

Total Cost of Care: A New Perspective on Laboratory Utilization Management

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Total Cost of Care (TCOC)

- A full-population, person-centered measurement tool that accounts for 100% of the care provided to a patient.
- HealthPartners has developed and has been using this methodology since 1995.
- In 2012, the National Quality Forum endorsed HealthPartners' Total Cost Index (TCI) and Resource Use Index (RUI).

Objectives

- Describe the HealthPartners Total Cost of Care Model
- Describe how laboratory test utilization impacts a patient's total cost of care
- Describe three examples of how the management of test utilization (over- or under-) impacts the total cost of care

Program Description

- Over the last 5-7 years, the focus on managing test utilization has been on reducing testing.
- There is also a need to understand when increasing utilization or performing more testing will actually reduce the overall patient "total cost of care" (TCOC).
- HealthPartners' TCOC framework addresses one of the most fundamental problems related to population health: rising health care costs.



HealthPartners

- An integrated health care organization providing health care services and health plan financing and administration.
- Founded in 1957 as a cooperative.
 - The largest consumer governed nonprofit health care organization in the nation - serving more than 1.5 million medical and dental health plan members nationwide.
- Merged with Park Nicollet Medical Center in 2013.
- Care system includes a multi-specialty group practice of more than 1,700 physicians.
- HealthPartners employs over 22,500 people.



HealthPartners Hospitals

- Methodist Hospital, St. Louis Park, Minn.
- Regions Hospital, Saint Paul, Minn.
- Lakeview Hospital, Stillwater, Minn.
- Hudson Hospital & Clinics, Hudson, Wisc.
- Westfields Hospital, New Richmond, Wisc.
- Amery Regional Medical Center, Amery, Wisc.



HealthPartners



TCOC - Overview

- **Total Cost of Care** is a name for a method of measuring health care affordability.
- HealthPartners has developed a TCOC model that is unique in a significant way.
- In addition to consideration of **cost of care** provided to a patient (or "Total Cost Index"), it also incorporates an innovative approach to measuring **resources used** in providing that care (or "Total Resource Use Index").
- These measures yield more comprehensive, revealing and actionable results than cost measures alone.



TCOC framework

- Can also provide patient-level predictions to identify high-risk individuals.
- Supplies reporting which easily and systematically pinpoints savings opportunities at the population, provider, condition, procedure, and patient-levels.
 - TCOC identifies problem areas, and produces actionable results.
 - Helps providers, payers, employers, researchers, and government entities to make a meaningful difference in their efforts to manage population health.
 - TCOC measures can help pinpoint ways to make health care more affordable in ways that do not compromise quality or experience.



Twin City Providers



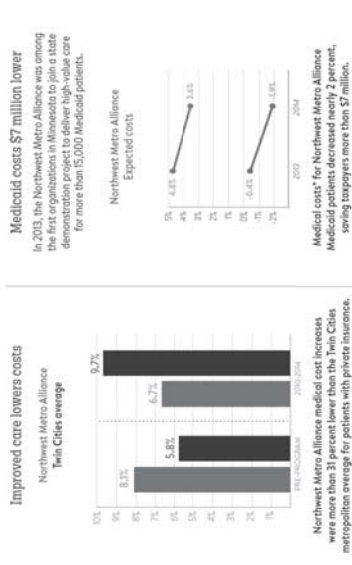
Standardized approach to TCOC

- Provides a much-needed, fundamental and shared building block for standardizing Total Cost of Care measurement broadly and supporting the development of accountable care organizations (ACOs) and other payment reform models.
- The measurement approach carries with it the strong potential for bolstering health care improvement and reform while driving greater value across a diverse range of users and organizations.



Role of the healthplan

- HealthPartners also has an insurance product with 1.5M members in Minnesota.
- HealthPartners covers patients seen in most provider organizations across Minnesota
- The TCOC uses administrative claims data.
- Can therefore compare cost and resource utilization for similar patient diagnosis, no matter where care is provided.
- Using this system, HealthPartners has outperformed Minnesota, regional and national risk-adjusted cost of care benchmarks for three straight years.



