

Using Data to Manage Providers & Patients in Our Communities Amidst the Opioid Crisis

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OBJECTIVES

Identify key patient safety and accountability tools that support community-based, safe and responsible treatment of chronic pain conditions

Articulate how tracking specific metrics using technology can help influence provider practice, productivity, and safety.

Connect the power of technology with its potential to influence hospital revenue, high quality patient care, and program efficiency.

THE OPIOID EPIDEMIC

\$78.5B Economic burden of prescription opioid misuse

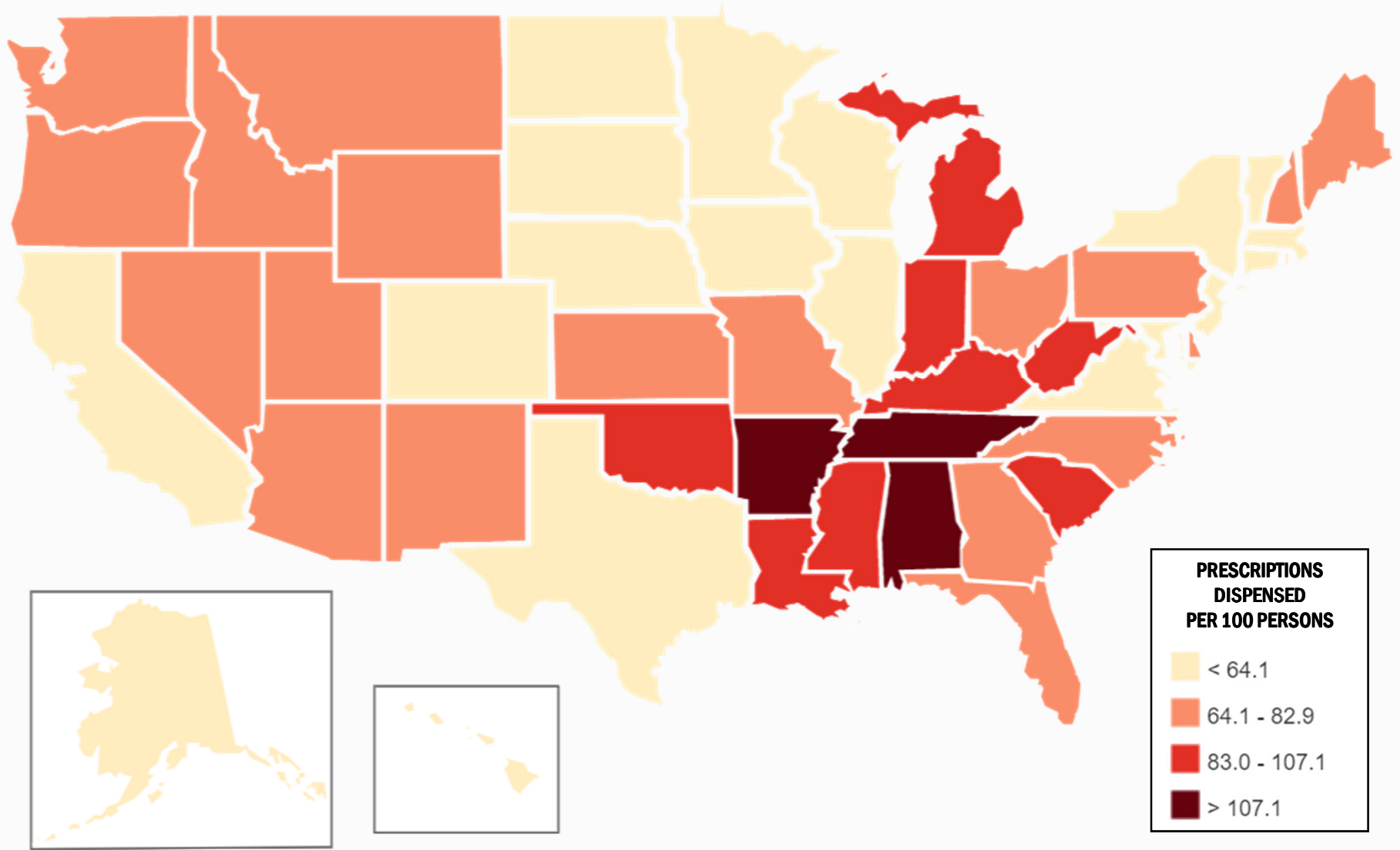
4 in 5 new heroin users started out misusing prescription painkillers

