HRET HIIN PHYSICIAN EVENT

Data Driven Techniques to Enhance Physician Participation

April 26, 2018

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

WELCOME AND INTRODUCTIONS

Radhika Parekh, MHA, Program Manager| HRET

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Summary Disclosure & Accreditation Statement

AHA/HRET Hospital Improvement Innovation Network (HIIN)

HRET HIIN Physician Event: Data Driven Techniques to Enhance Physician Participation
Live Online Webinar
April 26, 2018

The planners and faculty of the HRET HIIN "Data Driven Techniques to Enhance Physician Participation" webinar have indicated no relevant financial relationships to disclose in regard to the content of this presentation.

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American Board of Quality Assurance and Utilization Review Physicians

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical education through the joint providership of the American Board of Quality Assurance and Utilization Review Physicians, Inc. (ABQAURP) and Health Research & Education Trust (HRET). ABQAURP is accredited by the ACCME to provide continuing medical education for physicians.

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ABQAURP is an approved to provide continuing education for nurses. This activity is designated for 1.0 Nursing Contact Hours through the Florida Board of Nursing, Provider # 50-94.

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Webinar Platform Quick Reference

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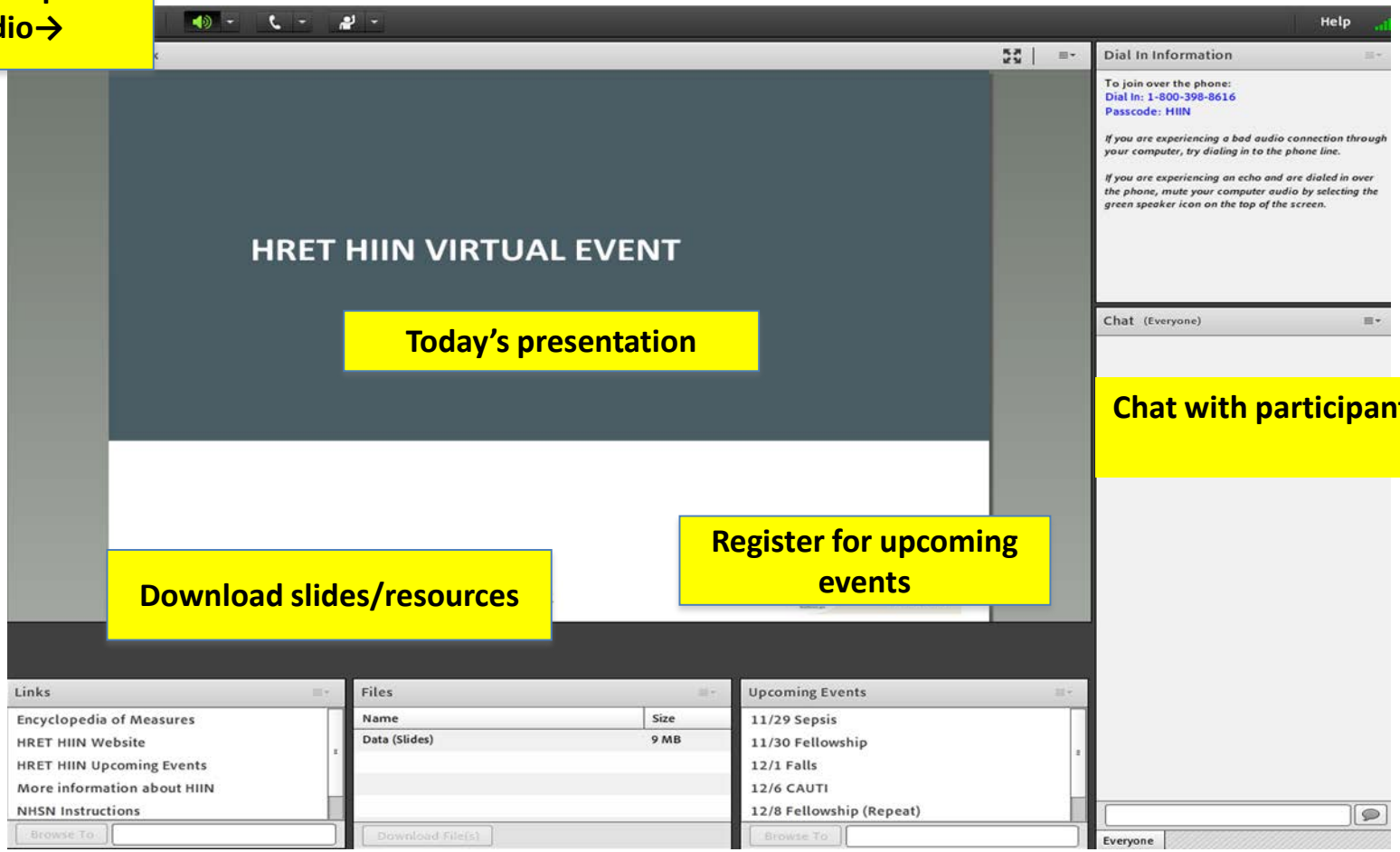

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Agenda for Today

2:00-2:03 p.m.	**Welcome and Introductions**	
		Radhika Parekh, MHA Program Manager, HRET
2:03-2:06 p.m.	**Let's Frame Today's Discussion**	
	Discuss how evidence-based strategies to sharing data can increase physician participation and accelerate change in quality and patient safety work.	**Bruce Spurlock, MD** Executive Director, Cynosure
2:06-2:28 p.m.	**Research in the field to Gain Physician Involvement**	
	Learn about the latest research and experience that enhances physician involvement including practice feedback mechanisms, methods to engage clinicans with the data, and how to use data to help clinicians make impactful change.	**Noah Ivers, MD CCFP PhD** Assistant Professor, University of Toronto
2:28-2:31 p.m.	**Reaction and Review**	
	Speakers engage in a brief discussion about lessons learned.	**Noah Ivers, MD CCFP PhD & Chad Konchak**
2:31-2:45 p.m.	**Using Analytics to Drive Success**	
	Explore techniques on how to engage surgeons through analytical processes in order to measure practice variation and clinical standardization.	**Chad Konchak** Senior Director, Data Analytics NorthShore University Health System
2:45-2:48 p.m.	**Reaction and Review**	
	Speakers engage in a brief discussion about lessons learned.	**Noah Ivers, MD CCFP PhD & Chad Konchak**
2:48-2:55 p.m.	**You have questions? We have answers!**	
	Open Line Question and Answers	**Presenters and Facilitators**
2:55-3:00 p.m.	**Bring it Home**	
	Close today's event with key learnings and share HRET HIIN physician resources	**Radhika Parekh, MHA** Program Manager, HRET

Poll Question 1

Who is in the room today?

a. Physician
b. Quality Leader
c. Executive Leader
d. Nurse Management
e. Frontline Staff
f. Other

Bruce Spurlock, MD

Executive Director, Cynosure Health

LET'S GET FOCUSED!
FRAMING TODAY'S EVENT

Best practices for designing feedback reports and facilitating the use of evidence to spark action