HealthPartners Total Cost of Care and Total Resource Use

- Measures include all care (professional, inpatient, outpatient, pharmacy, ancillary).
- Indicative of price and resource use drivers at every level.
- Uses Johns Hopkins Adjusted Clinical Groups (ACG) for effective comparisons and benchmarking.
- Displayed as an index to protect competitive information while being transparent with relative performance and price for procedures and services.
- Tested and reviewed over a three-year period for reliability and validity.



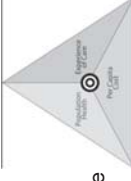
National Quality Foundation endorsement

- NQF as a standards setting organization
- January 2011: **inaugural call for national voluntary consensus standards for TCOC measures by The National Quality Forum (NQF)**.
 - consumer organizations, health plans, health professionals, providers, public and community health agencies, public and private purchasers, health care research and improvement organizations.
- January 31, 2012, NQF's **first-ever endorsement of a full-population TCOC measurement approach**



Implications and Benefits for a healthcare system

- HealthPartners is committed to achieving the Institute for Healthcare Improvement's Triple Aim.
- **HealthPartners has publicly released a depth of information** about the Total Cost of Care and Total Resource Use measurement approach. This release includes guidance on using the measures, technical guidelines, detailed scientific background, reference guides, and sample applications.

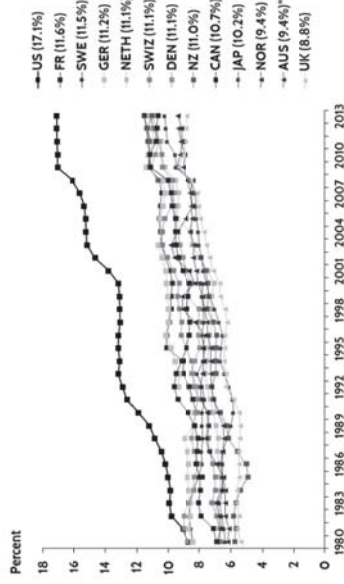


Why is this important?

- Health care spending is expected to continue to rise to over 20 percent of the domestic gross domestic product (GDP) by 2018.
 - The largest percentage of any developed nation in the world.
 - Rising costs prohibit thousands from being able to afford treatment, and contribute largely to personal bankruptcies.
- Affordability of care has become an increasingly prominent issue. In spite of this fact, however, few publicly-available cost and resource use measures exist.



Exhibit 1. Health Care Spending as a Percentage of GDP, 1980–2013



*2013 GDP values by gross domestic product. Dutch and Swiss data are for current spending only and exclude spending on capital formation in health care providers.
Source: OECD Health Data 2015.

Overuse of resources

- This has led to wide variation in health care cost and use across geographies and provider organizations.
- Studies suggest that Medicare spending would be decreased by almost 30 percent if medium and high spending geographies/organizations consumed health care services comparable to that of lower spending organizations.
- Reducing overuse can make care safer and more efficient.

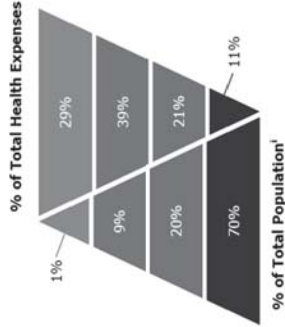


Complexity adjusted

- To account for a member's illness burden, both Total Cost of Care and Total Resource Use measures require the use of a commercial risk adjustment tool.
- HealthPartners uses Johns Hopkins' Adjusted Clinical Groups (ACG System) to assign each individual a risk score based on diagnoses, age, gender and other adjustment methods.



Affordability



TCOC Entity Application

- Providers can use TCOC values to estimate overall costs, and to evaluate practice efficiency and price competitiveness.
- Payers can use TCOC values to design benefit packages and create tiered networks, to develop reformed payment approaches (such as shared savings agreements).
- ACOs can use TCOC values to develop payment strategies. For instance, over 80% of HealthPartners' membership is linked to providers who are paid on TCOC-based shared savings agreements.
- Government entities can use TCOC measures to inform development of exchanges, and other innovations which assess cost and resource use for plans and providers.
- Employer groups can use TCOC measures to support marketplace comparisons of cost, quality, and resource use.
- Researchers can use TCOC data to understand cost and resource drivers in the health care industry.
- Individuals can use TCOC tools and visuals (available at www.healthpartners.com/costequality) to guide their decisions about their providers and services.



