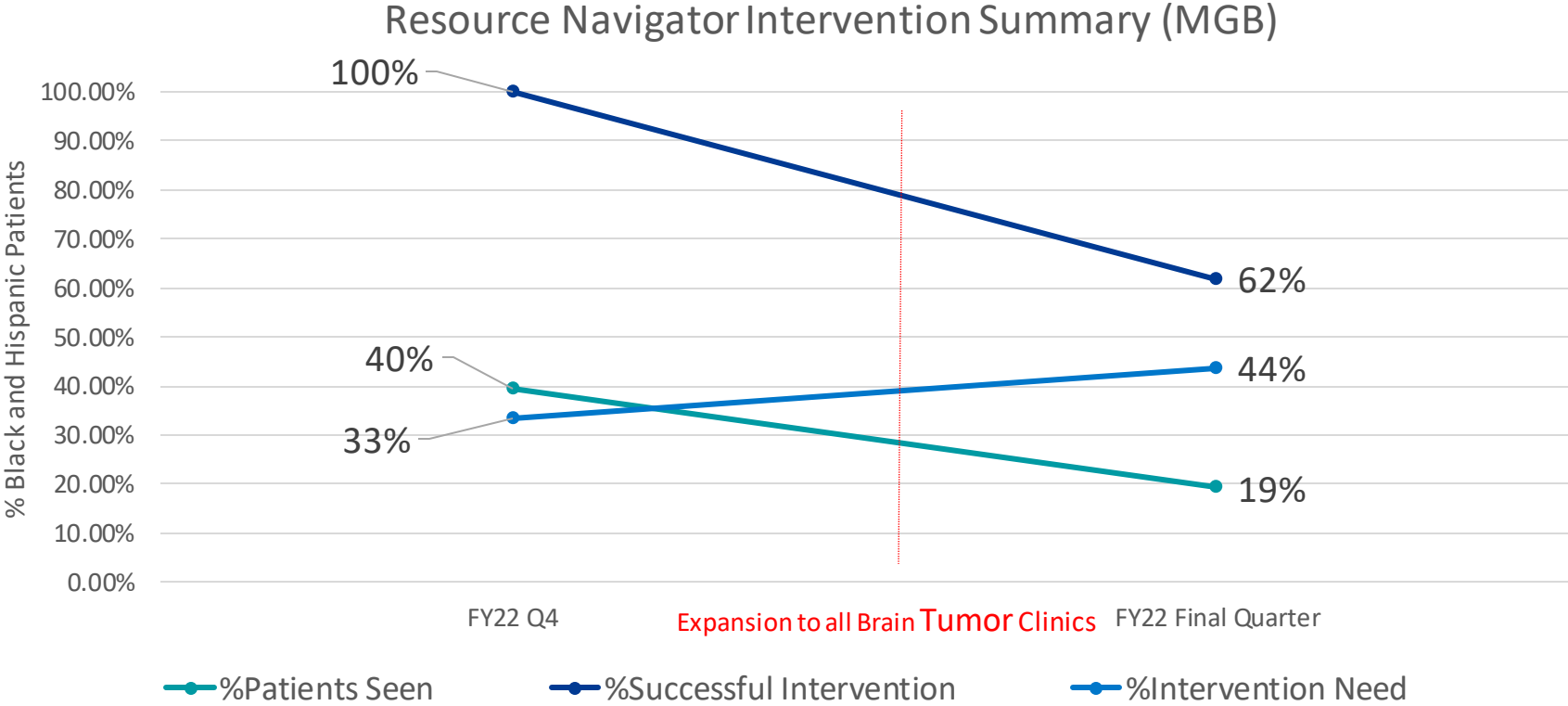


- Intervention Start: FY22 Q4
- Baseline Date time range: 2019-2021

- Source: EPIC Report



Resource Navigator Impact



Resource Navigator Intervention Summary (MGB)						
Time (Quarterly)	Patients Seen		Successful Intervention		Intervention Need	
	Volume	%	Volume	%	Volume	%
FY22 Q4	21/53	40%	7/7	100%	7/21	33%
FY22 Final Quarter	48/250	19%	13/21	62%	21/48	44%



Year 1 Challenge – Limited Navigator Bandwidth

With two departments and 4 clinic locations...