Noah Ivers MD PhD

Clinician Scientist, Women's College Hospital – University of Toronto

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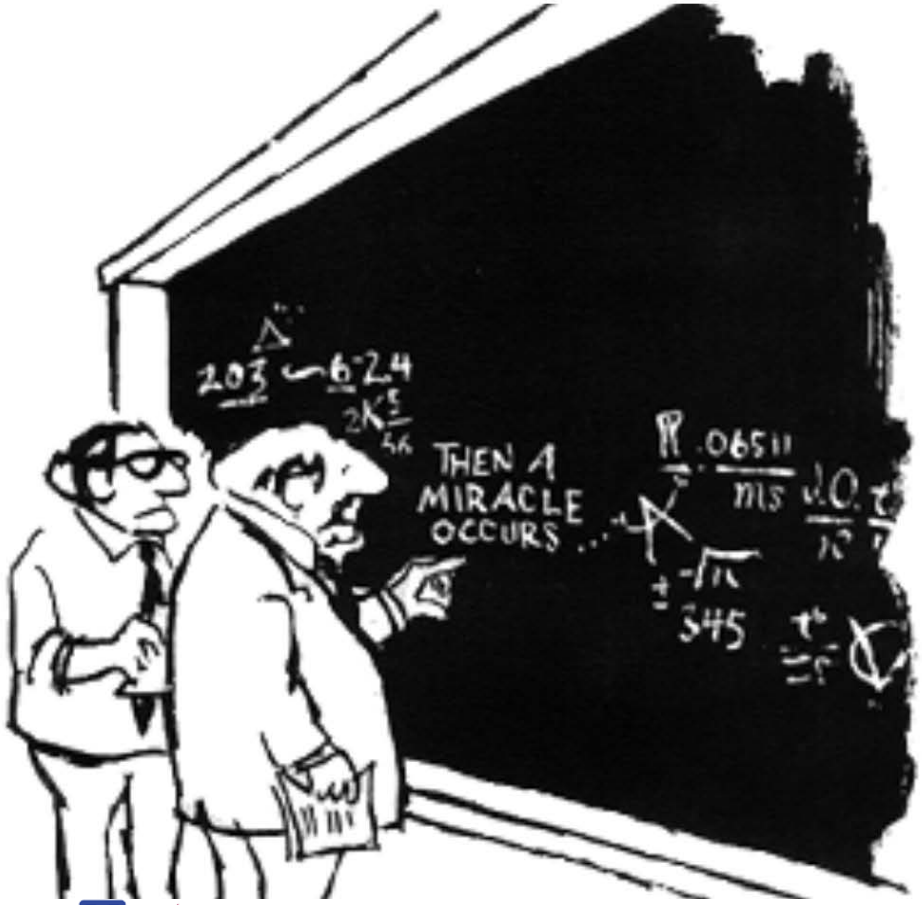
Agenda: A Whirlwind Tour of

- Evidence and best practices for practice feedback
- Actually engaging clinicians with the data
- Using the data to help clinicians make change
- Discussion


"You Can't Manage What You Don't Measure"
paraphrasing of an original quote by Lord Kelvin. The first to use this paraphrasing was Bill Hewlett, the co-founder of Hewlett Packer.
"...if I keep no record of what I do, I can always assume I've succeeded."
-Stephen Colbert
-*10 Key Takeaways From Bill Gates' Annual Letter 2013*

“Let’s produce a report card to improve outcomes”



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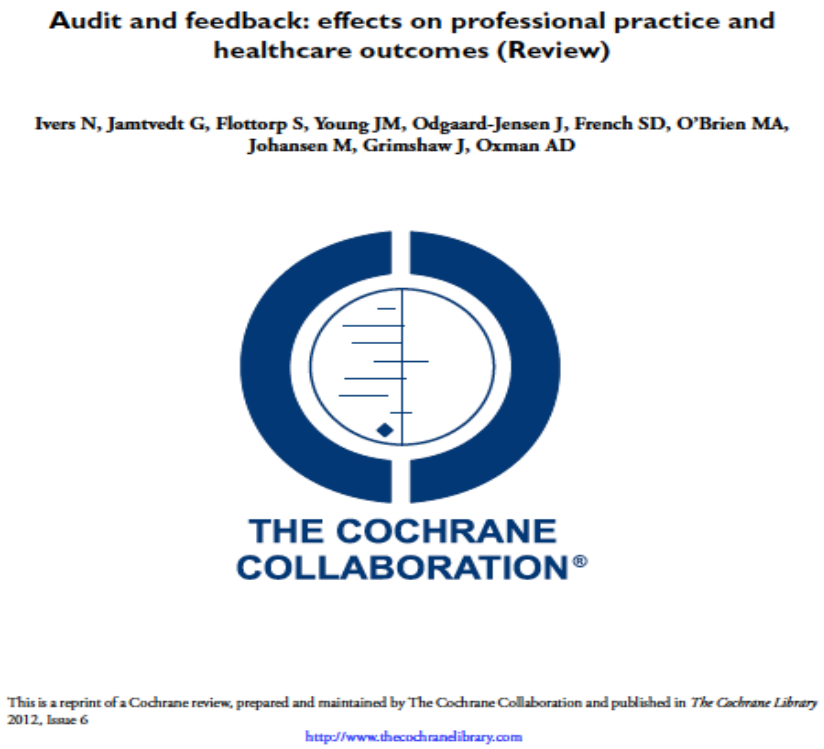
Does telling health professionals about their clinical performance work?

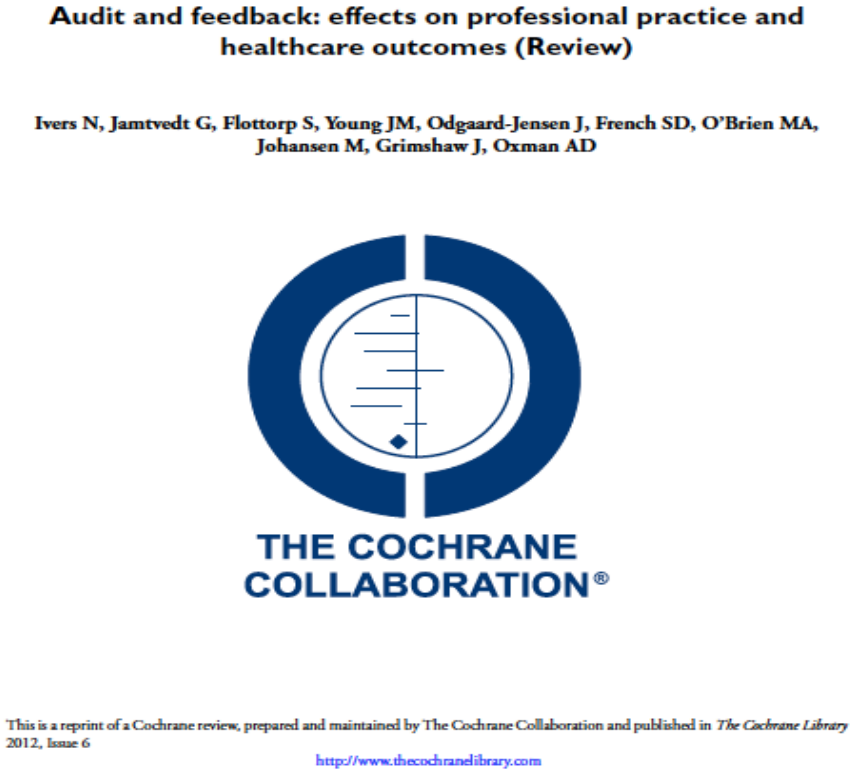


140 Randomized Trials published as of December 2010

Main analyses included:

- 2310 groups of health professionals from 32 cluster-randomized trials and
- 2053 health professionals from 17 trials allocating individual providers

Does telling health professionals about their clinical performance work?