TCOC Uptake Across the Country



- Since the NQF endorsement in 2012,
- 190+ licensees in 35 states (blue colored states).
 - Plus several national and regional organizations.



TCOC helps identify over- and underuse of resources

- Example, a primary care physician might refer patients with back pain directly to an orthopedic surgeon; as a result, these patients would have increased specialist costs and receive more back surgeries than would be expected for their population. Further examples include:
 - Preventable emergency department visits and hospitalization.
 - Inappropriate medication use, lab testing, or consultations.
 - Unwarranted diagnostic or surgical procedures.
 - Inappropriate site-of-service usage (e.g. performing MRI at a hospital instead of a free standing radiology center).



Framework/Design

- A full population, person-centered analytical tool that accounts for 100 % of the care provided.
 - Measures the cost of that care
 - Quantifies resources used
 - Facilitates a standardized price-comparison.



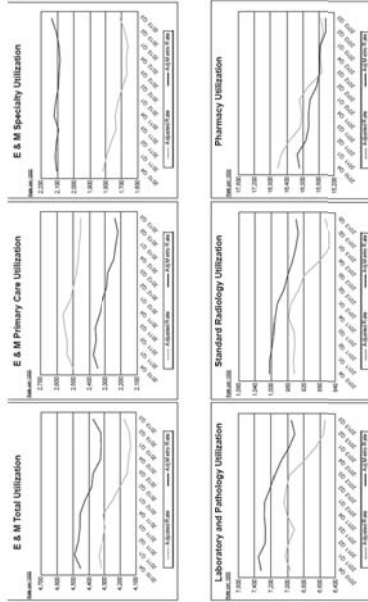
Utilization index

- Twin Cities Metro median = 1.0
- HealthPartners goal = .95
- We have determined that a change of .01=6,000 tests/yr
- If we make a change that no one else does, we will improve relative to the competition.
 - Example: HealthPartners has all pregnant women screened for drugs, unique in the market.
- If everyone makes a change, there would not be a relative improvement for anyone.
 - State requires, starting 2017 that all pregnant women be screen three times for syphilis during a pregnancy



Example Reports

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2016 – Park Nicollet Clinics



PARK NICOLLET - 201
 Total Cost of Care Episode Report - Ambulatory EOC Members - January through December 2016
 Ambulatory Member: Clinics, Hospital, Rx and Referral Providers
 Adjusted for Member Age

Primary Care	Epi Cost	% of Spend										UTL	
		Spent	TCI	PI	ROI	TCI	PI	ROI	TCI	PI	ROI		
Pharmacy	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
OBSTETRICS & GYN	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
ORTHOPEDIC SURGERY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MENTAL HEALTH	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
GASTROENTEROLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CARDIOLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
UROLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DERMATOLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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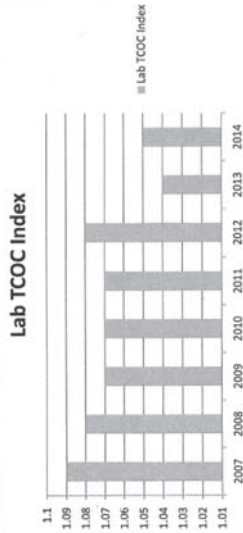
2016 – HealthPartners Clinics

HealthPartners
 HEALTHPARTNERS MEDICAL GROUP - 301
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MENTAL HEALTH	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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UROLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DERMATOLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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Lab TCOC trend



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DERMATOLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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Chronic Conditions Report - confid

