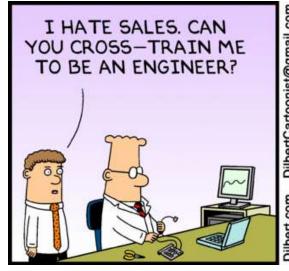
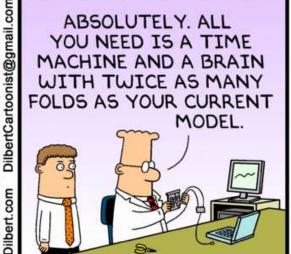
Essentia Health A View on Information Technology

ND HIMS Conference April 12, 2017 Tim Sayler, COO



Me Discussing... Information Technology









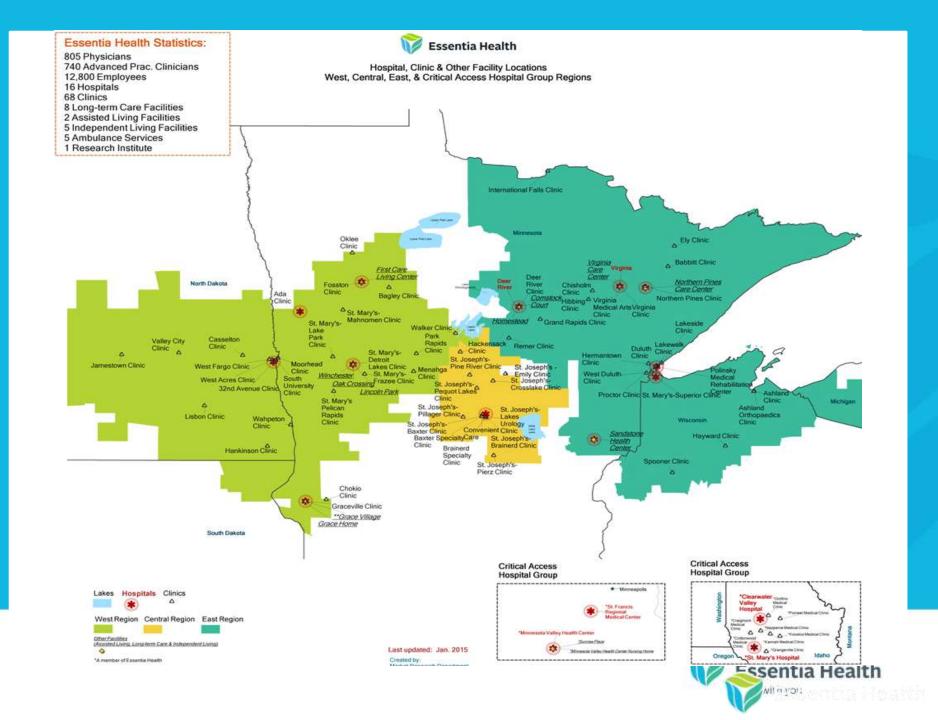
Overview

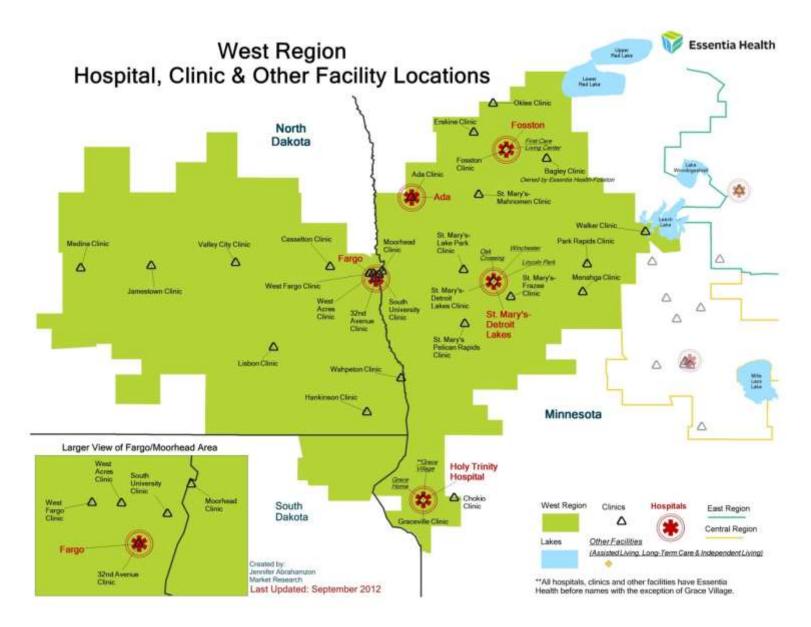
- Who is Essentia
- Why: Information Technology & Health Reform
- Accountable Care
 - An Example of General Population Health Improvement
 - An Example of Service Line/Chronic Care Population Mgmt
 - MSSP Risk Arrangement
- Interoperability
- On-Line Patient Experience



Essentia Health Mission









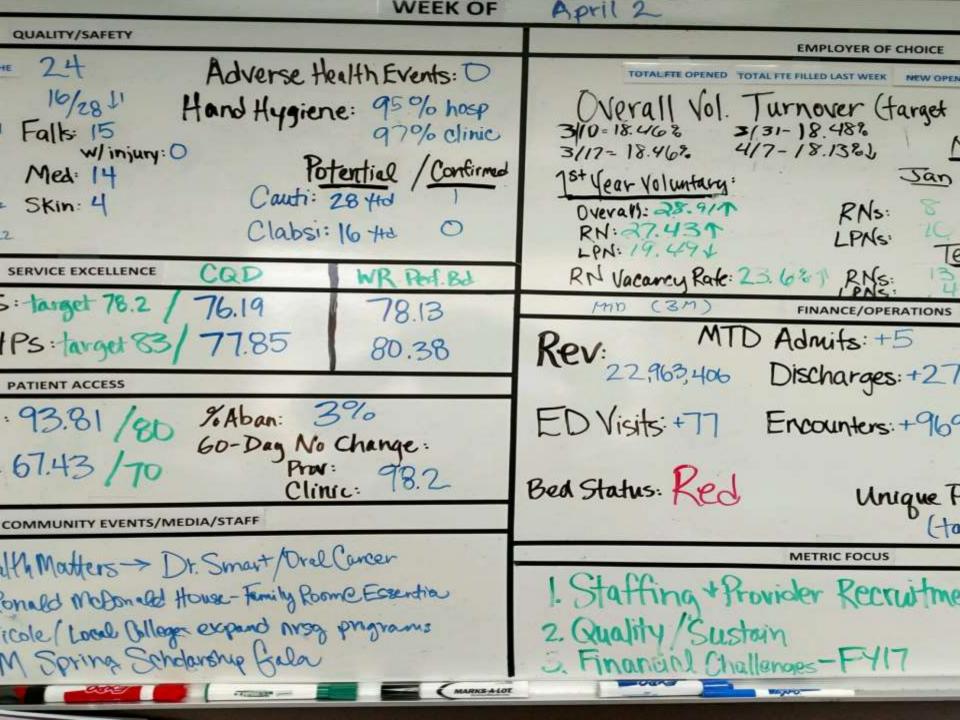
The Why: Information Technology Support

Accountable Care & Risk Strategy

Build Consumer Loyalty Platform

Radically Alter Cost Structure





Reduced Revenue vs. Increased Expenses

All payments by payors going down

- Medicare
- Medicaid
- Commercial



Expenses of providing care continues to increase

- Caregiver salaries
- Medical supplies
- Infrastructure



Looking Ahead

It's no surprise: This model is **not sustainable** for better health across the county.