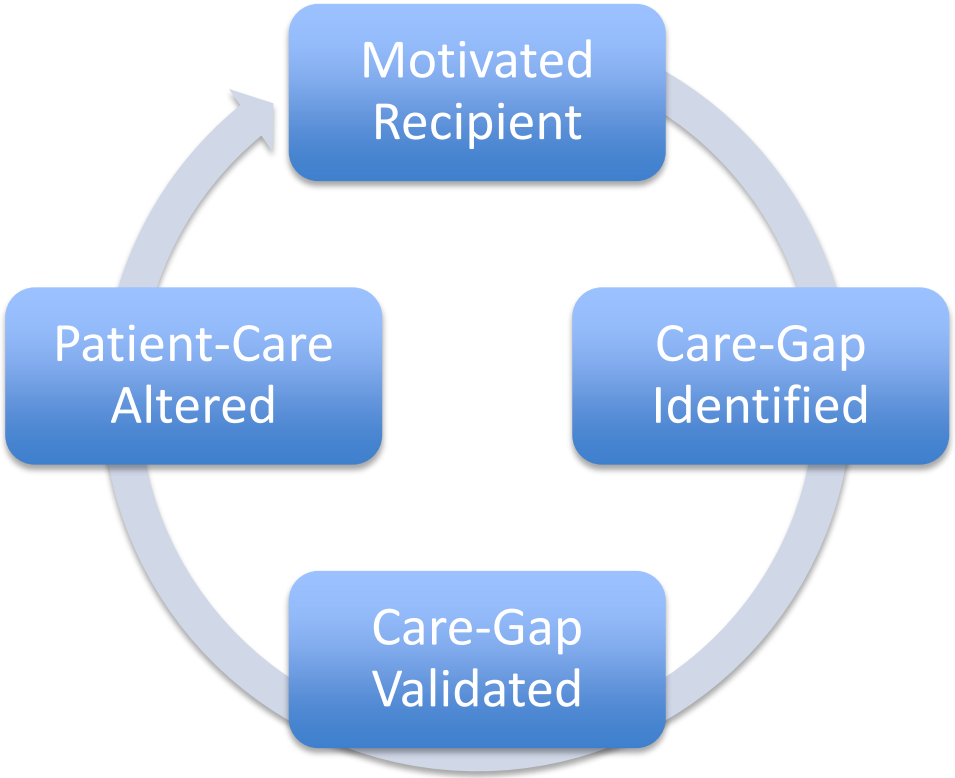
A&F improves compliance with desired professional behavior by 4% (IQR 0.5 - 16)

A&F more effective when:

- the source is a respected colleague,
- delivered both verbally and written,
- provided more than once,
- includes explicit targets and action plan

Targeted behavior plays an important role

- more effective when baseline performance is poor



Kluger AN, DeNisi A. Psychological Bulletin 1996;119:254–84.
Locke EA. A Theory of Goal Setting and Task Performance. 1990 Prentice Hall, New Jersey.
Carver CS, Scheier MF. Psychol Bull. 1982 Jul;92(1):111-35.

Common complaints

- My patients are different
- The data are not valid or not meaningful to me
- I'm already trying my hardest
- I don't have time for even one more thing

Poll Question 2

Where does your organization stand in engaging physicians in data sharing?

- We share general reports and/or graphs with the MEC and/or medical staff
- We post the quality and safety data for all physicians to see throughout the hospital
- We give department level feedback on quality or operational performance
- We give detailed specific data for each physician related to the quality, safety and operational priorities in our hospital

Help your recipients take action to improve their score

15 Suggestions for Designing Practice Feedback

1. Recommend actions that are consistent with established goals and priorities
2. **Recommended actions that can improve and are under the recipient's control**
3. Recommend specific actions

NATURE OF THE DESIRED ACTION

4. Provide multiple instances of feedback
5. Provide feedback as soon as possible and at a frequency informed by the number of new patient cases
6. **Provide individual rather than general data**

NATURE OF THE DATA AVAILABLE FOR FEEDBACK

7. **Choose comparisons that reinforce desired behaviour change**

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Reference: Ann Intern Med. Published online February 23, 2016. doi:10.7326/M15-2248

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15 Suggestions for Designing Practice Feedback

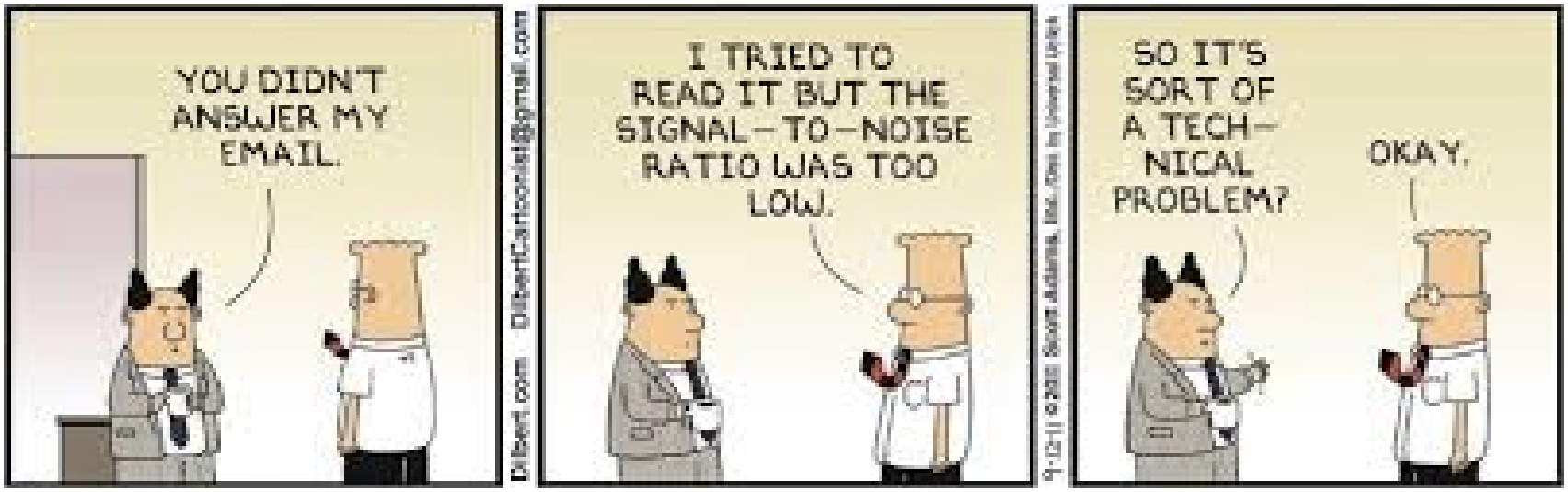
8. Closely link the visual display and summary message
9. Provide feedback in more than one way
10. **Minimize extraneous cognitive load for feedback recipients**

FEEDBACK DISPLAY

11. Address barriers to feedback use
12. Provide short, actionable messages followed by optional detail
13. Address credibility of the information
14. **Prevent defensive reactions to feedback**
15. **Construct feedback through social interaction**