Condition	Patient Management Utilization per Person per Year										Rt Count
	EM (Full)	EM (PC)	EM (Specialist)	EM (Other)	EM (Other)	EM (Other)	EM (Other)	EM (Other)	EM (Other)	EM (Other)	
ASTHMA	6.1	6.7	3.7	3.1	2.1	1.5	1.3	1.3	1.3	2.0	275
BACK PAIN	5.9	5.9	3.0	3.1	2.9	2.5	4.5	1.4	1.3	2.1	213
CHF	14.8	15.5	4.8	5.1	3.9	1.5	3.4	1.9	1.9	5.8	612
CHRONIC KIDNEY DISEASE	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	118
COOPD	7.0	7.3	3.8	3.8	3.4	3.7	1.4	1.9	1.3	3.7	332
DIABETES	6.6	6.9	3.8	3.8	3.0	3.3	1.9	1.6	1.2	1.1	507
HYPERLIPIDEMIA	5.2	5.2	2.9	2.9	2.2	2.2	1.1	1.1	1.1	1.1	325
ISCHEMIC HEART DISEASE	9.7	10.3	4.3	4.3	3.4	3.4	1.4	1.4	1.4	5.0	503
ALL OTHER CONDITIONS	2.9	2.8	2.0	1.9	0.9	0.9	4.1	3.9	6.5	6.1	6.3
PROVER AVE	4.0	4.0	2.4	2.4	1.6	1.6	6.7	6.3	6.9	6.9	6.2

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2016 – HealthPartners Clinics



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UROLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
DERMATOLOGY	\$1,000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

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Pregnancy – Park Nicollet

Spent	TCI	PI	ROI	TCI	PI	ROI	UTL
\$16,777,868	10%	1.08	1.12	0.97	1.19	1.21	0.89
\$1,500,000							52%

Pregnancy - HealthPartners

Spent	TCI	PI	ROI	TCI	PI	ROI	UTL
\$15,651,437	6%	0.89	0.90	0.99	0.94	0.99	0.88
\$1,500,000							50%

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OB comparison

Total Cost of Care	
OB/Pregnancy Smart Sets	Park Nicollet
Timeframes - Lab testing	
1st OB	Initial Prenatal
10-12 weeks	16-20 weeks
16-18 weeks	24-28 weeks
22 weeks	36-40 weeks
28 weeks	Post Partum
36 weeks	
38-41 weeks	
Health/Partners	Health/Partners
Hemoglobin	Hemoglobin
Antibody screen	Antibody screen
Glucose tolerance	Glucose tolerance
UA screen	UA screen
Free T4	Free T4
A1C (alabets)	A1C (alabets)
Platelets	Platelets
TSH reflex	TSH reflex
Hep C (water bath)	Hep C (water bath)
Antibody screen	Antibody screen
Free T4	Free T4
TSH reflex	TSH reflex
Hemoglobin	Hemoglobin
Platelets	Platelets
Drug screen	Drug screen
Hep C (water bath)	Hep C (water bath)



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Vitamin D: the order automatically opens to display these new process instructions:

"The evidence on screening for vitamin D deficiency in asymptomatic adults to improve health outcomes is insufficient and the balance of benefits and harms of screening and early intervention cannot be determined. No national, primary care professional organization currently recommends population-wide screening for vitamin D deficiency. In addition, it is not necessary to evaluate 25-(OH) D levels before discussing recommended daily allowances of Vitamin D with patients."



Folate: the order automatically opens to display these new process instructions:

"The incidence of folate deficiency in our patient population is <1%. Empirical supplementation with folic acid in place of testing for folate deficiency is cost effective and prevents missed cases of true folate deficiency."



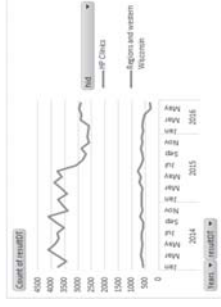
Any questions, please contact Dr. Dwight Grotte @ 953-4297 or dwight.grotte@park Nicollet.com.



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Vitamin D

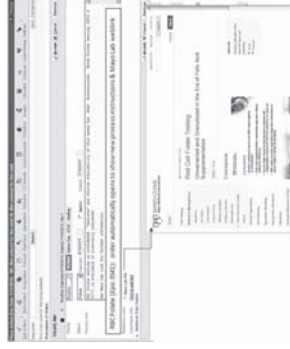
- Mid-2015 changes
 - Physician education
 - Epic soft stop
 - Physician scorecard
 - 38% reduction



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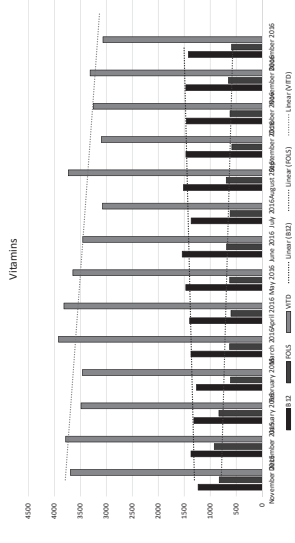
Folate, B12, RBC folate