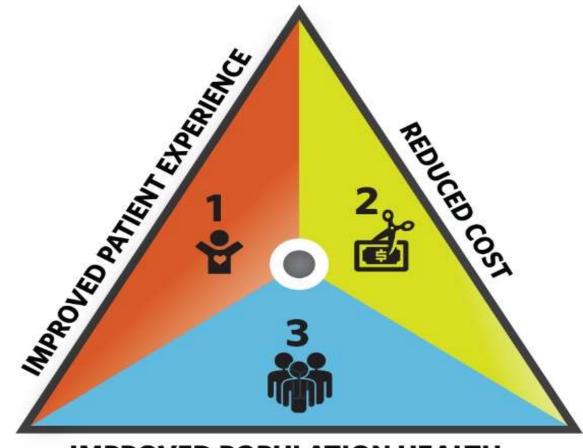
Accountable Care Organization

Definition:

Accountable Care Organizations are providerbased organizations that take responsibility for meeting the health care needs of a <u>defined</u> <u>population</u> with the goal of simultaneously improving health, improving patient experience and reducing per capita costs. (Triple Aim)

Affordable Care and Patient Protection Act (ACA)
National Committee for Quality Assurance (NCQA)





IMPROVED POPULATION HEALTH

* Inspired & Engaged Staff





ACO → Value

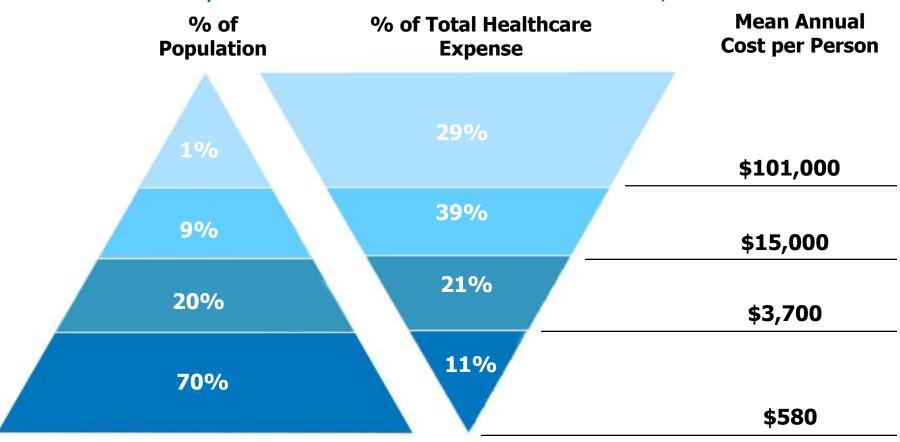
- How we take care of patients
 - Population Based
 - Proactive
 - Standard evidence based guidelines
- How we are paid
 - Quality, not Quantity
 - Total Cost of Care
 - Quality of Care
 - Service/Experience of Care
 - (Inspired & Engaged Staff)





High Risk: Opportunity for Better Care

National Sample of 21 Million Insured Americans, 2003-2007



Source: Thomson Reuters Markets can Database



@ 2015 Essentia Health

Essentia's 2016-2017 Strategies for Success

- Patient Attribution Management
 - Know enrollees/reduce churn
- Identification High Risk/High Cost Enrollees
 - Intense Care Management
- Reduce Practice Variation
 - Standard evidence based guidelines
- Pharmacy Management
 - Use of cost effective alternatives, second review of high cost medications
- Post Acute Care Strategy
 - Optimal Discharge prevent readmissions
 - Appropriate discharge disposition
 - Skilled Nursing Facility Management



Value Based Enrollees

Total Cost of Care ACO type Contracts

- Medicare Shared Savings
 - 28,000 enrollees
- Commercial
 - 60,000 enrollees
- MN Medicaid/IHP
 - 38,000 enrollees
- Medicare Advantage/SNP
 - 6,000 enrollees
- Employee Health Plan
 - 19,000 enrollees



Examples: Applying Technology to Support Accountable Care

Attributed Population- A Specific Patient & MD

Service Line Work- Spine Program

 A Specific Risk Population - Medicare Shared Savings Program



Moving From Providing Care to Managing Health

Attributed Population- A Specific Patient & MD

Example: Colorectal Screening



Clinical Quality Dashboard

Ver: 2.2

Select .. to view by Clinical Hierarchy

Select .. to view by Provider(s)

All Clinical Hierarchy

? Tobacco Counseling at Visit Documented

RMI Counseling at Visit Documented

All Providers

70.53 %

10.53 %

Ambulatory Care Measures

	KPI	Time	Value	Eval	Sparkline	Target
?	Hypertension Patients Receiving Optimal Care	Aug 08, 2015	83.05 %	•	-	80.00 %
?	Diabetic Pts Receiving Optimal Care w/Statins	Aug 08, 2015	41.73 %	•		42.00 %
?	Mammography Compliance	Aug 08, 2015	77.18 %	•	•	75.00 %
?	Vascular Pts Receiving Optimal Care w/Statins	Aug 08, 2015	59.06 %	•		61.00 %
?	Childhood Immunization Compliance	Aug 08, 2015	62.61 %	•	•	80.00 %
?	Colorectal Cancer Screening Rate	Aug 08, 2015	71.41 %	•		73.00 %
?	Depression Remission Rate at Six Months	Aug 10, 2015	18.66 %	•		16.00 %
?	Asthma Optimal Care (Children 5-17)	Aug 08, 2015	62.18 %	•	Patient Safety	_
?	Asthma Optimal Care (Adults 18-50)	Aug 08, 2015	57.68 %	•	KPI	

Aug 08, 2015

Aug 08, 2015

,	KPI	Time	Value	Eval	Sparkline	Target
?	HCAHPS Hand Hyglene	May - Jul	67.49 %		m	65.30 %
?	CLABSI / 1000 Central Line Days	Mar - May	0.46		~~~	0.50
?	CAUTI / 1000 Foley Days	Mar - May	1.15			1.50

Inpatient Measures

	КРІ	Time	Value	Eval	
?	Inpatient Stroke % All Measures Met	Apr - Jun	93.38 %		~
?	Hospital CHF 30-Day Readmission	Feb - Apr	19.15 %		
?	Hospital AMI 30-Day Readmission	Feb - Apr	12.38 %		~
?	Hospital Pneumonia 30-Day Readmission	Feb - Apr	12.23 %		\
?	Hospital COPD 30-Day Readmission	Feb - Apr	15.45 %		~
?	Hospital Total Hip/Knee 30-Day Readmission	Apr - Jun	1.44 %	•	~
?	Inpatient Overall Mortality Rate	Mar - May	2.47 %	•	^

Patient Experience

п	KPI	Time	Value	Eval	Sparkline	Target
?	HCAHPS Overall Hospital Rating	Apr - Jun	74.63 %		~~~~	75.00 %
?	CGCAHPS Patient's Rating of Provider	Apr - Jun	80.56 %			82.00 %

Access

	KPI	Time	Value	Eval	5parkline -	Target
?	ED Left Without Being Seen	July, 2015	1.84 %		~~~	1,70 %

Heasures Under Development

	KPI	Time	Value	Eval	Sparkline	Target
	COAT Patients with a Care Plan	Coming Soon!		0		
	CGCAHPS Hand Hyglene	Coming Soon!		0		
?	Mislabeled Specimens	Apr - Jun	37.00			0.00
?	Case Mix Index	July, 2015	1.49			1.35

50-year-old man comes to see Dr. Whitcomb for a physical.



Discussion with patient on the importance of colon cancer screening.



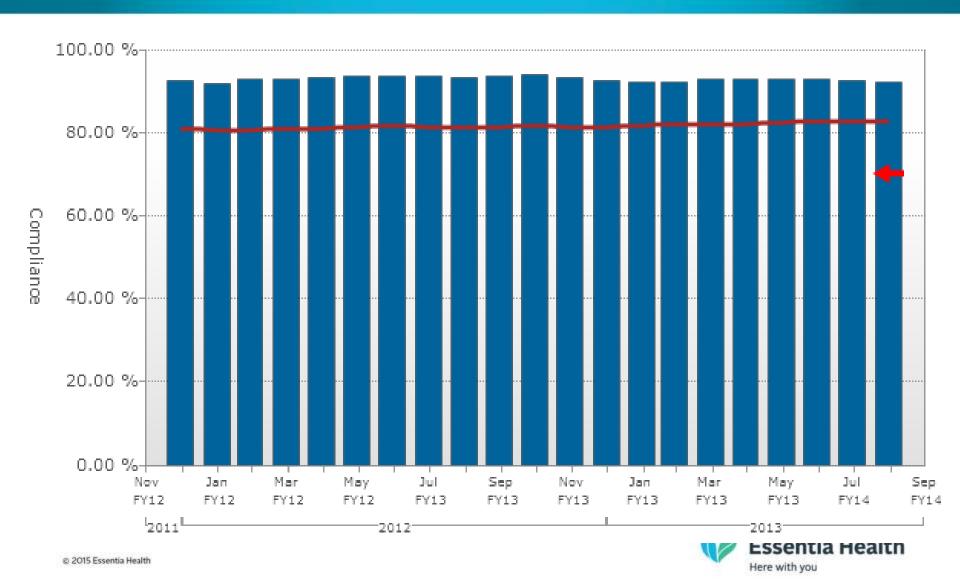
Patient is reluctant to have colonoscopy – doesn't have time, doesn't like the idea.