175+ Americans die every day from unintentional drug overdoses

63,000+ American overdose fatalities annually

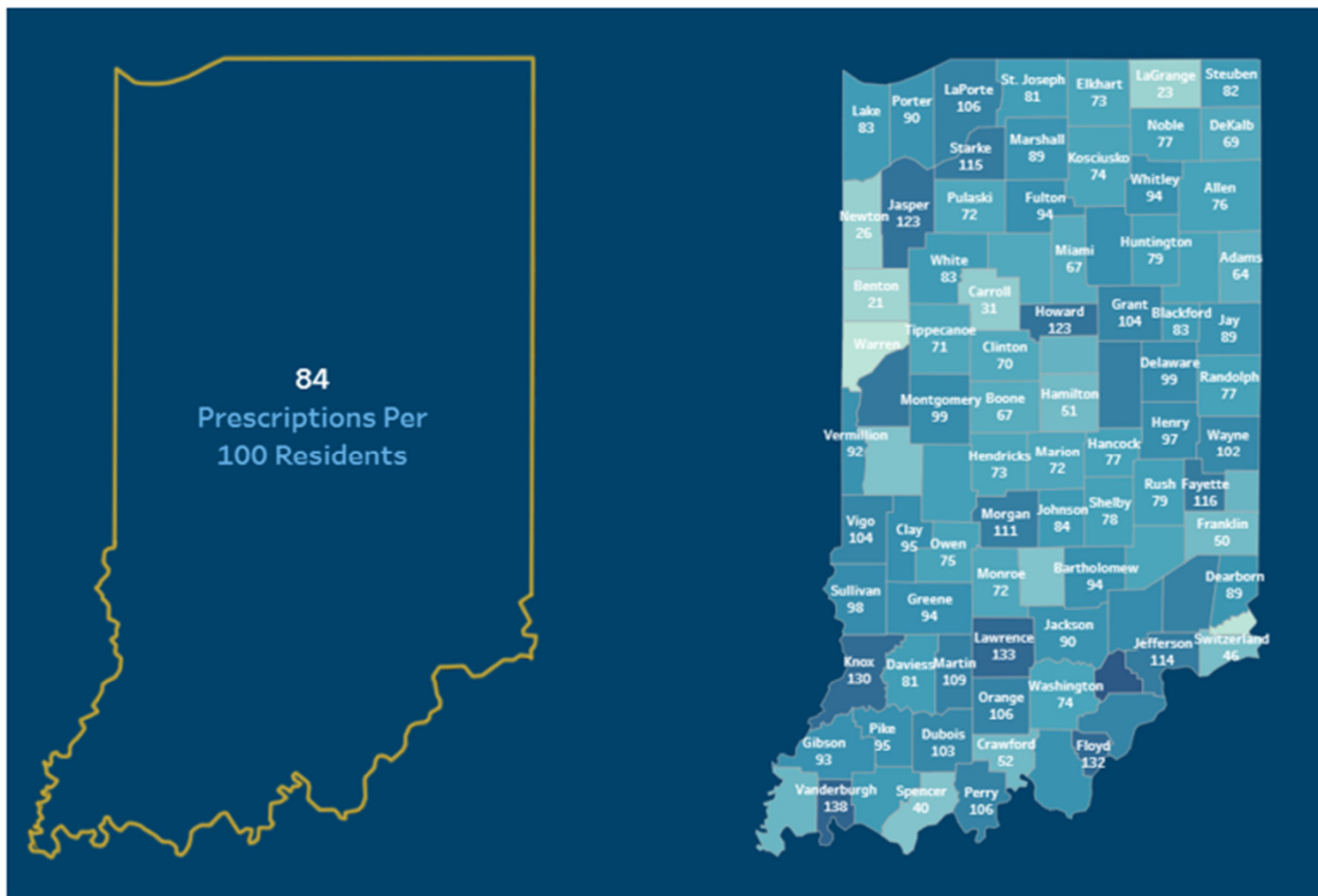
THE OPIOID EPIDEMIC

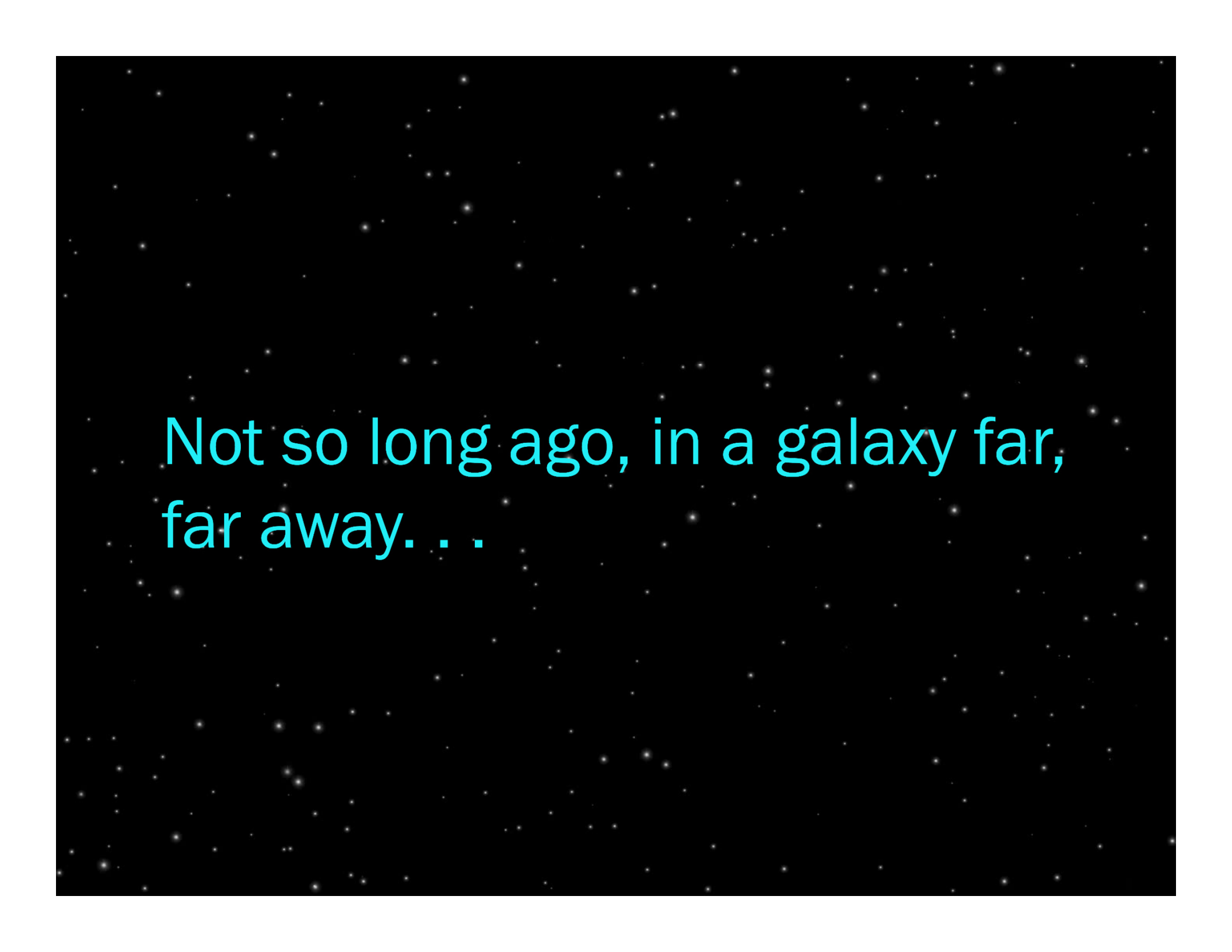
2016 STATE PRESCRIBING RATE



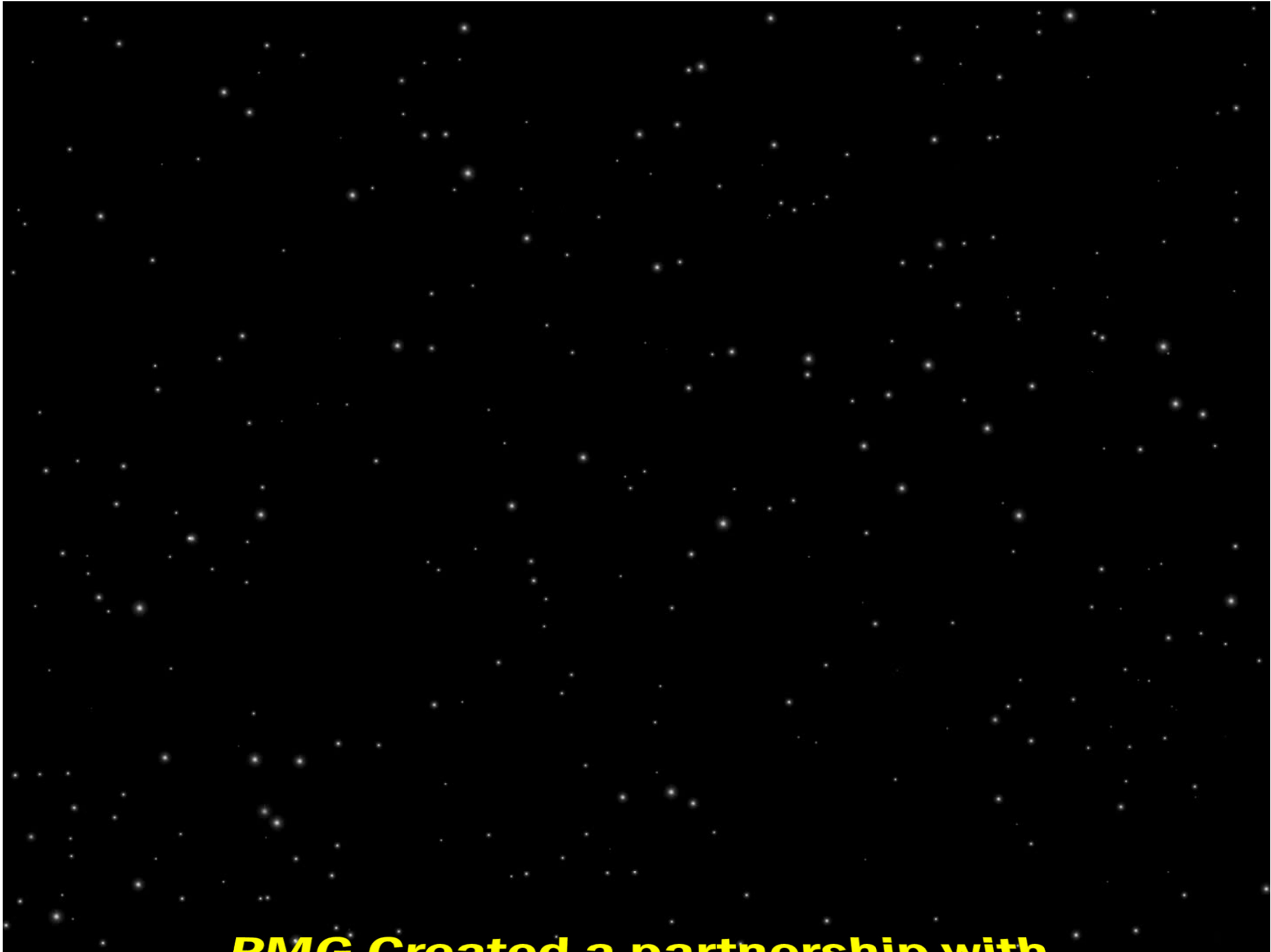
THE OPIOID EPIDEMIC

2016 INDIANA PRESCRIBING RATE





Not so long ago, in a galaxy far,
far away. . .



BMC Created a partnership with

Mitigating Risk: Endor Medical Center Case Study

How PMG used technology & data to mitigate risk



LACK OF ACCOUNTABILITY

Endor: THEN

Patients were not being held accountable to an abbreviated PTA agreement.

Providers did not consistently utilize non-narcotic care plans when patients displayed non-compliance.

Staff was not well-educated on pain management patients (utilized float staff) and standard processes and physicians didn't empower staff to learn or ask questions.

**Pain Treatment
Agreement**

**Compliance
Management List**

UTOX

Key Accountability Tools



Centralized Compliance Management List

- Automatic search of CML when enter a NP referral