- B12-Folate panel no longer available, must be ordered separately. Discourage Folate levels.
- RBC folate no longer available



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Vitamins



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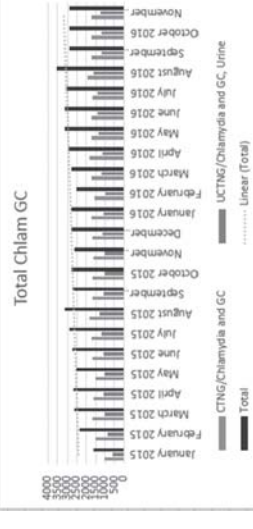
Strep screening changes

- Step 1: Back-up strep testing not required on adults >21 years of age
 - 2015: 23,882 cultures
 - 2016: 16,126 cultures
- Step 2 (in process): Converting to the BD LIAT strep method which will eliminate all back-up strep culture
 - Lower utilization
 - More clinically accurate results
 - Improved patient experience



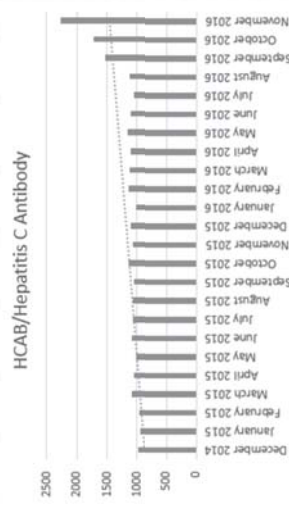
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Chlamydia / NG screening – need to improve screening rates. Validating home self-collection



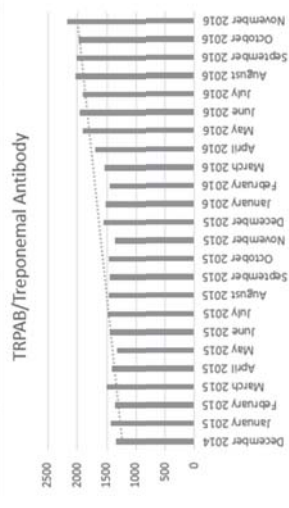
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Hepatitis C screening



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Syphilis screening



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Trend 2013-2015

HEALTHPARTNERS MEDICAL GROUP - 201
 Total Cost of Care Report - Rating to Market: January through December 2013, 2014, 2015
 Also Adjusted Total Cost of Care Metric
 Adjusted for Market, Specialty, Community, Specialty, Specialty, Specialty and Age
 Total Benchmark Group at 100.00%

Market	2013	2014	2015	2013-2015 Avg	2013-2015 Std Dev	2013-2015 Min	2013-2015 Max	2013-2015 Range	2013-2015 %
HealthPartners Medical Group	115,000	104,800	104,375	108,000	1,000	1,000	1,000	1,000	1,000
Market Total	115,000	104,800	104,375	108,000	1,000	1,000	1,000	1,000	1,000

Market	2013	2014	2015	2013-2015 Avg	2013-2015 Std Dev	2013-2015 Min	2013-2015 Max	2013-2015 Range	2013-2015 %
HealthPartners Medical Group	115,000	104,800	104,375	108,000	1,000	1,000	1,000	1,000	1,000
Market Total	115,000	104,800	104,375	108,000	1,000	1,000	1,000	1,000	1,000



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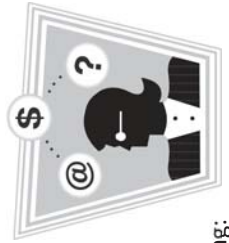
Current topics

- Vitamin D
 - Patient Education Material Review
 - discuss review with specialists like endocrinology)
- Duplicate testing data / physician feedback
- Influenza Testing (compare 2 primary care groups
- Panel vs. Individual Test Philosophy Discussion
- Tick Smart Set – review data since March)
- Hypertension
- Thyroid Testing
- Obesity – Smart Set implemented Feb 2017)



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Questions?



- Rick Panning:
 - Rick.L.Panning@HealthPartners.com
 - 651-280-5909 (cell)



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