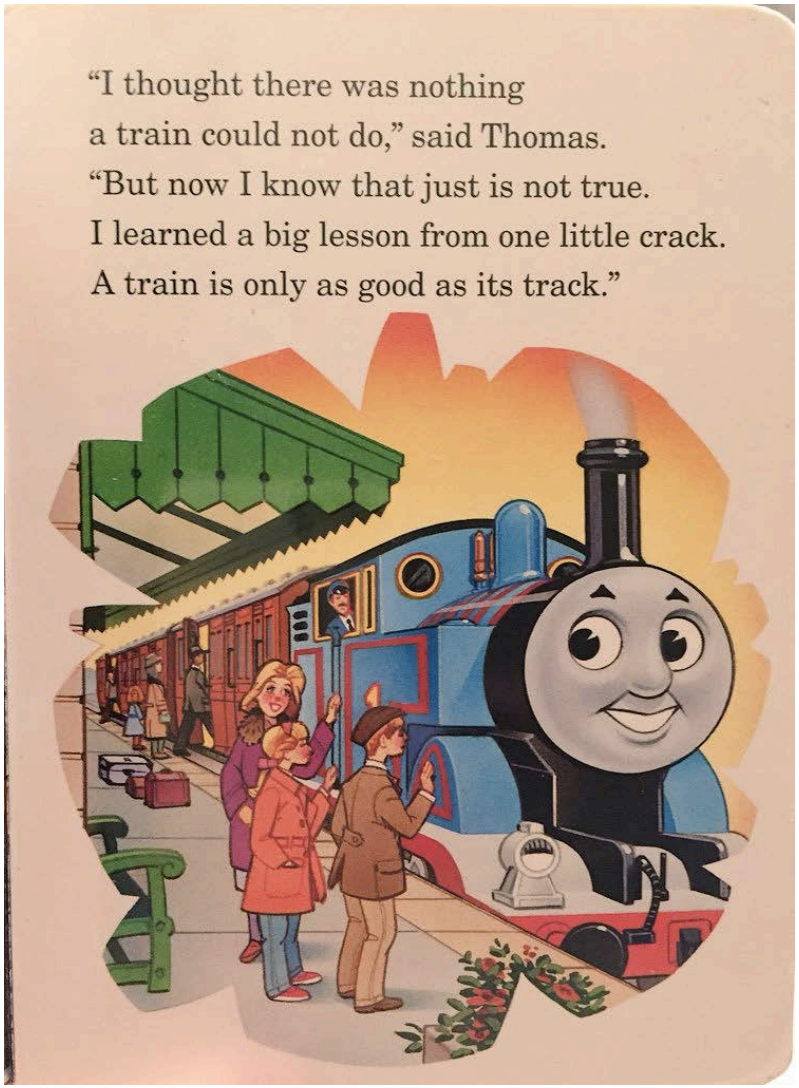
DELIVERING THE FEEDBACK INTERVENTION

Reference: Ann Intern Med. Published online February 23, 2016. doi:10.7326/M15-2248


YOU DIDN'T ANSWER MY EMAIL.
I TRIED TO READ IT BUT THE SIGNAL-TO-NOISE RATIO WAS TOO LOW.
SO IT'S SORT OF A TECH-NICAL PROBLEM?
OKAY.

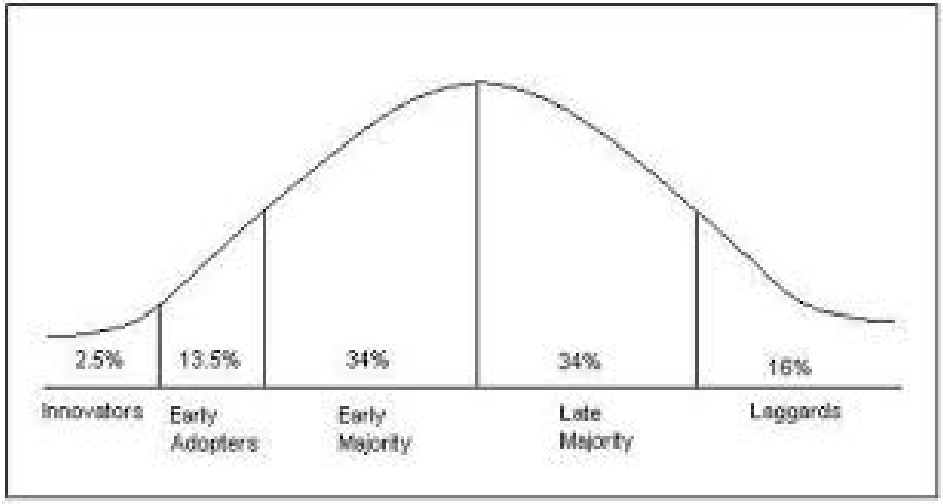
Design Rule
#1
= Empathy

Help your recipients take action to improve their score



But what if people just aren't ready?

- Culture eats strategy for breakfast…
  - but its appetite comes from Purpose



https://www.england.nhs.uk/ourwork/qual-clin-lead/sustainableimprovement/change-model/

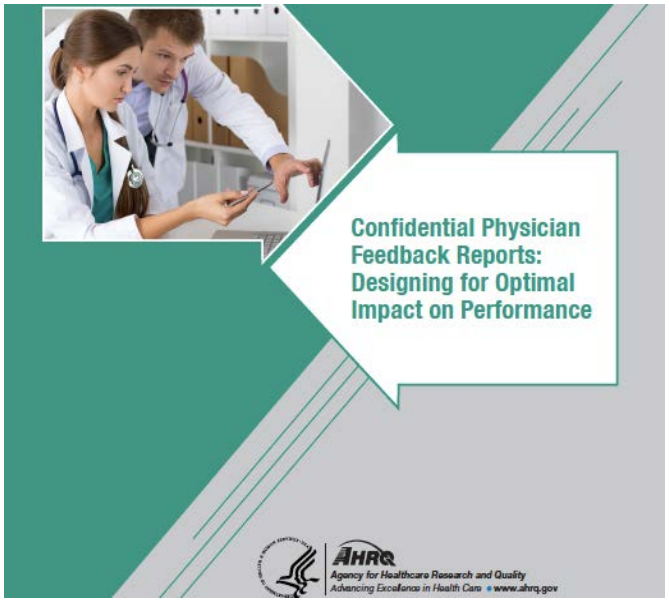
Take Home Points:

Build upon existing evidence

Have you incorporated best practices into your initiative?