- Resource Navigator unable to be physically present at both sites daily
- Overlaps in appointment times between providers.

Steps Taken:

- Implemented telephone follow up for missed patients
- Provider consents patient and informs navigator of any identified barriers
- Alternating weekly onsite location of Navigator
- Prioritization of new patients and patients with known barriers



Year 1 Challenges – Inconsistent Communications

Communicating with multiple providers on select appointments with various scheduling conflicts

Steps Taken:

- Standard Operating Procedure
- Individual meetings with clinic teams
- EPIC Scheduling appointment tagging system
- Huddle note tagging procedure on EPIC schedules with e-mail identification of patients
- Focused engagement with Practice Operation Assistants/Patient Service Coordinators
- Weekly patient identification emails with updated reminder emails one day before clinic



Year 1 Challenge – Resource Availability and Department Knowledge

Identifying available resources at each department and each hospital

Steps taken:

- Monthly training with MGH Social Determinants of Health Team/Resource Specialists
- Communication with BWH Social Determinants of Health Team
- BWH Primary Care Resource Folder
- Communication and resource utilization of DFCI Resource Specialists and Social Work
- Massachusetts League of community Health Centers



Year 1 Challenge – Patient Reachability and Accessibility

Known Patient-Related Barriers

- Language
- Unknown or unclear medical proxies
- Time differences/Work schedule conflicts
- Patient memory challenges/Reminder notification needs
- Technological Literacy

Steps Taken:

- Coordination with clinic teams
- Frequent follow-up calls
- Patient education (how to get an interpreter, who to contact, how to set up patient gateway)
- Calls outside of normal operating hours
- Resource Navigator direct line



Year 1 Challenge – Engaging Community Providers

How to interact with and reach out to Community Health Centers

Steps Taken:

- Meetings held with VP of Clinical Affairs at Massachusetts League of Community Health Centers, Susan Dargon-Hart
- Approved CME Series for League of Community Health Center CMOs
- Developing patient education material and social media material
- Future plans to provide patient education material at Community Health Center events



Looking Ahead: Plans for Year 2

Goals:

- Expand to spine tumors
- Expand to Emergency Department consults/inpatient encounters
- Develop, consolidate, and disseminate folder of patient resources

Next Steps:

- Integrate into virtual care
- CME Event with League of Community Health Centers
- Expand patient education materials
- Develop social media content
- Distribute and collect patient satisfaction surveys
- Foster relationships with institutional and community resource groups



Appendix



Team Members

Name	Credentials	Role/Discipline (i.e. hospitalist, nurse manager, analyst, etc.)
Project Leaders:		
Lydia Headley		Equity Coordinator/Resource Navigator, Neurosurgery BWH
Gregory Fournier	MPH	Business Manager, Neurosurgery, MGH
Jillian Hinkley		BWPO Project Manager, Neurosurgery, BWH
Team Members:		
Ali Aziz-Sultan	MD, MBA	Chief of Vascular/Endovascular Neurosurgery, BWH
Wenya Linda Bi	MD, PhD	Neurosurgery, BWH
Jean-Valery Coumans	MD	Director of Neurosurgery Education, MDH
William Curry	MD	Director of Neurosurgical Oncology, Chief Medical Officer, MGH
Danielle Sarno	MD	Director, Interventional Pain Management, Neurosurgery, BWH
Theresa Williamson	MD	Neurosurgery, MGH
Ron Ash	MHA	Senior Administrative Director, Neurosurgery, MGH
Jessica Fallon	MSHA	Director of Operations, Neurosurgery, BWH
Lindsey Sadler	MBA, MA	Executive Director, Neurosurgery, BWH
Project Sponsors:		
Bob Carter	MD, PhD	Chair of Neurosurgery, MGH
Ennio Chiocca	MD, PhD	Chair of Neurosurgery, BWH



Local Impact - Voice of the Patient

MGB Neurosurgery is a quaternary referral center for complex neuro-oncological cases which benefit from surgery. Black and Hispanic patients may lack the care infrastructure and/or insurance schema to access our neurosurgical care.*