- Supports PMG's key business and clinical processes

We see you have previously been seen at our [Daviess Community Hospital](#) facility. We encourage you to call that facility to reschedule. Do you need the phone number for that facility? Phone: [812-254-2952](#)

Q CML Results

Name	Physician	DOB	Location	Reason	Date Added	Notes
Darth Vader	Dr. Lynch	01/01/2001	Daviess Community Hospital	NNCP (Medication Management)	12/10/2014	violated at MCHS also

No Patient Found

Referral Log *Darth Vader is entered into Referral Log . . .*

Referral Date: Month:

Pt. First: Pt. Last:

Pt. DOB: Pt. Zip Code:

Q Search Referrals

Work Queue

10 records per page Search:

Last Action:

Compliance Management List Benchmarking

Exception Reporting	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PMG AVG
% Wrong Site Procedure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Infection Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Admissions Following Surgery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Pts. with Dural Puncture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Death / Overdose	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Pts w ED Visits ¹	1.0%	0.6%	0.0%	0.6%	0.0%	0.7%	0.0%	0.0%	3.7%	2.4%	0.0%	0.0%	0.0%	2.1%

Non-Compliance Metrics	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PMG AVG
% Pt Encounters Non-Compliant due to Medication Management	2.0%	1.3%	1.2%	1.1%	0.0%	0.7%	0.0%	0.0%	2.8%	2.4%	1.0%	0.0%	0.0%	1.6%
% Pt Encounters Non-Compliant due to Attendance	2.0%	3.8%	2.5%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.8%	1.0%	4.3%	0.0%	1.2%
% Pt Encounters Non-Compliant due to Behavior	0.5%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.6%	1.0%	0.9%	0.0%	0.4%

Customer Satisfaction	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PMG AVG
Clinic Survey Score	90.0%	100%	95%	100%	80%	83%	100%	100%	100%	100%	100%	94%	100%	--
Clinic Survey Sample Size	--	17	18	12	10	29	8	30	20	30	3	18	10	--
Procedure Survey Score	90.0%	100%	94%	96%	100%	100%	--	100%	100%	100%	100%	94%	100%	--
Procedure Survey Sample Size	--	16	15	35	16	10	0	13	7	10	16	16	6	--

Endor: THEN

Patients were not being held accountable to an abbreviated agreement.