Designing Confidential Physician Feedback

- **Identifying a clinical focus**
  - Aligned with priorities of clinicians
  - Room for improvement and amenable to change
- **Ensuring the data support the aims of the report**
  - Perceived as valid and actionable
  - Timely and updated frequently
- **Optimizing user functionality**
  - Appropriate comparator, goals, and improvement plans are provided
  - Key messages highlighted; graded entry to detailed information
- **Delivering to promote impact**
  - Discussion with respected colleagues
  - Ongoing cycles; aligned with other QI initiatives

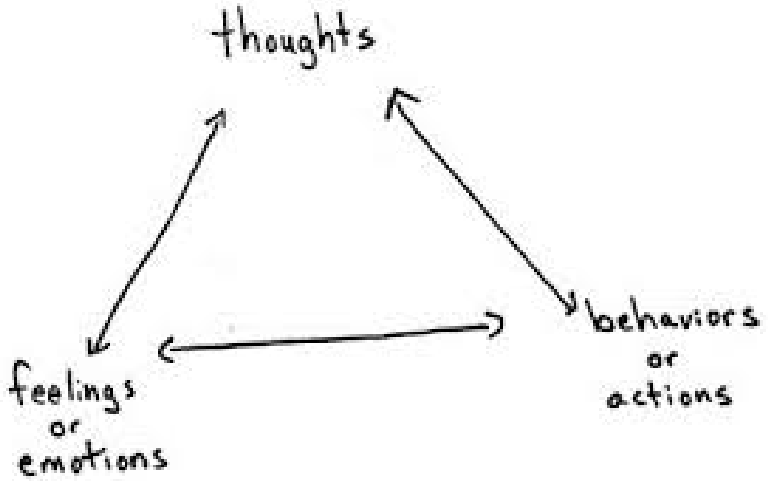


Reference: McNamara, Shaller, Ivers. Agency for Healthcare Research and Quality; 2016. AHRQ Pub. No. 16-0017-EF

Take Home Points:

Appeal to hearts and minds

Every clinical action is important; **prioritization** is necessary



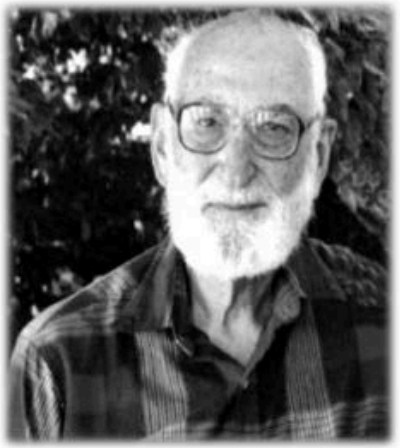
System and provider goals don't always align; common interest is **patient outcomes**

Emotion & Narrative can complement Data & Facts

The secret of quality

*'Ultimately, the secret of quality is **love**.*

..... If you have love, you can then work backward to monitor and improve the system.'



Avedis Donabedian

Using Analytics to Drive Standardization and Success in a Fixed Payment / Value-Based World

Chad Konchak

Senior Director, Data Analytics

NorthShore University Health System

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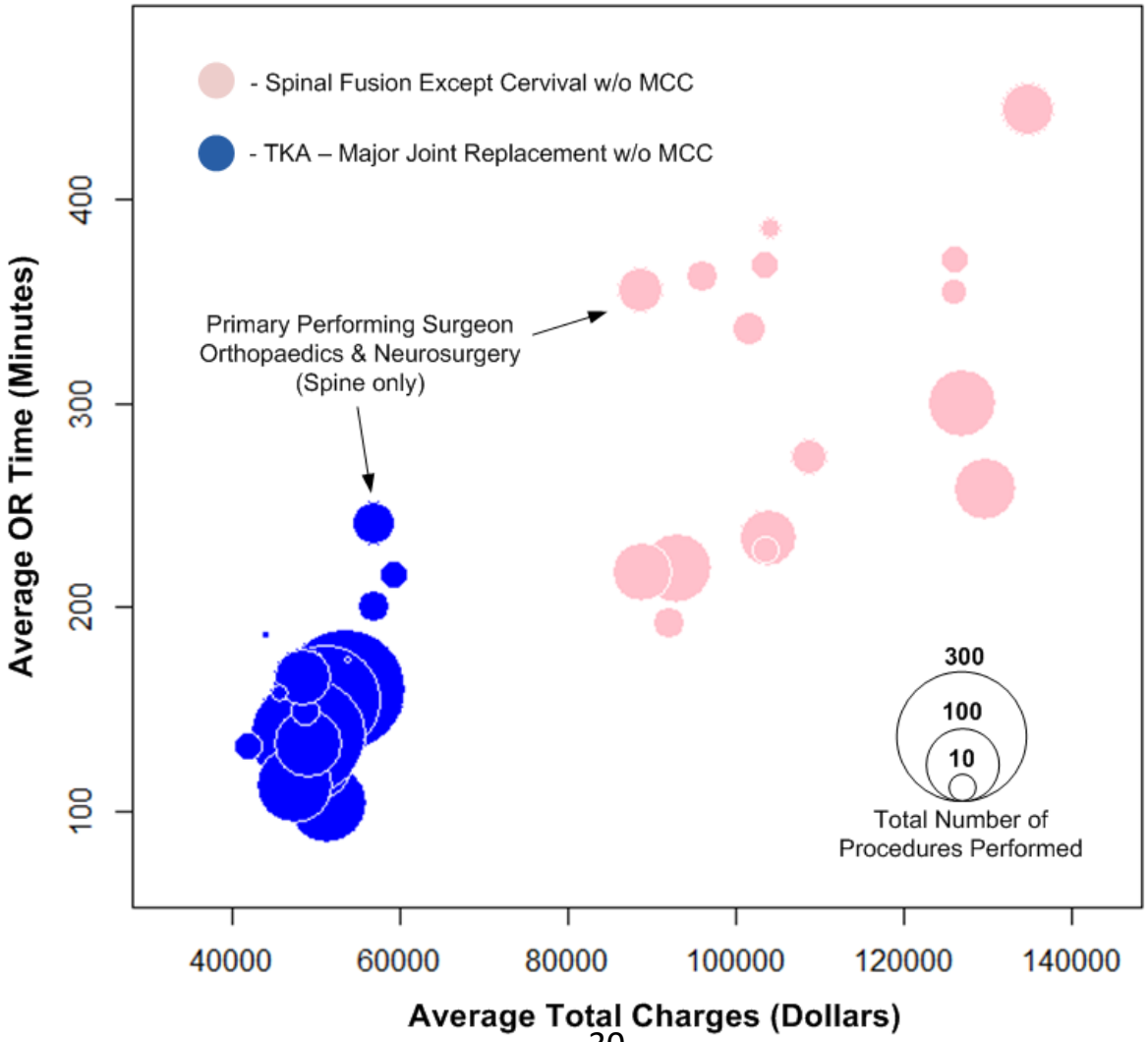
Identifying Cost Savings Opportunities (Bundled Payments)

Spine Fusions and Total Knee Replacements

FY2011 - FY2012



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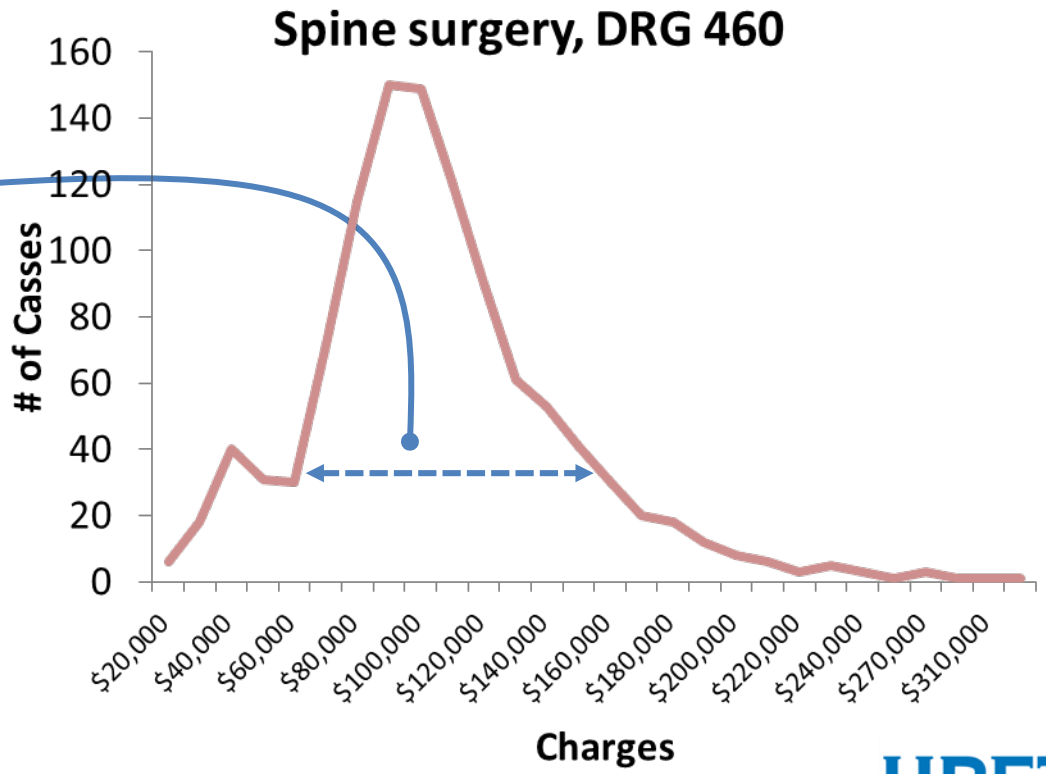
Example