Provider	VaÎue	Eval	Sparkline	Patients
WHITCOMB, MICHAEL L	91.99 %			749
			'	



How is Dr. Whitcomb Doing?



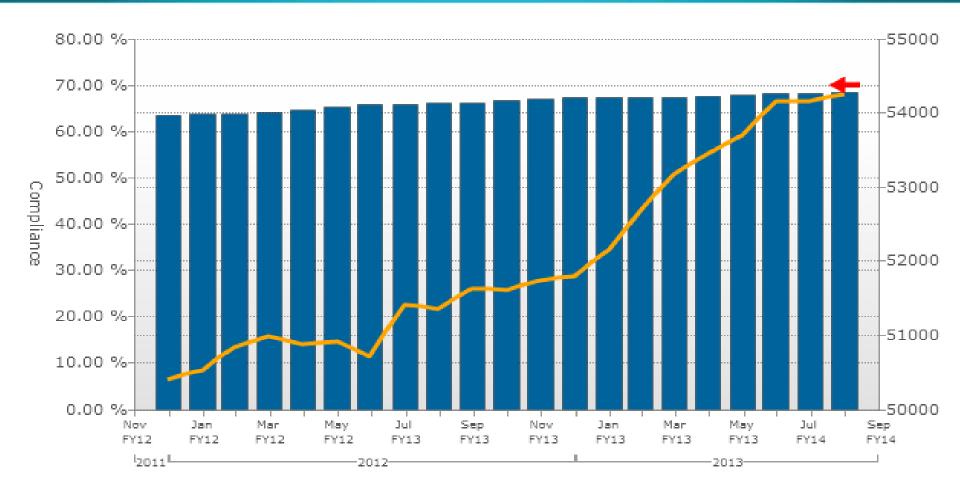
How is 1st Street Internal Medicine Doing?

Essentia Health

Here with you

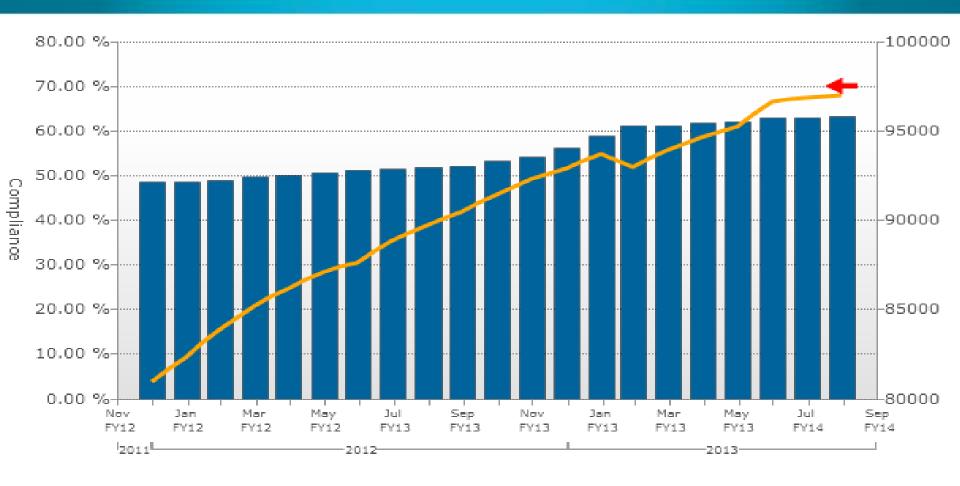
Provider	VaÎue	Eval	Sparkline	Patients	^
PETERSON, ALAN L	75.00 %		****	4	
HAHN, GENE	77.08 %	•		576	
PEASLEE, ERNEST M	77.25 %		•	668	
IWU, OKECHUKWU N	79.21 %			279	
GOOD, PETER A	81.00 %			637	
DIAZ, JOSEFINO C	81.74 %		~~~	586	
JORGENSON, JAMES N	82.13 %		~~~	1,108	
HOLCOMB, JOHN F	82.16 %		•	370	
KAMAL, SHEHLA A	84.40 %		~~~~	218	
KNIGHTON, PRISCILLA E	84.67 %			613	
DEPENTHAL, CHRISTINE	86.80 %		~~~~	727	
LAO, MARIA L	87.92 %			389	
WHITCOMB, MICHAEL L	91.99 %			749	
NEPHEW, STEPHANIE J	100.00 %		•••••	1	~
COIS Essentia Health				>	

How is East Region Doing?



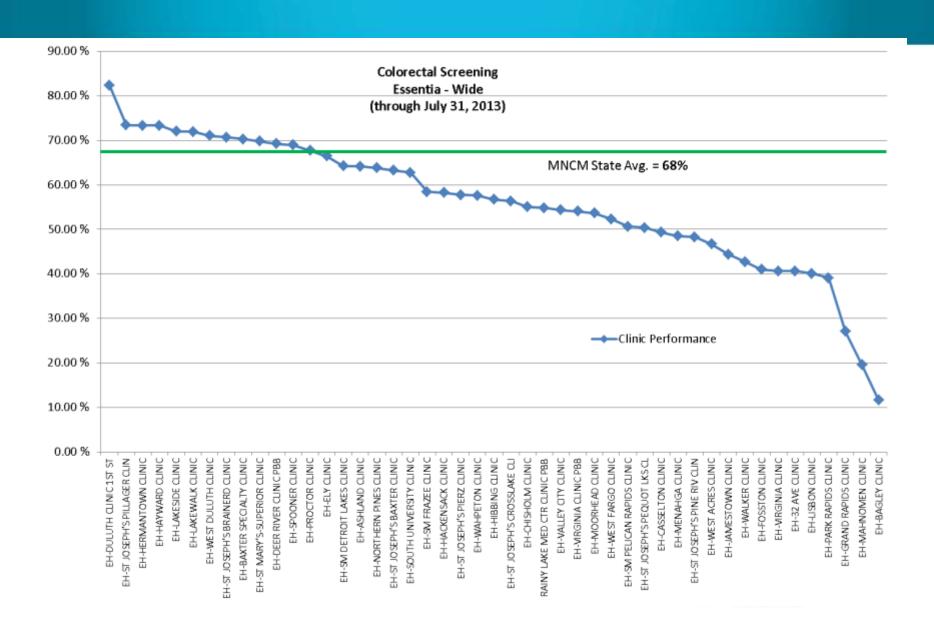


How is Essentia Doing?





Colorectal Screening



We are Called to Make a Healthy Difference in People's Lives

How are 97,000 patients eligible for colonoscopy doing?



96,978 people

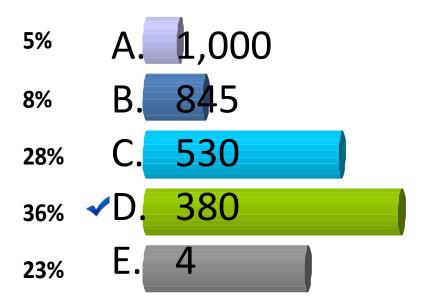
63.26%

61,348

35,630



How many colonoscopies do we have to perform to save 1 year of life?





