

# Challenges of providing genomic medicine in a resource constrained system

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**DENVER HEALTH**

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# Genomic medicine in an urban FQHC <sup>2</sup>

- Variation between providers' knowledge and practice
- Genetic diseases – rarely seen, leading to delay of recognition/referral
- Genetic consultation by external referral and varies by payor source
- Rare and severe genetic syndromes are best managed in subspecialty care setting
- Screening asymptomatic patients with risk for well-defined hereditary syndromes needed but not yet standard of care
- Role of primary care in genomic medicine not yet well defined

# Denver Health

- Primary integrated safety net health system in Denver and regional trauma center
- Nine outpatient federally qualified health centers
- Cares for almost one-third of Denver county's population
- Inpatient 525 bed facility with >25,000 admissions annually

# Lowry Family Health Center



Unique users: 27,000

Providers: 15

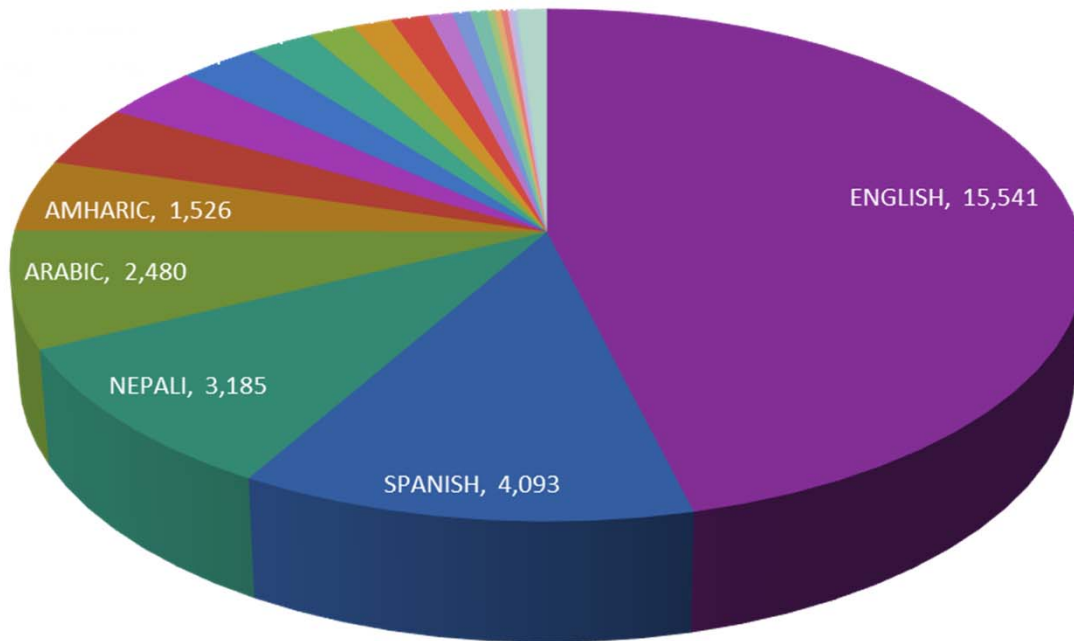
<200% FPL 98%

Hispanic 29%

Black 29%

Medicare or Medicaid  
74%

*50 Languages in Total*







Navigators Adrien Matadi and Kuang Oo standing outside of LFHC

# Primary Care Providers in FQHC

- Perceive limited benefit of genomic medicine
- Competing demands
- More urgent issues
- Confusion about who and how to screen and refer (no clear guidelines or standard care)
- Awareness and education about genomic medicine and resources inconsistent
- Lack of actionable information and triggers in EMR
- Limited resources and support for patients, esp. with language/cultural barriers
- Unclear handoffs to specialty care



# 2018 ACS Clinical Performance Indicators

		<b>Diabetes A1c &lt;8</b> 63%	<b>Hypertension BP Controlled</b> 66%	<b>Breast Cancer Screening</b> 63%	<b>Colorectal Cancer Screening</b> 54%	<b>Pediatric Vaccinations</b> 60%	<b>Six Well Child Visits Before 15 Months</b> 79%	<b>Well Child Check Rate 3-9 year olds</b> 76%	<b>Weight Assessment and Counseling - Peds</b> 64%	<b>First Trimester Entry into Prenatal Care**</b> 64%	<b>Post-Partum Visit 21-56 days**</b> 62%	<b>ACS Tobacco Interventions *</b> 55%	<b>Ambulatory Quality Strategic Index</b> 14 pts
CHS	Overall	57.25%	63.42%	57.98%	51.99%	51.47%	74.42%	74.87%	60.85%	64.82%	66.29%	51.72%	4 pts
		9415	20814	13685	24790	3159	782	23446	47016	1356	709	4383	
		57.25%	63.42%	57.98%	51.99%	51.47%	74.42%	74.87%	60.85%	64.82%	66.29%	51.72%	4 pts
		9415	20814	13685	24790	3159	782	23446	47016	1356	709	4383	
Family Medicine Division		58.12%	62.84%	57.3%	50.09%	44.89%	72.26%	73.3%	54.63%	57.65%	66.79%		4 pts
		4778	9986	6578	11501	1361	393	8924	15423	536	277		
General Internal Medicine Division		56.51%	63.39%	59.69%	54.35%	68.63%	57.14%	80.82%	66.29%	87.5%	100.0%		4 pts
		4475	10373	6896	13079	51	7	292	623	16	7		
General Pediatric Division						56.5%	76.96%	77.39%	68.01%				4 pts
						1722	382	13268	24090				
School Health Division								53.01%	49.34%				4 pts
								962	6867				
Womens Care Division				23.22%	9.05%					69.15%	65.41%		4 pts
				211	210					804	425		



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# % patients with FH collected in DH 10

## Primary Care 05/2018

	Any Family History	Cancer FH	Diabetes/CVD FH
Pediatric	55	8	25
IM	67	32	33
FM	59	24	30
OB/GYN	54	22	19
Total	59	20	28

# Diverse patients

- More likely to have ambiguous result
- Higher burden of comorbid conditions with fewer resources
- Information about family history uncertain
- Preventive healthcare and wellness less of a priority, more accepting of acute care
- Language, literacy and cultural barriers
- Additional burden and costs accessing care
- Less knowledge about genomic medicine and syndromes
- Lack of culturally competent educational resources and support groups
- More likely to rely on provider or community for guidance than their own research

# System issues

- Screening for familial conditions inconsistent and not measured
- Limited resources and access to genomic medicine
- Lack of payor sources
- Cost and consistency of downstream care
- Handoffs between primary and specialty care not defined

# Meeting these gaps where I work

- Diverse patient centered care
- Tailoring genomic medicine services to diverse populations
- Cost-effective
- Evidence-based guidelines for population care
- Patient/provider communication and trust
- Provider education, support and feedback
- Optimizing electronic tools and standard work
- Empowering patients to understand their and their families' health