- Spine surgery
- >1,100 done at NorthShore annually
- Two surgical services, 13 surgeons
- Large cost variability

$100,000 charge spread across 80% of cases for the same DRG

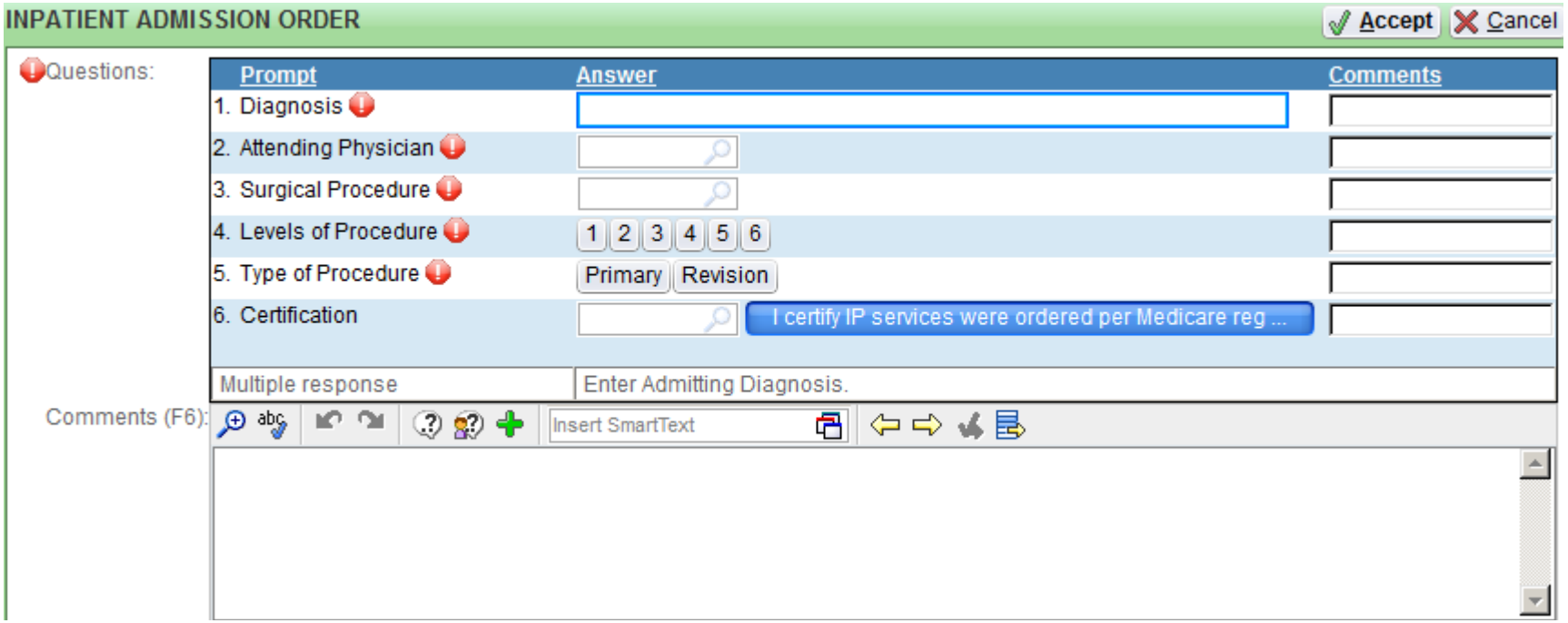


Version 1

Clinical Standardization Scorecard							
	Baseline (FY 2013)		Last 4 available quarters: Sept '13-Aug '14	Sept-Nov '13	Dec '13-Feb '14	Mar-May '14	Jun-Aug '14
DRG 460							
# of Cases	339		304	62	72	86	84
Avg Age At Discharge	60.9		61.9	62.8	58.1	62.4	63.9
Avg LOS	4.1		3.9	3.8	4.0	4.0	3.8
Mean GMLOS	3.1		3.1	3.1	3.1	3.1	3.1
Total Variant Days	350.3		244.3	44.2	62.1	76.4	61.5
Median Total Charges	$94,280		$89,567	$89,782	$89,382	$89,520	$90,147

DRG 460 includes a lot of other complicated multi-level spine procedures.
We need to focus on Level 1 & Level 2 Procedures

EMR Documentation For Levels and Revisions



Version 2

Clinical Standardization Scorecard							
	Baseline (FY 2013)		Last 4 available quarters: Sept '13-Aug '14	Sept-Nov '13	Dec '13-Feb '14	Mar-May '14	Jun-Aug '14
DRG 460							
# of Cases	339		304	62	72	86	84
Avg Age At Discharge	60.9		61.9	62.8	58.1	62.4	63.9
Avg LOS	4.1		3.9	3.8	4.0	4.0	3.8
Mean GMLOS	3.1		3.1	3.1	3.1	3.1	3.1
Total Variant Days	350.3		244.3	44.2	62.1	76.4	61.5
% Order Set Usage	57%		77%	66%	69%	87%	82%
Median Total Charges	$94,280		$89,567	$89,782	$89,382	$89,520	$90,147

Where are the opportunities to standardize?