Providers did not consistently utilize non-narcotic care plans when patients displayed non-compliance.

Staff was not well-educated on pain management patients (utilized float staff) and standard processes and physicians didn't empower staff to learn or ask questions.

Endor: NOW

Patients are educated about, sign, and held accountable to a robust, standard Pain Treatment Agreement.

Centralized Compliance Management List. Benchmarking metrics re: provider use of CML.

Strong manager to provide uniform physician & staff education, consistent messaging, and administration of patient safety policies & procedures.

**POOR
QUALITY**

Endor: THEN

**The providers were maintaining MED levels
that were outside of the CDC guidelines**

Utilizing high number of pain pumps

Regular chart reviews were not completed

No consistent quality data was tracked

**POOR
QUALITY**

**Electronic
Chart Audit**

**Prescription &
Procedure
Benchmarking**

Key Quality Tools

Chart Audit Application: Patient Safety

Risk Management Metrics

PTA

Select One ▼

PMP checked

Select One ▼

SOAPP (*preferred NP tool*)

Select One ▼

ORT

Select One ▼

Utox

Select One ▼

History of overdose in last 1 year?

No ▼

Chart Audit Application: Prescription Metrics

Provider Metrics

Brand Name (generic): [Prescription not listed?](#)

Dose

mg

Frequency
HS (at night)

Ordered PRN ? ☒

Add

Record rationale for opioid prescription:

Rationale not found: ☐

Current MED

Preferred Calculator: https://www.ohiopmp.gov/MED_Calculator.aspx
<https://www.easycalculation.com/medical/opioid-conversion-calculator.php>

Within the last year was

If the patient was opiate naive, did provider initiate an opiate at the NP visit?

No

High Risk Medication Prescribed?
No

Opiate + Benzo* ?
No

An opiate prescribed when history of Suboxone (Bupenorphine) ?
No



Chart Audit Summary

	Q2 17	Q3 17	Q4 17	Q1 18	PMG AVG Q1 18
Charts Audited					
Total Encounters	2388	2356	2515	2718	882
Charts Audited	61	61	60	60	22.54
Total Visits Audited	206	246	245	235	106.38
% Visits Audited	8.63%	10.44%	9.74%	8.65%	12.06%
Staff Metrics					
PTA % Complete	96.72%	100%	95%	98.33%	96.42%
PMP % Complete	88.52%	88.52%	96.67%	88.33%	93.17%
Risk Tool % Complete	100%	100%	100%	98.33%	99.66%
High Risk Patients	11	20	18	19	5.96
Utox % Complete	96.72%	96.72%	95%	90%	66.21%
Prescription Metrics					
% Patients on Opiate	59.02%	68.85%	56.67%	46.67%	51.02%
Average MED	26.68	28.14	39.22	21.97	33.57
Max MED†	135.00	180.00	240.00	60.00	218.00†
% Patients w/ MED >= 80	3.28%	1.64%	6.67%	0%	3.24%
% High Risk Meds Prescribed	1.64%	3.28%	3.33%	0%	2.73%
% w/ Opiate + Benzo	1.64%	8.2%	11.67%	5%	4.44%
% High Risk Pts Prescribed Opiates	13.11%	18.03%	15%	15%	13.14%
† Max MED is highest reported MED across all locations.					



Outcome & Benchmarking Reporting

Exception Reporting	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PMG AVG
% Wrong Site Procedure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Infection Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Admissions Following Surgery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Pts. with Dural Puncture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Death / Overdose	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Pts w ED Visits ¹	1.0%	2.4%	2.6%	2.1%	0.2%	1.5%	1.1%	0.1%	0.4%	0.4%	0.2%	0.6%	0.7%	2.1%
Meet or exceed goal = green. Miss goal = red.														
¹ ED Visits 2% or less = green. 2% - 4% = yellow. >4% = red.														
Non-Compliance Metrics	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PMG AVG
% Pt Encounters Non-Compliant due to Medication Management	2.0%	14.3%	7.0%	4.0%	0.9%	1.1%	1.4%	1.2%	1.0%	0.8%	0.8%	0.5%	1.6%	1.6%
% Pt Encounters Non-Compliant due to Attendance	2.0%	0.6%	2.2%	1.4%	0.2%	0.0%	0.7%	0.8%	0.0%	0.0%	0.2%	0.0%	0.0%	1.2%
% Pt Encounters Non-Compliant due to Behavior	0.5%	2.7%	2.2%	1.2%	0.2%	0.1%	0.4%	0.1%	0.0%	0.5%	0.0%	0.2%	0.0%	0.4%