If we screen all eligible

8,908

years added to the lives of our Essentia population



3.25 million days



500,000

Visioning Data Analytics Strategy ACO Contracting SYSTEM Care Innovation Care Model Formation ID Metric Gaps Community Health REGION/DIVISION Spread / Replication Resourcing 55,000 **Care Model Communication Standardization Variation Reduction Coaching** Mgmt. Oversight CLINIC/HOSPITAL **Care Management Closing Metric Gaps Ensuring Model Adherence** 7,500 **Workflow- Model Adoption** Huddles **Teamwork CARE TEAM** 745 **Cue up Communication** Work Lists - Closing Care Gaps PHYSICIAN, APN, **Engagement Awareness** Focus on Clinical Competencies & Excellence

Patient





Managing the Health of a Population

- Patient in my office today
- Patient's attributed to a physician
- Patient's attributed to a clinic
- Patient's served in a region
- Patient's seen in our system
 - People in the community
 - We are called to make a healthy difference in peoples lives
 - We are accountable for peoples care



Clinic (Ambulatory) Quality Measure Report Card

Quality Measures/ Optimal Care Standards	Total patients in each category	Patients meeting standards	Comparative Data	Impact of meeting standards
Hypertension • Blood pressure under 140/90	68,015	56,908 82.77%	* National average	 455 lives saved 849 strokes prevented 569 heart attacks prevented
Diabetes • Blood pressure under 140/90 • A1C level under 8 ★No tobacco use • Take daily aspirin	18,424	8,946 48.56%	47.7% Minnesota state average	2,000 fewer microvascular complications Fewer amputations Less vision loss Less kidney disease
Vascular (heart) disease • Blood pressure under 140/90 ★No tobacco use • Take daily aspirin	11,076	7,300 65.91%	66.9% Minnesota state average	Fewer heart attacks Fewer strokes Less angina
Colon cancer screening • Up to date on colon screening, starting at age 50	97,517	69,429 71.2%	58.20%** National average	18,525 life years gained (if you catch a polyp at age 50, that could add 30 years to your life)***

Hypertension among adults in the U.S.: National Health and Nutrition Examination Survey, - . NCHS brief number .
 National Center for Health Statistics, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services,
 http://www.cdc.gov/media/releases/ /p -cancer-screening.html



http://www.uspreventiveservicetaskforce.org/Page/Document/RecommendationstatementFinal/colorectal-cancer-screening

Moving From Providing Care to Managing Health

An Example of Service Line/Chronic Care Pop Mgmt
Spine Patients

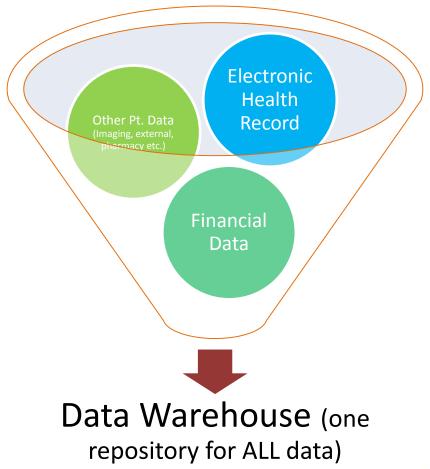


Why Health Care Data is so Challenging to Analyze

- Data exists in multiple places and formats
 - Electronic Health Record
 - Radiology Platforms
 - External Sources
 - Claims and Financial Data
 - Images
 - Text
 - Numeric
- Data is structured and unstructured
 - Data may or may not be retrievable dependent upon how it is entered
- Data definitions may vary
 - 'Apples to apples' comparisons difficult
- Regulatory and Evidence-Based practice changes frequently
 - Hard to keep current



Data Integration is Necessary for Driving Analytics





Using Real Time Data to Answer Clinical Questions

(Example)

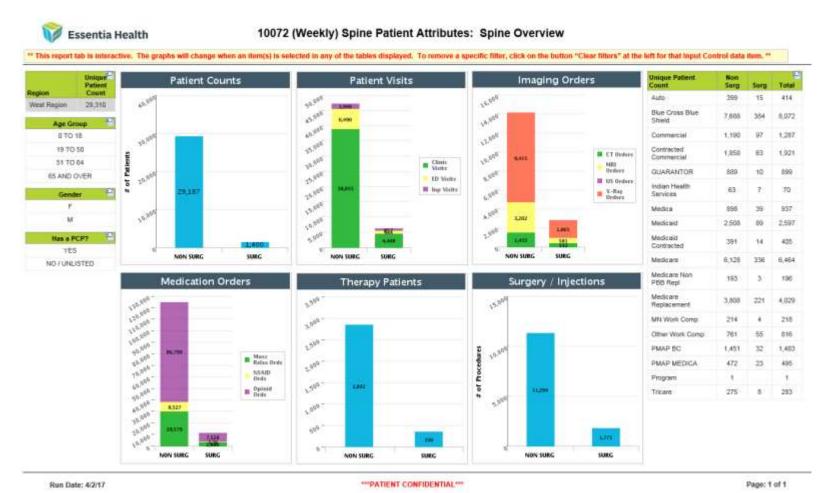
- How many patients do we have with a spine condition?
- Where are they receiving their care?
 - Are they going to the emergency room to often for care?
- Do we have too many spine patients on opioids?
- Are we positively affecting their quality of life?





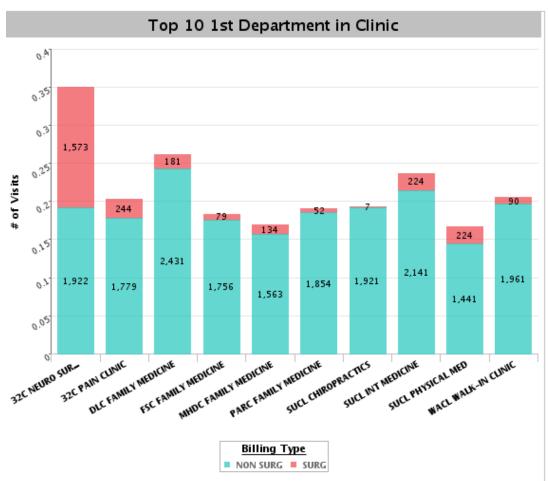
Real Time Data

(Refreshed Weekly)



Essentia Health
Here with you

Where Patients are Seen





Examples of Information Available

- **29,455** unique patients visited Essentia West in the last 24 months for a spine problem
- **87** (0.3%) patients sought the Emergency Department for their spine problem for a total of 1400 visits in the last 24 months
- 24 of those patients are currently on an opioid medication for pain

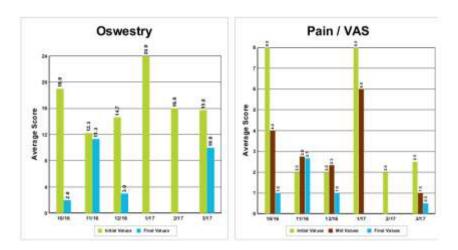
Result

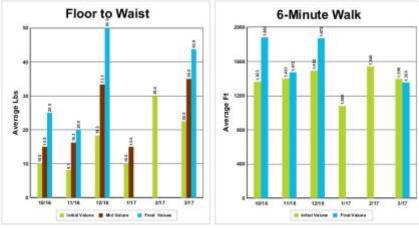
Spine Navigator selects those 87 patients for care coordination program with specific emphasis on the 24 receiving opioids to ensure timely access and that clinical quality indicators are being met.



Outcomes Measurement

Data integration provides the ability to demonstrate clinical improvements for spine patients in mobility, endurance and pain as the appropriate clinical interventions are applied.







Value of Integrating Data in the Health Care Organization

- Ability to examine clinical variation and drive care improvements
- Ability to better understand the correlation between costs and outcomes
- Increased confidence in projecting cost and outcomes for payers
- Data transparency drives clinician engagement
 - Ability to see results of clinical initiatives
- Return on Investment for dollars spent implementing the EHR

Moving From Providing Care to Managing Health

Medicare Shared Savings Program
Example



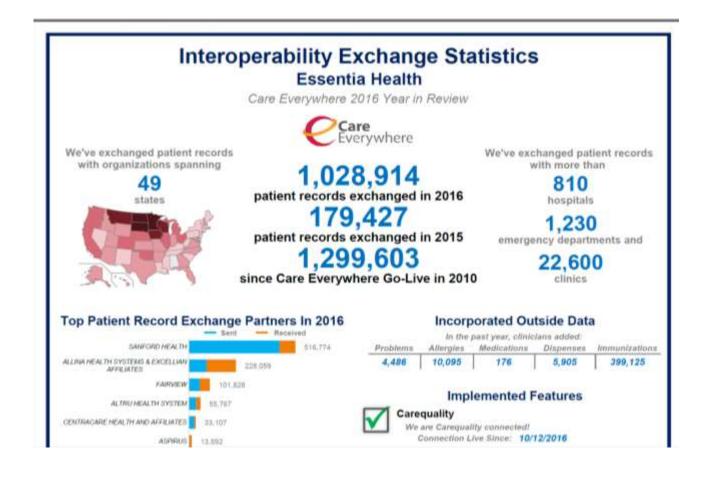
MSSP Tier 3

- 28,000 enrollees
 - Healthy Planet
 - Rolling 12 month cost
 - Unplanned Admission Risk Score
 - HCC Diagnosis
 - AWV keep patients attributed
 - Pop Health clinician identify, recommend, hand-off to Primary Care