Variability in the use of doppler tests for blood clots following spine surgery

	Cases	Doppler count	Dopplers/ case	Total charges	Charges/ case
Neurosurgery					
Surgeon 10	13	13	1.0	$ 20,622.00	$ 1,586
Surgeon 1	58	73	1.3	$ 111,147.00	$ 1,916
Surgeon 3	46	56	1.2	$ 80,881.00	$ 1,758
Surgeon 9	16	12	0.8	$ 19,245.00	$ 1,203
Surgeon 4	34	21	0.6	$ 30,530.00	$ 898
Orthopaedic Surgery					
Surgeon 12	11	2	0.2	$ 2,946.00	$ 268
Surgeon 6	25	6	0.2	$ 8,435.00	$ 337
Surgeon 11	12	1	0.1	$ 1,569.00	$ 131
Surgeon 13	11	1	0.1	$ 1,473.00	$ 134
Surgeon 7	19	2	0.1	$ 3,042.00	$ 160
Surgeon 2	46	6	0.1	$ 8,838.00	$ 192
Surgeon 5	34	3	0.1	$ 4,419.00	$ 130

Too many tests is a problem:

- Test cost
- False positives → unnecessary Rx
  → public reporting of "complications"

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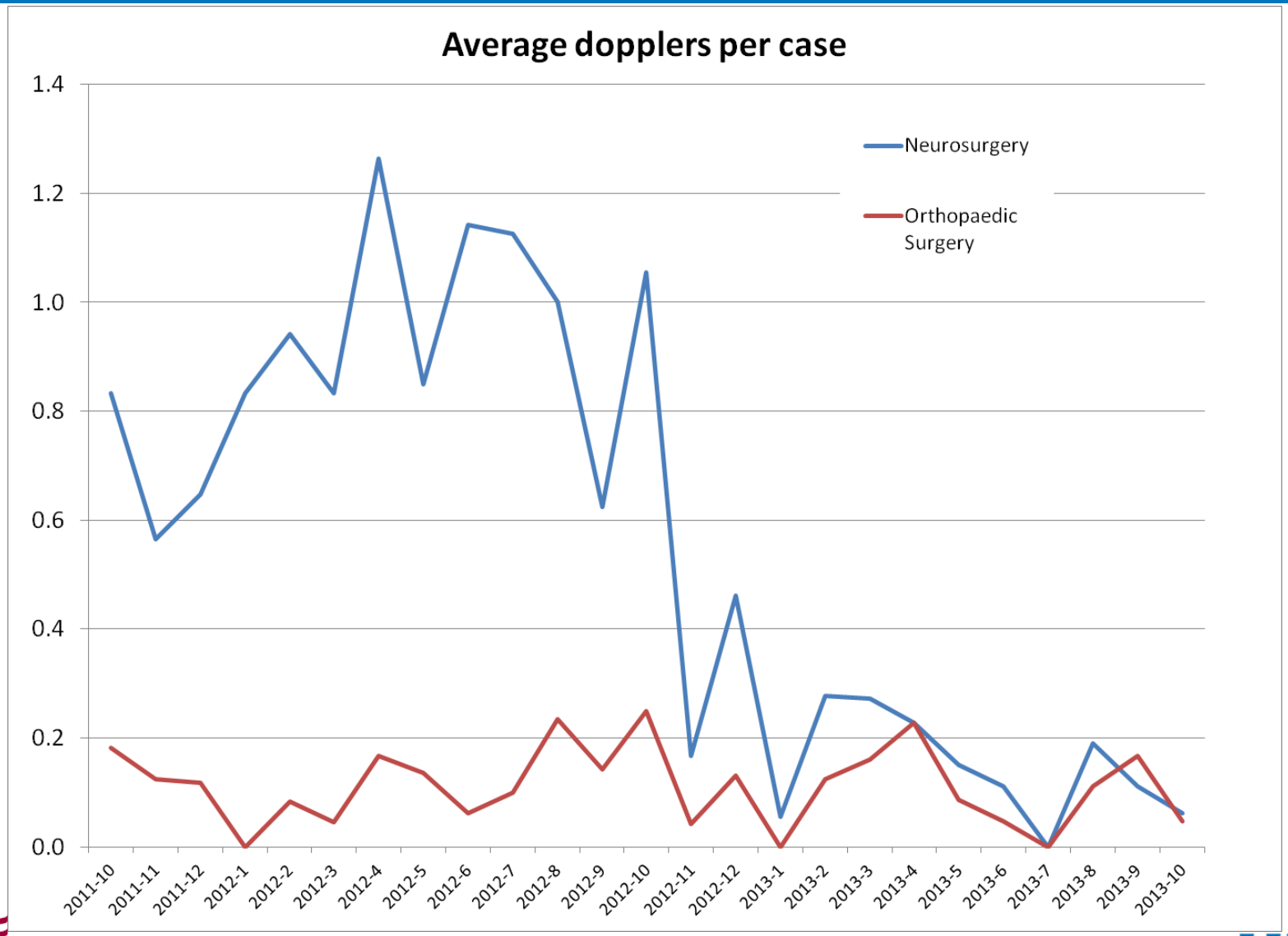
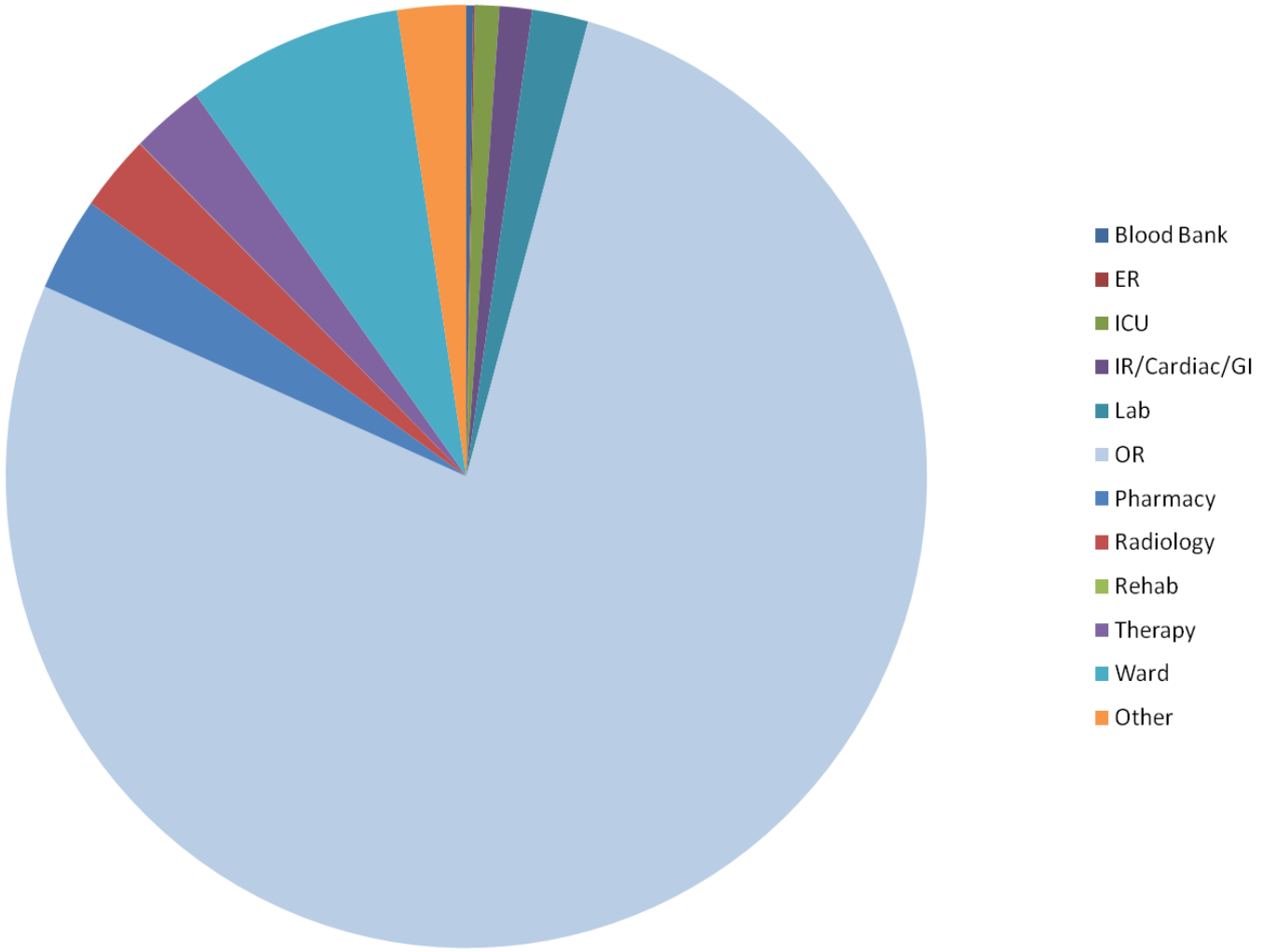