Procedure Outcome & Benchmark Reporting

Procedures	Count	%Total Procedures Facility	%Total Procedures PMG
Epidural Steroid Injection	292	33.4%	14.1%
Medial Branch Block	247	28.3%	22%
Sacroiliac Joint Injection	58	6.6%	8.2%
Joint Injections: Shoulder, Knee, Hip, Bursa, Ankle	56	6.4%	6.1%
Radiofrequency Ablation	56	6.4%	15.4%
Other Diagnostic	50	5.7%	3.8%
Other Therapeutic	38	4.3%	6.3%
<i>Caudal Epidural</i>	25	2.9%	2.6%
<i>Facet Injection</i>	15	1.7%	8.3%
<i>Nerve root / TFESI</i>	14	1.6%	10.8%
<i>Lumbar Sympathetic block</i>	12	1.4%	0.7%
<i>Intercostal Nerve Block</i>	5	0.6%	0.3%
<i>Ganglion Impar</i>	3	0.3%	0.3%
<i>Stellate Ganglion Block</i>	2	0.2%	0.1%
<i>Stimulator Trial, Implant, or Revision</i>	1	0.1%	0.4%
<i>Dorsal Ramus Block</i>	0	0%	0.5%
<i>Occipital Nerve Block: Greater, Lesser, Third</i>	0	0%	0.3%
Grand Total	874	100%	100.2%
Cumulative ESI Rating*	331	37.9%	27.5%

Procedure Outcome & Benchmark Reporting

Procedures	Minor Improvement	Moderate Improvement	Significant Improvement	Mod / Sig Improvement	PMG AVG Mod / Sig
Epidural Steroid Injection	24%	33%	43%	76%	77%
Medial Branch Block	16%	24%	60%	84%	86%
Sacroiliac Joint Injection	26%	26%	48%	74%	82%
Joint Injections: Shoulder, Knee, Hip, Bursa, Ankle	27%	36%	38%	73%	82%
Radiofrequency Ablation	13%	20%	68%	88%	89%
Other Diagnostic	14%	22%	64%	86%	83%
Other Therapeutic	13%	45%	42%	87%	75%
Caudal Epidural	52%	24%	24%	48%	81%
Facet Injection	33%	33%	33%	67%	82%
Nerve root / TFESI	43%	36%	21%	57%	81%
Lumbar Sympathetic block	67%	25%	8%	33%	56%
Intercostal Nerve Block	0%	60%	40%	100%	79%
Ganglion Impar	33%	0%	67%	67%	71%
Stellate Ganglion Block	100%	0%	0%	0%	68%
Stimulator Trial, Implant, or Revision	0%	100%	0%	100%	89%
Dorsal Ramus Block	--	--	--	--	80%
Occipital Nerve Block: Greater, Lesser, Third	--	--	--	--	81%
Grand Total	22%	29%	49%	78%	83%
Cumulative ESI Rating*	27%	32%	40%	73%	79%

Endor: THEN

The providers maintained MED levels that were outside of the CDC guidelines

Utilizing high number of pain pumps

Regular chart reviews were not completed

No consistent quality data was tracked

Endor: NOW

Defined responsibilities for all staff members

Routine completion of chart audits and time out audits, tracking of procedure quality metrics and completion of time out audits.

Reduced MED, less pain pumps

Regular chart reviews

Program and physician benchmarking

INEFFICIENCY

Endor: THEN

**Department goals & expectations not
clearly identified**

**An average of 2 patients
per hour were seen on
a regular basis.**

**Physicians drove throughput
and not supportive of
increased productivity**

Facility Dashboard

**Physician PpH
Benchmarking**

**Operations Financial
Review**

Key Efficiency Tools

Facility Dashboard



Stats Breakdown (prior week)

	NP Scheduled	NP Seen	Follow-Up Seen	Procedures Seen	Same Day Cx / Ns	Total Encounters	Scheduled / Day	Worked Hrs	Encounters / Hour
Monday	4	4	27	--	9	31	40	6.75	4.6
Tuesday	7	5	23	--	8	28	36	7.08	4
Wednesday	2	6	26	--	5	32	37	7.17	4.5
Thursday	--	--	--	11	3	11	14	5.33	2.1
Friday	7	8	26	--	2	34	36	6.53	5.2

CX/NS (prior month)