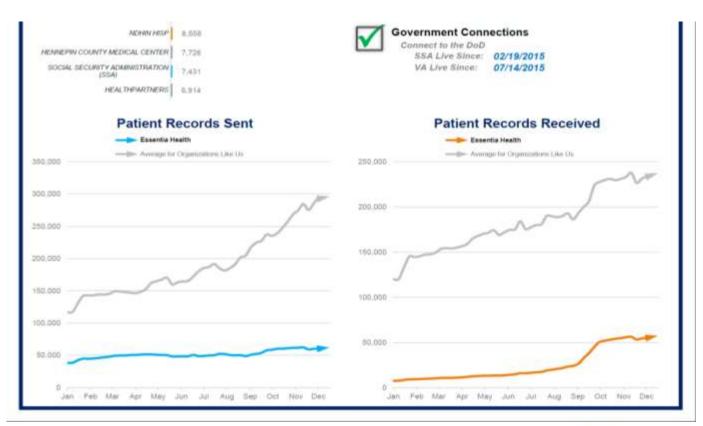














- What's changed?
 - Annual consent
 - Implemented discrete data exchange and reconciliation
 - Previously only exchanged continuity of care documents
 - Implemented auto-query
 - Nightly process that queries available records for scheduled patients the next day and presents those records to the care team.



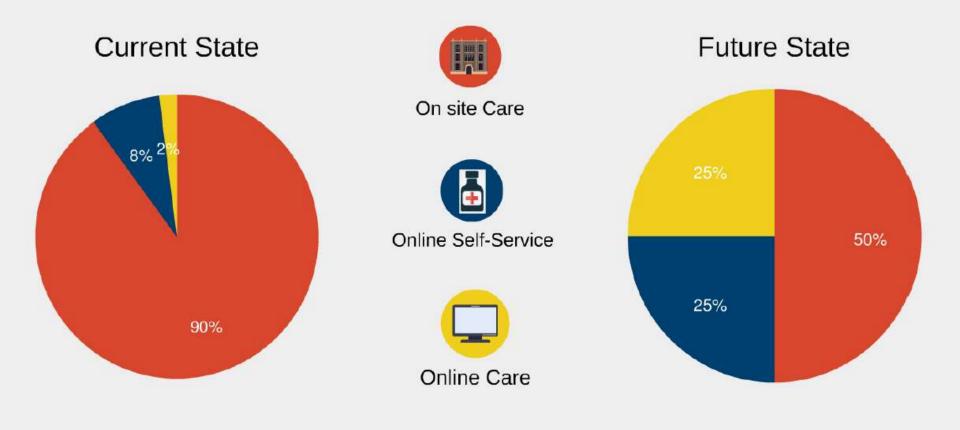
Online Patient Experience

Digital Marketing Strategy



Online Patient Experience:

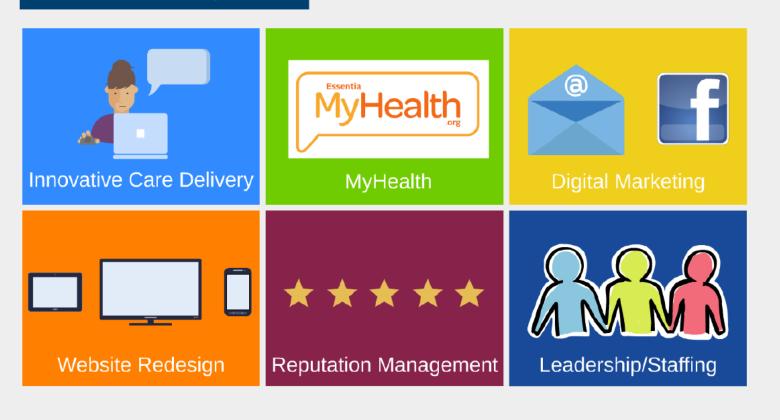
Shift to a New Care Delivery Model



Online Patient Experience

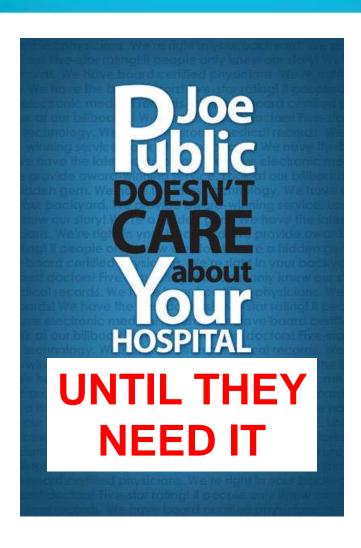


Resource Six Key Areas





The Simple Truth





Why is Digital Marketing Effective?



Messages are broadcast to consumers without their expressed interest.

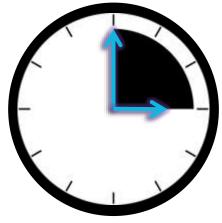
Information is readily available 24/7 to consumers when they are actively searching for it.

lth

Meet Patients Where They Are



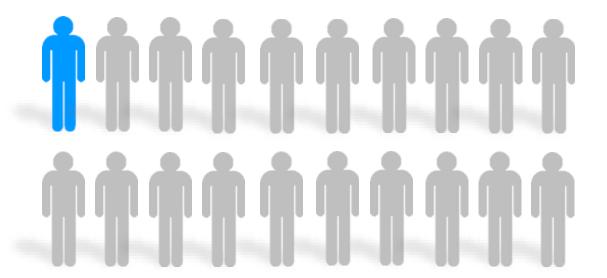
People spend an average of 3 hours a day on mobile devices





Health-Related Google Searches

1 in 20





Digital Marketing Strategy

Make it easy for people to:

- 1. Find accurate information about us online.
 - Maintain accurate online listings.
 - Rank high in search results.
- 2. Communicate/engage with us online.
- 3. Learn about/access our services online.