A 35 year-old Black man developed severe headaches and double vision, found to have a thalamic and brainstem tumor causing hydrocephalus. He underwent placement of a ventriculoperitoneal shunt at Boston Medical Center and was referred to MGB Neurosurgery by BMC neurosurgery for resection of his thalamic brainstem glioma. The patient was initially informed that his **insurance was not accepted by MGB** and there would be no conduit for evaluation or treatment. He was seen by a MGB neurosurgeon in consultation without charge given the gravity of his clinical case and continued to progress in symptoms while insurance appeal ensued. He ultimately presented to the Brigham ED, from where imaging showed progression of disease over two weeks. He was admitted and underwent an uneventful surgery, confirming diagnosis of a midline high-grade glioma. Following recovery from surgery, he was evaluated by neuro-oncology and CNS radiation oncology as an inpatient but **could not establish outpatient treatment** due to insurance barriers. The **neurosurgery team spent over a dozen hours trying to establish a PCP** for the patient to allow for referrals, but the first available PCP appointment in his network was not for another 2 months despite direct physician communication of the case urgency, thereby leading to significant further delays in his care.



Measure

Measure

What is your measure?

Absolute number and percentage of patients evaluated at MGB for diagnosed brain and spine tumors who are Black or Hispanic

Patient Population

Patients >17 years old who are evaluated in the ambulatory clinics, in the ED, transferred, or seen in clinic with diagnosed brain and spine tumors

Calculation methodology

Division

Data source

Epic Data Warehouse

Data collection frequency.

Weekly

Measure Source

Benchmark & Source

Internal and HCUP



Process & Balance Measures

	Process Measure #1	Process Measure #2
What is your measure?	CME Events with League of Community Health Centers	Percent of Black and Hispanic patients engaged by Resource Navigator
Patient Population (include age, gender , exclusion if any, other parameters)	N/A	Black and Hispanic adult patients
Calculation methodology (numerator/denominator if applicable)		Black and Hispanic patients engaged by Equity Coordinator/ Total Black and Hispanic patients
Data source	Internal reporting	Equity Coordinator list/ EPIC data warehouse
Data collection frequency	Quarterly	Monthly
Measure Source HEDIS, Medicare, Internal, etc.	Internal	Internal/ EPIC data warehouse
Benchmark & Source (if internal measure indicate N/A)	N/A	N/A



FY22 Q4 Reporting Numbers (Apr-Jun)

NSU UAR Identified Black and Hispanic Patients (Apr-Jul1)

	MGH		BWH		Total	
	Volume	(%)	Volume	(%)	Volume	(%)
Cranial/Tumor Group	187/2115	8.84%	131/1476	8.88%	318/3591	8.86%
Participating Provider	44/415	10.60%	30/399	7.52%	74/819	9.04%
Patients seen by Resource Navigator						
Patients seen that needed additional resources						

	MGH (Unique Patients)		BWH (Unique Patients)		Total (Unique Patients)	
	Volume	(%)	Volume	(%)	Volume	(%)
Cranial/Tumor Group	105/1178	8.91%	141/1345	10.48%	246/2490	9.88%
Participating Provider	23/223	10.31%	30/346	8.67%	53/569	9.31%
Patients seen by Resource Navigator	5/23	17.39%	16/30	53.33%	21/53	39.62%
Patients seen that needed additional resources	2		5		7	



FY22 Final Quarter Reporting Numbers (Jul-Sep)

NSU UAR Identified Black and Hispanic Patients (Jul-Sep)

	MGH		BWH		Total	
	Volume	(%)	Volume	(%)	Volume	(%)
Cranial/Tumor Group	174/2003	8.69%	224/2568	8.72%	398/4571	8.71%
Participating Provider	174/2003	8.69%	220/2489	8.84%	394/4492	8.77%
Patients seen by Resource Navigator						
Patients seen that needed additional resources						

	MGH (Unique Patients)		BWH (Unique Patients)		Total (Unique Patients)	
	Volume	(%)	Volume	(%)	Volume	(%)
Cranial/Tumor Group	115/1179	9.75%	137/1461	9.38%	252/2640	9.55%
Participating Provider	115/1179	9.75%	135/1422	9.49%	250/2601	9.61%
Patients seen by Resource Navigator	19/115	16.52%	37/135	27.41%	48/250	22.40%
Patients seen that needed additional resources	9		12		21	





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