

Reducing Unwarranted Variation in Care

**Taking Advantage of the Resources
in VHAN's Low Back Pain Care Path**



Rhodes Amaker, MMHC

Anna Chandler, RN, BSN, MBA

Russell Brothers

Heather Limper, PhD

Michael Modic, MD

Acknowledgements & Funding:
Vanderbilt Health Affiliated Network
and its Participating Members

Vanderbilt Health
Affiliated Network

Reducing Unwarranted Variation in Care

Why Target Low Back Pain?

It is estimated that 80% of the U.S. population will experience low back pain (LBP) at least once in their lifetime, according to a study published in *JAMA*.

That study also found that patients with lower back pain frequently received care inconsistent with clinical guidelines:

- 32.3% received imaging within 30 days and accounted for 2 times greater costs than those who did not
- 35.3% received imaging without first trying physical therapy
- Approx. 40% received opiates within first year of diagnosis
- Non-surgical patients accounted \$1.6 billion of expenditures within 6 months of diagnosis

Within VHAN, an estimated \$5.8 million in waste can be tied to avoidable spine MRI/CTs and physical therapy.

VHAN patients with a low back pain diagnosis are:

2.4x more likely to have an avoidable ED visit

1.7x more likely to have a hospital admission

Vanderbilt Health
Affiliated Network

Practice Engagement Plan

Methods

Provide cost and executive summary information

Why low back pain?

Why variation in care?

Present practice level data to leadership

Set individual statistically significant targets based on practice baseline

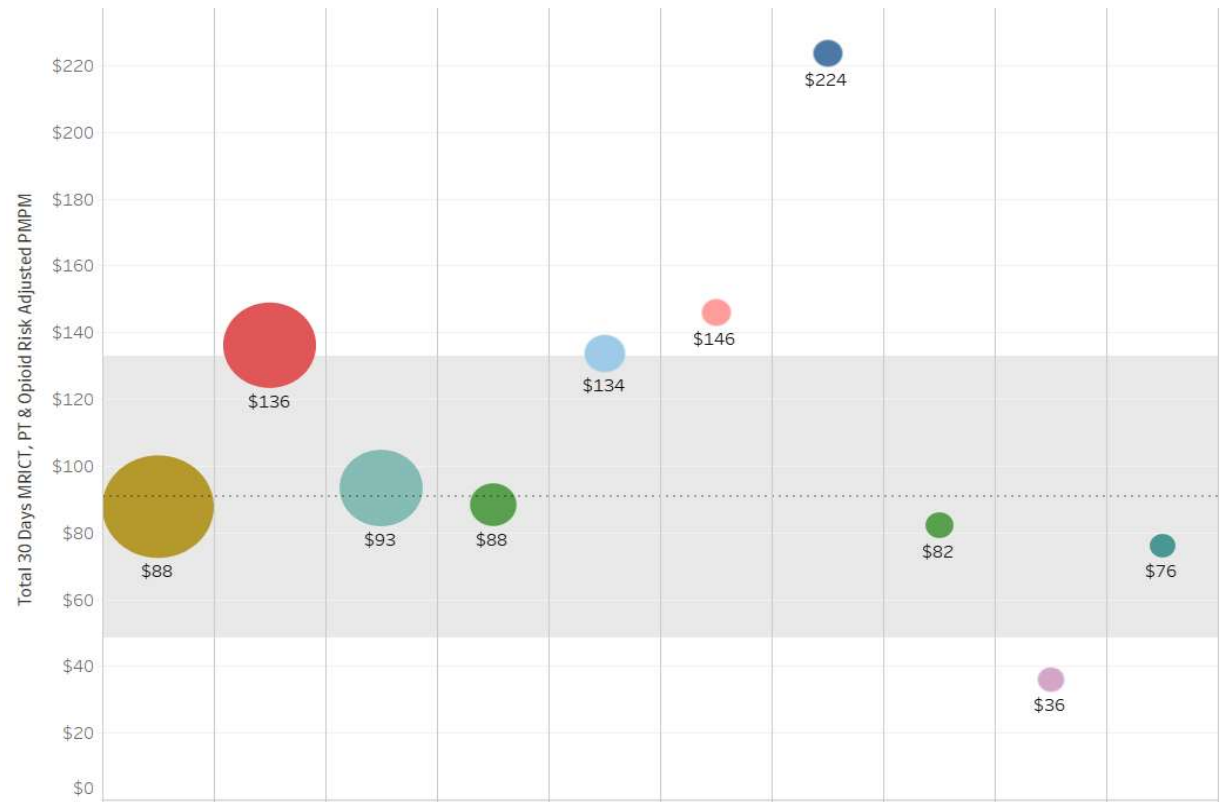
VHAN assists practice to develop tactical strategy and implementation