Monitor and Maintain Online Listings

Primary Listings

Other Citations

Statistics

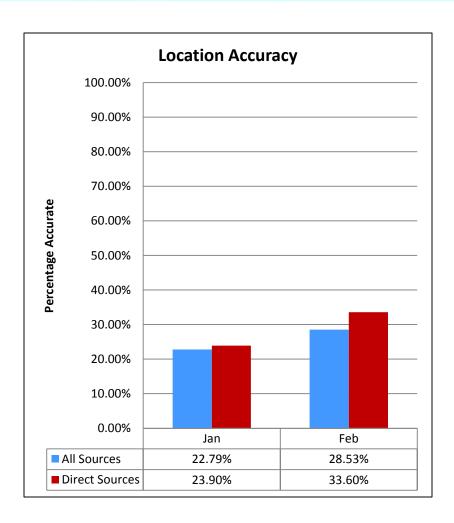


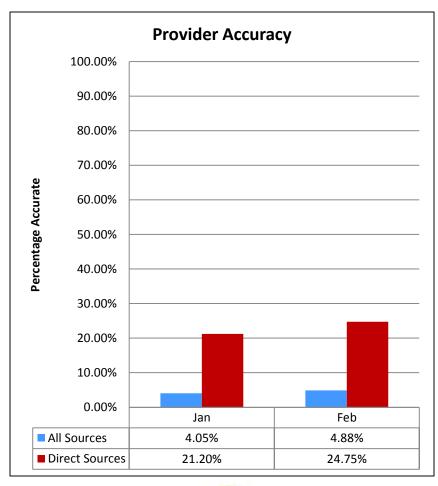
21% Listing Score

Accurate
Found with Possible Errors
Not Found
Total Listing Sources



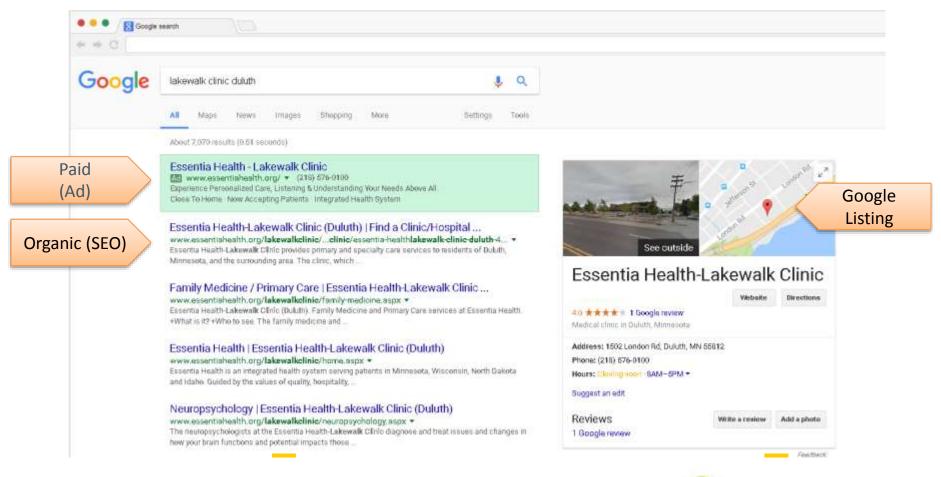
Location and Provider Listings







Rank High in Search Results





Digital Marketing Strategy

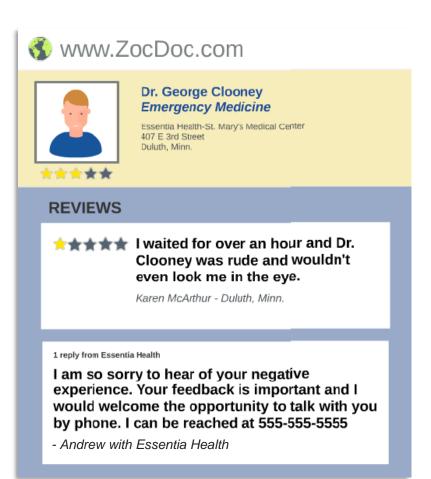
Make it easy for people to:

- 1. Find accurate information about us online.
- 2. Communicate/engage with us online.
 - Monitor and respond to online reviews.
 - Engage with patients via social media.
- 3. Learn about/access our services online.

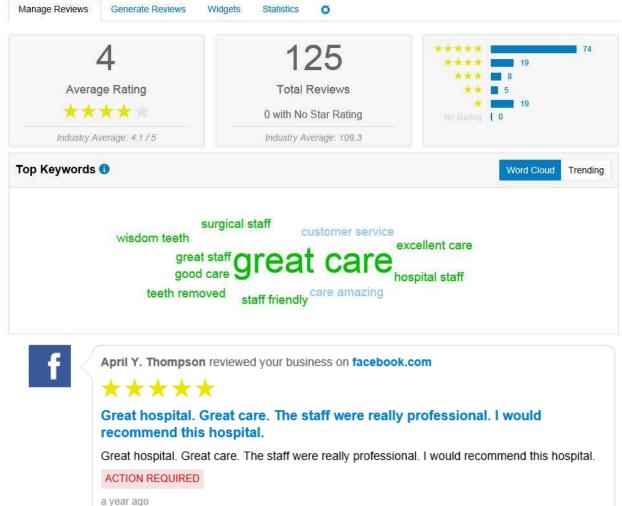


Online Ratings and Reviews



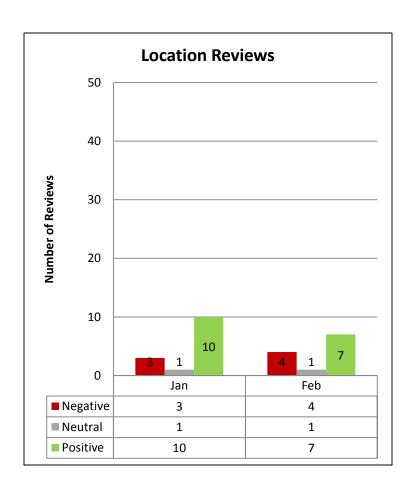


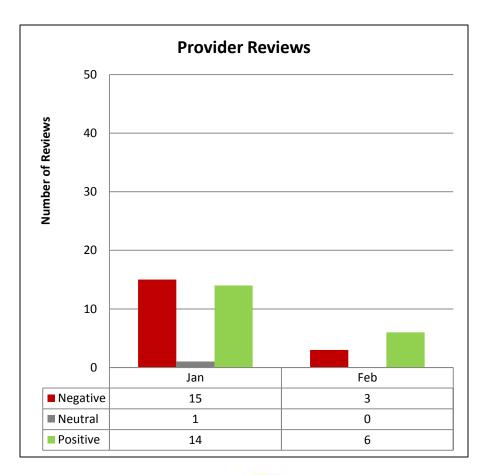
Monitor and Respond to All Reviews





Location and Provider Reviews



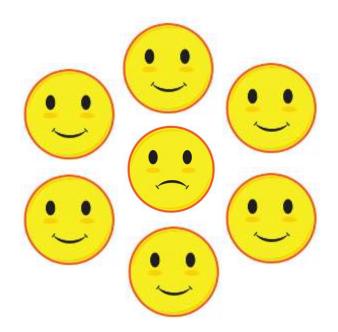




Solicit Reviews

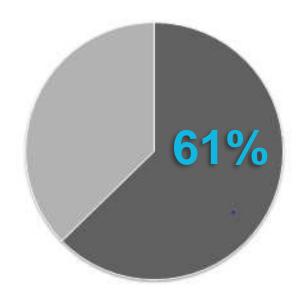
Only 3% of people will post an unsolicited review.



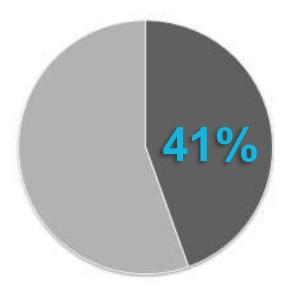




Word of Mouth Matters



Patients who look at online reviews before selecting a doctor



Patients who say ratings are very important to making a decision.



Engage With Patients Via Social Media









Essentia Health added 4 new photos.

Published by Andrew Hammer [2] - November 27 at 10:36am - 🚱

An organization is only as good as its people. We're so grateful to add these outstanding members to our team. Learn more by browsing their photos and leave a comment.





Essentia Health

Published by Andrew Hammer [2] - February 22 at 12:13pm - €

After getting a cut, it can be difficult to tell if you need to see a doctor. Essentia Health urgent care physician Dr. Deb King suggests using these general guidelines.



- Is more than 1/4 inch deep and 3/4 inch long.
- Is down to the fat, muscle, bone, or other deep structures.
- · Is located over a joint.
- · Bleeds after 15 minutes of direct pressure.
- · Is on an area where you would be worried about scarring.
- · Is jagged or gaping open.





Essentia Health added 26 new photos.

Published by Andrew Hammer [3] - October 18 - 🚱

The DAISY Award For Extraordinary Nurses honors the super-human work nurses do for patients and families every day. Pictured are some of our past DAISY Award winners. We have the best nurses! http://ow.ly/i7K8305bone



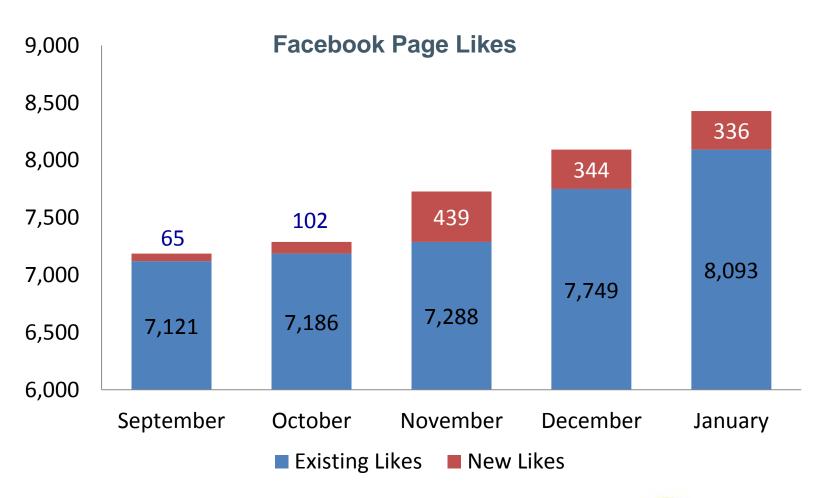








More Likes = More Reach







Essentia Health

Published by Andrew Hammer [?] - December 23, 2016 - 🚱

Meet Ethan, a six year old who embodies the spirit of giving. After discussing with his parents, Ethan decided to use his 6th birthday party as an opportunity to collect gifts for children in the hospital during Christmas. Ethan delivered 37 gifts for kids at Essentia Health in Fargo.