Clinic

136 25%

Procedure

18 16%

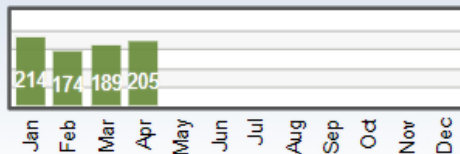
Patients / Hour

(prior week)

4.1

YTD: 15.8

Monthly Referrals



Patients in Queue

16

Pending Paperwork

3

New Patient Wait

Time

(Days)

0

Effective Time Out

(prior month)

6 (n = 6)

Physician Efficiency (worked hours prior week)

Dr. Name 4.14 Patients per hour YTD: 3.71

Physician Procedure Ratio (prior week)

Dr. Name 8% YTD: 18%

Physician PpH Benchmarking

Q4 2017 Physician Comparison

☐ Include Extenders ☒ Exclude Extenders

Physician Comparison - Patients per Hour

Includes all locations for each provider

Goal = 4 patients per hour

(Excluding Extenders)

Physician	Q1 2017 Patients per Hour	Q2 2017 Patients per Hour	Q3 2017 Patients per Hour	Q4 2017 Patients per Hour	
PMG AVG	3.5	3.5	3.4	3.3	
	4.5	4.8	4.8	4.8	
	5.1	4.1	3.9	4.7	
	4.4	4.4	4.5	4.4	
	3.9	4.2	4.4	4.2	
	3.8	3.9	4.1	4.1	
	4.4	4.5	4.3	4.0	
	3.8	4.2	4.1	4.0	
	4.1	4.0	4.1	3.9	
Dr. Name	2.4	3.4	3.8	3.9	
	--	1.5	2.2	3.6	
	3.3	3.4	3.5	3.6	
					GOAL = 4.0



Operations Financial Review

- **Physician Specific Procedure Quality Scores**
- **Physician Specific Exception / CML / Patient Satisfaction Scores**
- **Physician Comparison: Patient Encounters by Doctor (clinic, procedure, PpH, Procedure Ratio)**
- **Physician Comparison: PpH (current Q + prior 3 Q)**
- **Stats Service Report**
- **Financial Analysis (current revenue comparison with income support)**

Endor: THEN

Department goals & expectations not clearly identified

An average of 2 patients per hour were seen on a regular basis.

Physicians drove throughput and not supportive of increased productivity

Endor: NOW

Consistent tracking weekly monitoring of productivity / clear & consistent expectations established.

Balanced & engaged provider: an average of 3.9 patients per hour are seen.

POOR COMMUNICATION

THEN

Lack of communication with referring physicians and continuity of care which was hampered by EMR

Little to no education was completed to the community or medical staff limiting the understanding of the scope of the program.

Outpatient
EMR
Physician Education

Key Communication Tools



Endor: THEN

Lack of communication with referring physicians and continuity of care which was hampered by EMR

Little to no communication was completed to the community or medical staff limiting the understanding of the scope of the program

Endor: NOW

Improved communication within outpatient EMR

Marketing & education to referring physicians

Medical Staff buy in to pain provider care plan

MISSED FINANCIAL OPPORTUNITY

THEN

Prior authorizations were not being completed in a timely fashion, therefore slowing down ability to get patients into procedures.

Difficulty supplying appropriate documentation in an inpatient EMR

Financial Benchmark Report

	1st Quarter 2017	2nd Quarter 2017	3rd Quarter 2017	4th Quarter 2017	Endor 2016 Consolidated	PMG 2016 Consolidated	Management Agreement 2016
Encounters							
Clinic Visits	1239	1898	1925	2067	1524		
Procedures	252	490	431	448	633		
Total Encounters	1491	2388	2356	2515	2157		
Clinic Visits % of Encounters	83%	79%	82%	82%	71%	74%	75%
Procedures % of Encounters	17%	21%	18%	18%	29%	26%	25%
Charge Analysis							
Gross Revenue per Encounter	\$343.55	\$545.67	\$435.14	\$465.70	\$1,731.78	\$963.01	\$798.63
Net Revenue per Encounter	\$113.37	\$242.99	\$202.94	\$227.55	\$513.91	\$328.83	\$261.91
Net Revenue % to Charge	33%	45%	47%	49%	30%	34%	33%
Cost Analysis							
Compensation % of GR	49%	17%	18%	17%	9%	9%	8%
Compensation % of NR	149%	38%	40%	35%	30%	26%	25%
Compensation % of Total Cost	68%	55%	60%	53%	29%	40%	47%
Compensation \$ per Encounter	\$168.77	\$93.26	\$80.40	\$79.87	\$152.78	\$86.62	\$65.07
Benefits % of Compensation	16%	26%	15%	22%	23%	30%	31%
Non-Wage Related % of NR	46%	21%	20%	23%	66%	32%	21%
Total Expense % of NR	219%	69%	66%	66%	102%	66%	51%
Profitability Analysis							
Net Operating Margin	-119%	31%	34%	34%	-2%	34%	47%

n = 10

Endor: THEN

Prior authorizations were not being completed in a timely fashion, therefore slowing down ability to get patients into procedures