Care Path Implementation

Patient Education

Provider Education

Practice Level Data *spend relative to the mean*



Vanderbilt Health
Affiliated Network

All Regions
Index LBP by Attributed Provider Group Heat Map

VHAN Provider	% of Members without Imaging	% of Members without PT	% of Members without Narco	MRICT PT and Opioid Average Percent
America's Family Doctors	69.8%	63.5%	96.8%	76.7%
Chattanooga Family Practice	65.8%	74.0%	84.9%	74.9%
Cool Springs Internal Medicine and Pediatrics	59.1%	60.2%	94.6%	71.3%
Erlanger Medical Group	54.3%	68.3%	90.1%	70.9%
Heritage Medical Associates	61.7%	62.6%	95.6%	73.3%
Northcrest Physician Services	72.7%	75.0%	86.4%	78.0%
Northside Medical Professionals	69.8%	85.7%	93.7%	83.1%
Premier Medical Group	81.2%	84.1%	97.1%	87.4%
Summit Medical Group	67.5%	74.0%	96.1%	79.2%
The Jackson Clinic	71.6%	83.0%	90.9%	81.8%
Vanderbilt Medical Group	64.5%	59.5%	92.0%	72.0%
West Tennessee Medical Associates	56.3%	75.0%	84.4%	71.9%
West Tennessee Medical Group	71.9%	75.0%	87.5%	78.1%
Williamson Medical Group	73.4%	64.2%	89.9%	75.8%
Grand Total	64.7%	64.8%	92.1%	73.9%



Identify Top Opportunities for
Reducing Unwarranted Variation

Interventions

Provide cost and executive summary information

Provider education and coaching

Quiztime

In-person education for smaller practices

Patient coaching and education

Low back pain handout (p.33)

Low back pain exercises

ED Reduction Tactics

Care path

Order set

Express lane

Vanderbilt Health
Affiliated Network

Current Status, Results & Next Steps

Current Status

- Implemented low back pain care path at pilot location
- Developing plans for 2nd pilot
- Identified 12 additional practices that represent 80% of the opportunity for low back pain care implementation for the network
- Set targets for the project

Results:

- Set metric targets for performance
- Will await results of the pilot compared to baseline and relative to targets

	% Without Metric						
	Baseline	Comparison			Target		
Category	% With Out Metric	14 Group Baseline	*Regional Benchmark	*National Benchmark	Threshold	Target	Reach
% w/o MRCT	59.10%	64.70%	65.92%	70.61%	68.7%	71.8%	81.2%
% w/o PT	60.22%	64.80%			74.0%	75.0%	85.7%
% w/o Opioids	94.60%	92.10%			91.5%	95.4%	97.1%
Total Savings							
Pvalue							
% w/o MRCT					0.0001628	0.0000110	0.0000000
% w/o PT					0.0000297	0.0000149	0.0000000
% w/o Opioids					0.9904076	0.2678336	0.0268725

Next Steps

- Collect pilot data
- Scale pilot to 2nd location
- Leverage interventions for other top opportunity practices
- Start to measure performance relative to baseline for practices