Join us in thanking Ethan for his generosity by liking his photo!





ASSESSMENT FULL POSSESS CARREST CARRES



Digital Marketing Strategy

Make it easy for people to:

- 1. Find accurate information about us online.
- 2. Communicate/engage with us online.
- 3. Learn about/access our services online.
 - Redesign Essentia Health website.
 - Advertise our services online.

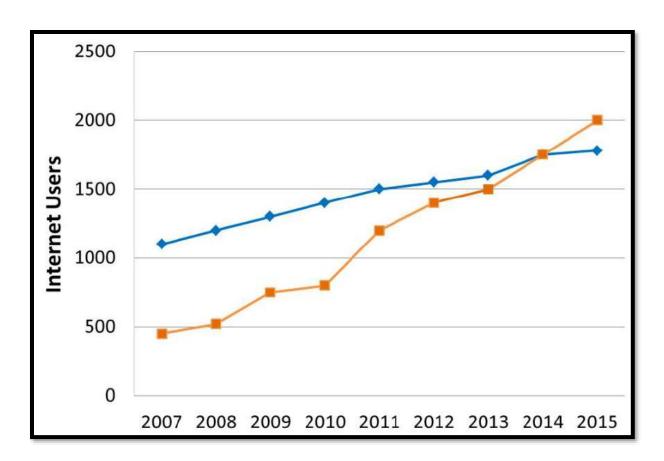


Website Redesign – 10,000 Daily





Mobile-First Website



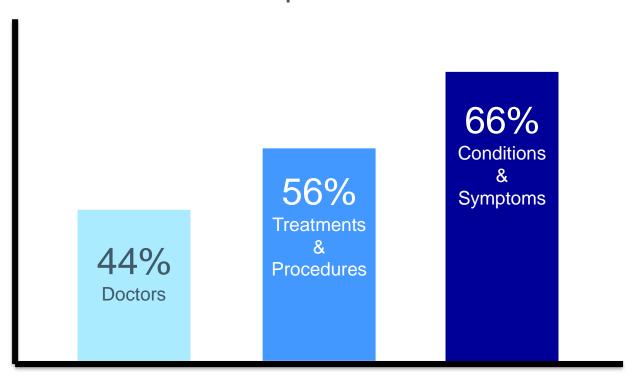
Current website designed in 2010 for desktop computers.

Mobile internet use has now surpassed desktop use.



Improved User Experience







Improved Access Via Online Care

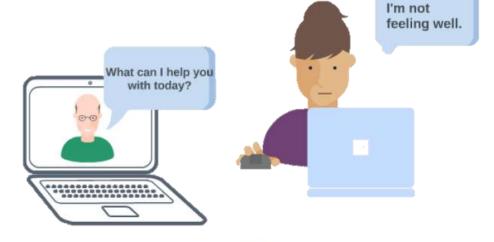
E-Visits

Patient fills out online questionnaire.



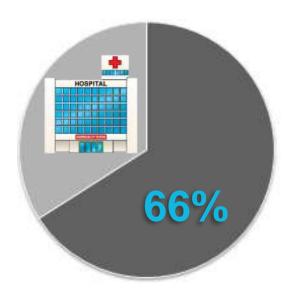
Video Visits

Patient uses a webcam to see and speak with a medical professional.

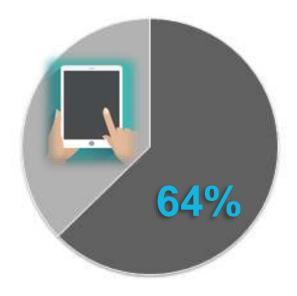




By 2019...



Health systems will offer self-scheduling

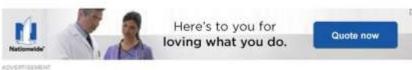


Patients will use self-scheduling



Advertise Online Scheduling





Sports

CHICAGO BULLS 11 12 AM

Michael Jordan's greatest NBA Finals moments

By Chicago Tribune staff

There are memorable NBA Finals moments. And then there are Michael Jordan's NBA Finals moments. Here are the best.



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extre years.

Breaking MORE BREAKING SPORTS

CHREAGO CUBS

Willson Contra aunder Cubs' minor 1 microscope

CHICAGO CU

Wednesday cap: Cubs 8, Phillies 1

CHICAGO BEARS 2:25

Bears rookie Jonathan Bullard learning when to take his chances

COLLEGE SPORTS - 2:35 PM

Notre Dame hires Ryan Humphrey as men's basketball assistant

BREAKING SPORTS 1 52 PM

Some looking to profit from free tickets to Muhammad Ali services

Find a primary care appointment that fits YOUR schedule



Healthy Driven Edward-Elmhurst

ADMENTO MADOR

Trending stories



How do the Bears' rookie safeties look so far?



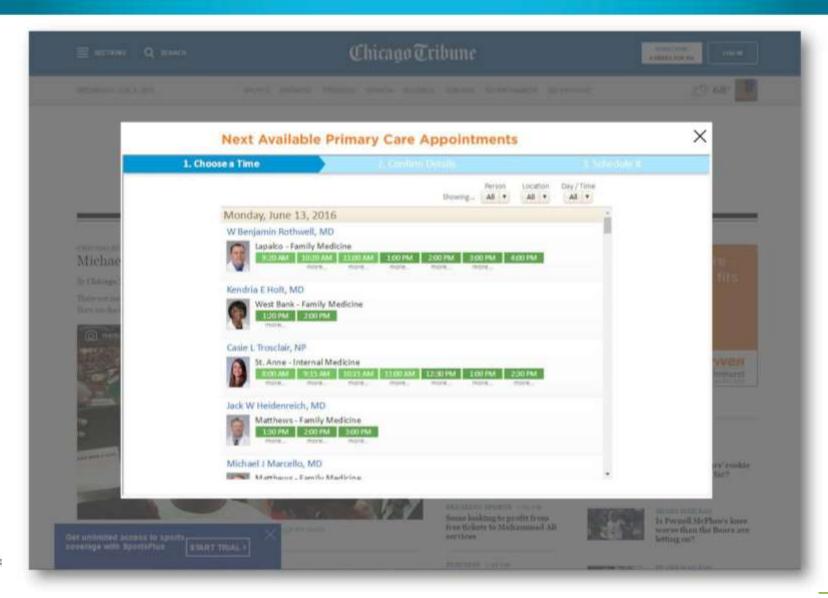
BEARS MAILBAG

Is Pernell McPhee's knee worse than the Bears are letting on?

BUNDNESS THE PIE

THE AREA MADE BAD

Online vs. Phone Scheduling

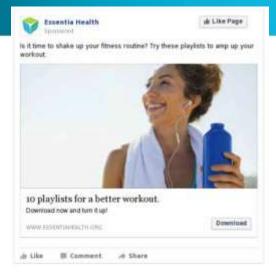


Online Access

Orthopedic Example

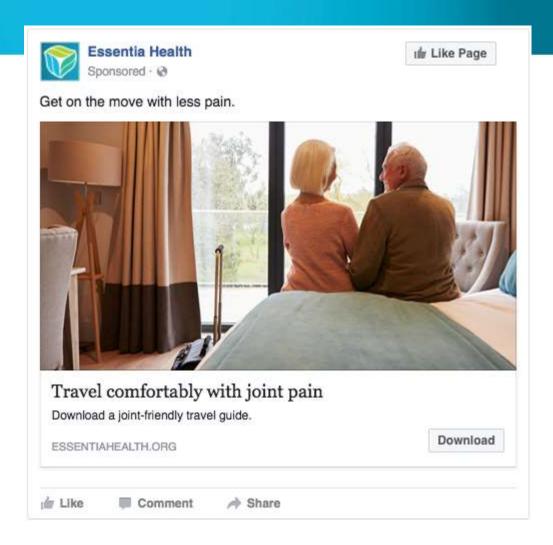


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Display Ads



Nationally Recognized Joint Replacement Care Get back to the activities you love.