Difficulty supplying appropriate documentation in an inpatient EMR

Endor: NOW

Streamlined, centralized prior authorization

67% increase in total encounters

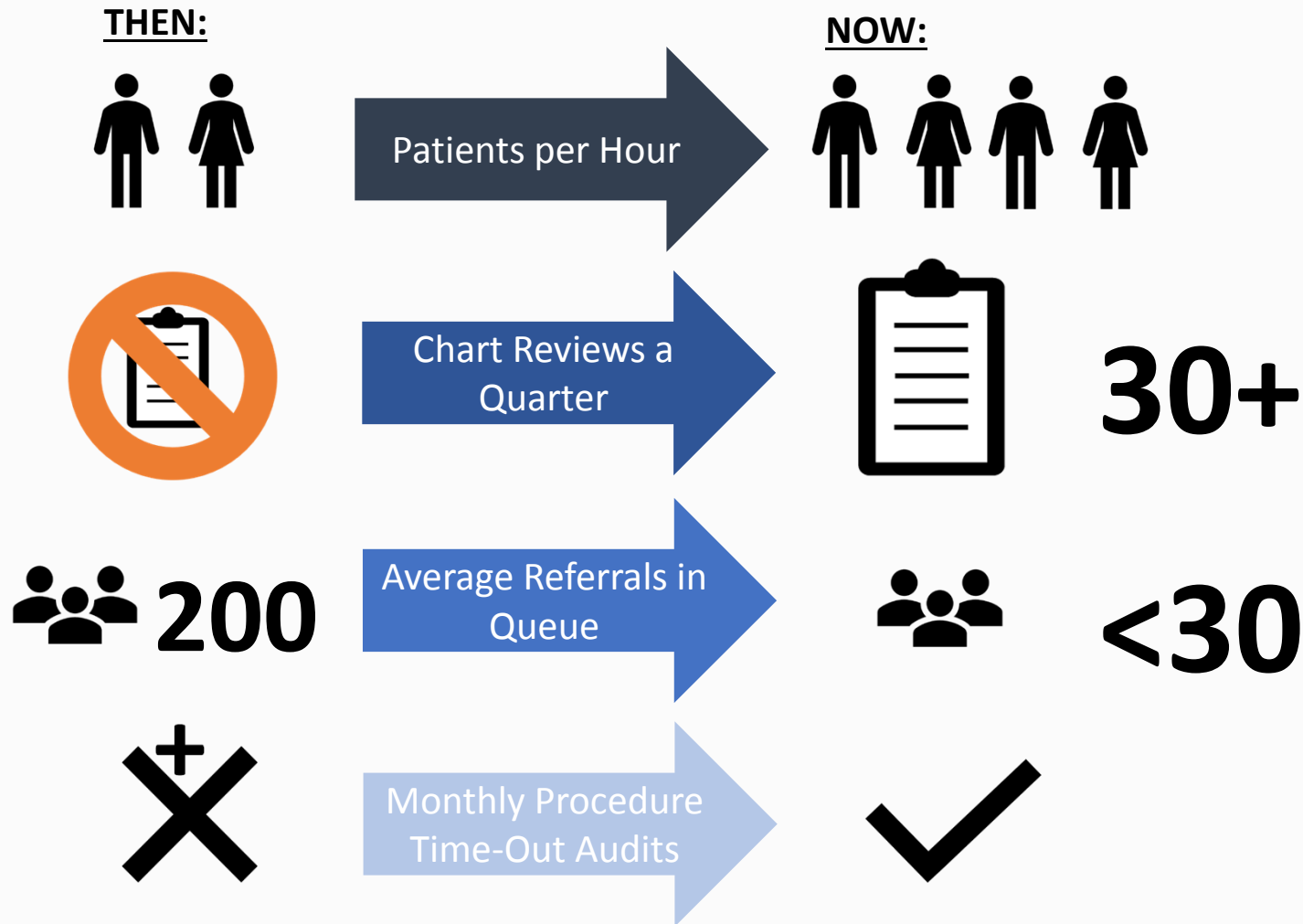
\$100 increase in revenue / encounter

7x increase in NOM

50% decrease in compensation / encounter

Ease of documentation (and communication to referring physicians) in outpatient EMR.

THE RESULTS of Using Data to Manage Providers and Patients



Questions?

Resources

Centers for Disease Control and Prevention (2017). CDC guideline for prescribing opioids for chronic pain. Retrieved from <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>

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