MAKE AN ORTHOPEDIC APPOINTMENT NOW



Near You

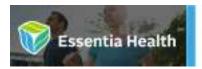
SEARCH NOW >











Don't run from joint pain.

Visit an Orthopedic Specialist Near You





Paid Google Search Ads

Ready To Stop Joint Pain?
Essentia Health Orthopedics
orthopedics.essentiahealth.info/Orthopedics/Specialists
Discover An Orthopedic Treatment Plan Made Just For You.
Make An Appointment.

Need A Sports Medicine Doctor? Essentia Health Sports Med orthopedics.essentiahealth.info/Orthopedics/Sports-Medicine Discover A Sports Medicine Care Plan Made Just For You. Make An Appointment.

Essentia Health Orthopedics
Experience Personalized Care
orthopedics.essentiahealth.info/Orthopedics/Specialists
Don't Just Pick A Doctor. Choose A Partner. Call Our
Orthopedic Specialists Now.

Get Help For Rotator Cuff Pain
Essentia Health Shoulder Care
orthopedics.essentiahealth.info/Orthopedics/Arm-Shoulder
Discover A Rotator Cuff Treatment Plan Made Just For You.
Make An Appointment.



Landing Pages



For information on all our services, please visit EssentiaHealth.org
1-844-663-1068

Clinic Locations

Joint Pain/ Joint Replacement

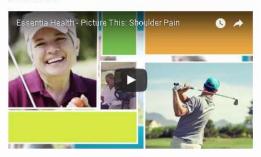
Sports Medicine

Healthy Livin

Shoulder

Imagine Living Life Free of Shoulder Pain

Your shoulder has the widest range of motion in your entire body. When the shoulder joint is damaged, it prohibits the arm from moving and can be very painful. The pain may present as dull or sharp, and may come on gradually or suddenly. Whether you are suffering from a torn rotator cuff or a pinched nerve in your neck, you can trust the orthopedic specialists at Essentia Health to provide advanced shoulder pain treatment.



Cause & Symptoms of Shoulder Pain

There are various factors and medical conditions that can cause shoulder pain, including injury or trauma, overuse from manual labor or sports, rotator cuff tendinitis, arthritis, pinched nerve in the neck or shoulder, forzen shoulder, or dislocated shoulder. You should seek professional treatment for your shoulder pain if you are experiencing the following symptoms:

- Shoulder pain performing everyday activities
- Shoulder pain at rest
- Muscle spasms
- Shoulder weakness
- Inability to move shoulder
- Swelling
- Deformed shoulder joint (dislocation)

Why See an Essentia Health Orthopedic Specialist?

- Essentia Health physicians have specialized training to care for patients with shoulder pain.
- Receive a treatment plan for your shoulder pain with non-surgical or surgical options.
- Improve your quality of life and restore your independence, without shoulder pain.
- Experience convenient locations and quick diagnostics to get you back to your favorite
 activities sooner.







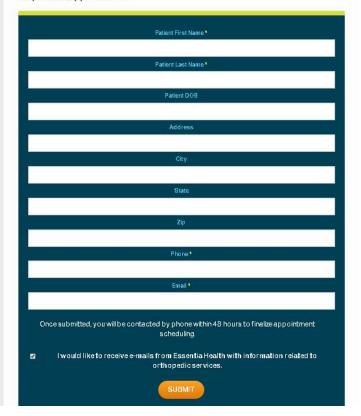


Say Goodbye to Shoulder Pain

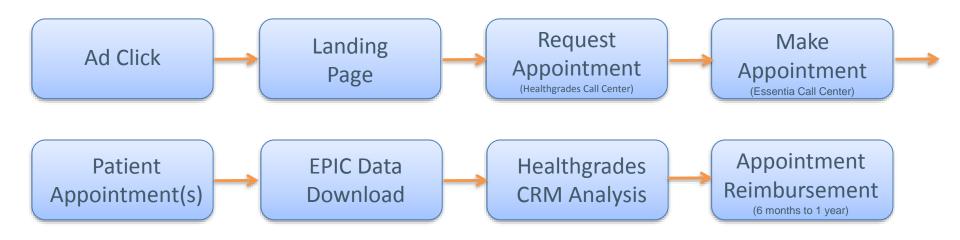
Don't let shoulder pain control your life. You deserve to live an active life, free of pain. At Essentia Health, our orthopedic specialists can perform a thorough physical examination to help determine the cause of your shoulder pain. Depending on your diagnosis, we may prescribe anti-inflammatory medications, pain relievers or exercises to improve joint mobility to help you find pain relief, or surgery. See an Essentia Health or thopedic specialist and get back to being you.

Individuals suffering from shoulder pain in Minnesota and Wisconsin turn to the orthopedic specialists at Essentia Health for treatment.

Request an Appointment



Digital Advertising is Measurable

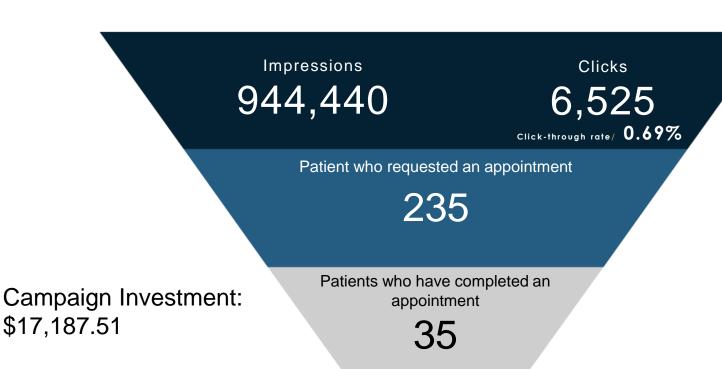


Appointment Reimbursement – Advertising Spend = ROI



East Orthopedic Digital Campaign Phase I: 7/8/2016-10/18/2016

CHANNELS INCLUDED Pay Per Click (PPC)/ Display / Social



ROI To Date:

Charges: \$317,471

Reimbursement: \$128,648

Completed Appointments

160



Digital Recruiting

- Innovation in Candidate Sourcing
 - Use of social media
 - Targeted sourcing through LinkedIn, Facebook
 - Leveraging employee base for referrals and sharing



Digital Marketing Strategy

Make it easy for people to:

- 1. Find accurate information about us online.
- 2. Communicate/engage with us online.
- 2. Learn about/access our services online.



Other Technology



- Integrating Telecare with the EHR to support nurse triage, text reminders, Rx refill, provider paging
- Tele Sitters
- Epic Refuel



In Conclusion

No-Regrets Priorities for Next Era of Health Care Reform



Accessibility

- Multi-channel navigation platform, including search, price estimation, and triage/scheduling helps streamline transactions
- Development of diverse network of access points (e.g. urgent care, retail, enhanced access to specialty care, primary care) to meet varied consumer access demands



Reliability

- Organization-wide commitment and investment in service delivery and quality improvement drives broad engagement in delivering superior outcomes
- High-reliability approach to both service delivery and clinical quality ensures baseline of performance



Affordability

- Willingness to partner with lower-cost providers offers patients affordable options, helps prevent markets from becoming overbuilt
- When markets are already overbuilt, commitment to scale back excess capacity ensures affordability in the long-term

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Adapting Provider Strategy to New Market Realities

Four Key Steps to Succeed In the Next Era of Health Care Reform



Radically Reduce Cost Structure

Reduce cost structure to enable pricing flexibility



Build a Consumer Loyalty Platform

Prioritize consumer loyalty strategy to build durable patient relationships



Establish a Sustainable Medicare Risk Strategy

Carefully pace transition to Medicare risk to capture returns from care management



Elevate Physician Network Performance

Restructure physician network to meet twin mandates of population health and consumerism



2016-2017 Health Care Advisory Board National Meeting

To learn more, attend the 2016-2017 Health Care Advisory Board National Meeting; members can register here or at https://www.advisory.com/research



Discussion