Average dopplers per case
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Neurosurgery
Orthopaedic Surgery
2011-10
2011-11
2011-12
2012-1
2012-2
2012-3
2012-4
2012-5
2012-6
2012-7
2012-8
2012-9
2012-10
2012-11
2012-12
2013-1
2013-2
2013-3
2013-4
2013-5
2013-6
2013-7
2013-8
2013-9
2013-10

Version 3

Clinical Standardization Scorecard							
	Baseline (FY 2013)		Last 4 available quarters: Sept '13-Aug '14	Sept-Nov '13	Dec '13-Feb '14	Mar-May '14	Jun-Aug '14
Spine (levels 1+2)							
# of Cases	339		304	62	72	86	84
Avg Age At Discharge	60.9		61.9	62.8	58.1	62.4	63.9
Avg LOS	4.1		3.9	3.8	4.0	4.0	3.8
Mean GMLOS	3.1		3.1	3.1	3.1	3.1	3.1
Total Variant Days	350.3		244.3	44.2	62.1	76.4	61.5
% Order Set Usage	57%		77%	66%	69%	87%	82%
% Doppler Done at least once	14%		10%	8%	11%	10%	10%
Median Total Charges	$94,280		$89,567	$89,782	$89,382	$89,520	$90,147

Great, but these Dopplers cannot be telling the whole story
There have to be some other costs driving these differences, right?

Distribution of Charges, non-cervical spine fusion



Version 4

	Baseline (FY 2013)		Last 4 available quarters: Sept '13-Aug '14	Sept-Nov '13	Dec '13-Feb '14	Mar-May '14	Jun-Aug '14
Spine (levels 1+2)							
# of Cases	339		304	62	72	86	84
Avg Age At Discharge	60.9		61.9	62.8	58.1	62.4	63.9
Avg LOS	4.1		3.9	3.8	4.0	4.0	3.8
% Doppler Done at least once	14%		10%	8%	11%	10%	10%
% Order Set Usage	57%		77%	66%	69%	87%	82%
Mean GMLOS	3.1		3.1	3.1	3.1	3.1	3.1
Total Variant Days	350.3		244.3	44.2	62.1	76.4	61.5
Median OR Charges	$74,489		$70,334	$71,489	$70,234	$70,859	$69,125
Median Lab Charges	$1,303		$1,280	$1,313	$1,466	$1,281	$1,168
Median Therapy Charges	$2,247		$2,365	$2,326	$2,324	$2,473	$2,351
Median Radiology Charges	$1,885		$1,885	$1,861	$1,885	$1,885	$1,776
Median Pharmacy Charges	$2,914		$2,809	$2,896	$2,900	$2,834	$2,583
Median Total Charges	$94,280		$89,567	$89,782	$89,382	$89,520	$90,147

Looks like the OR is really driving the majority of these charges.
Is there something specific in there that we can pinpoint?

Charges *per case* for non-cervical spine fusion: Operating Room Charges

	Surgeon	Implant	Supply	Time	Grand Total
Highest Cost →	Surgeon 1	$ 81,531	$ 2,520	$ 29,684	$ 113,734
	Surgeon 6	$ 66,722	$ 2,643	$ 33,832	$ 103,197
	Surgeon 3	$ 60,382	$ 3,971	$ 25,496	$ 89,849
	Surgeon 10	$ 58,644	$ 3,814	$ 26,423	$ 88,881
	Surgeon 11	$ 55,676	$ 1,952	$ 25,806	$ 83,433
	Surgeon 7	$ 45,618	$ 3,901	$ 32,490	$ 82,009
	Surgeon 5	$ 55,946	$ 2,490	$ 22,796	$ 81,232
	Surgeon 13	$ 41,535	$ 4,587	$ 30,667	$ 76,788
	Surgeon 8	$ 43,199	$ 1,301	$ 29,181	$ 73,680
	Surgeon 12	$ 30,958	$ 5,991	$ 31,968	$ 68,917
Lowest Cost →	Surgeon 4	$ 41,163	$ 1,956	$ 21,968	$ 65,087
	Surgeon 2	$ 41,789	$ 2,559	$ 20,366	$ 64,713
	Surgeon 9	$ 21,522	$ 1,946	$ 23,457	$ 46,925
	Grand Total	**$ 54,271**	**$ 2,862**	**$ 26,411**	**$ 83,545**

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Implant charges per case: Surgeon 1

Implant	Total	Charges/case
BONE GRAFT INFUSE MED 7510400	$ 915,970	$ 15,793
BONE GRAFT INFUSE LG2 7510800	$ 293,670	$ 5,063
MASTER GRAFT MATRIX (7600320)	$ 239,967	$ 4,137
BONE GRAFT INFUSE SM (7510200)	$ 229,382	$ 3,955
CAGE CALIB 10X22 8-12(194.122)	$ 228,150	$ 3,934
LOC CAP REV 124.000	$ 204,220	$ 3,521
CAGE DISTR PLIF 9X24X6	$ 140,400	$ 2,421
SPACER CALIB 10X22 (194.222)	$ 122,850	$ 2,118
SPACER CALIB 10X26 (194.126)	$ 105,300	$ 1,816
CAGE CALIB 10X26 9-13(194.426)	$ 105,300	$ 1,816
PLTE 26X32X13.5 8D 08.802.000S	$ 96,077	$ 1,656
SPACER CALIB 12X26MM (594.226)	$ 87,750	$ 1,513
SPACER CALIB 10X26 (194.226)	$ 70,200	$ 1,210
SCRW PEDCL REV 6.5X 50 124.466	$ 68,055	$ 1,173
SCRW PEDCL REV 6.5X 60 124.468	$ 61,035	$ 1,052
CAGE DISTR PLIF 10X24MM 6	$ 52,650	$ 908
IMPLT CALIB 12X26 (594.426)	$ 52,650	$ 908
SPACER CALIB C 10X22 (194.422)	$ 52,650	$ 908
SCRW DOD 6.5X60MM (124.777)	$ 49,920	$ 861
SCRW PEDCL REV 6.5X 55 124.467	$ 48,165	$ 830
SCRW PED REV 6.5X40 124.464	$ 40,560	$ 699
SCRW DOD 6.5X50MM (124.775)	$ 37,440	$ 646
SCRW PEDCL REV 5.5X 50 124.456	$ 37,440	$ 646
CONN CROSS VARI 5.5 48-60 124.	$ 37,343	$ 644
SCRW PEDCL REV 6.5X 45 124.465	$ 36,855	$ 635
DURASEAL DURAL SEALANT SYS 5ML	$ 35,882	$ 619
		605
		605
		605
		592

After seeing these data, surgeons have agreed to develop and adhere to evidence-based guidelines on bone graft use

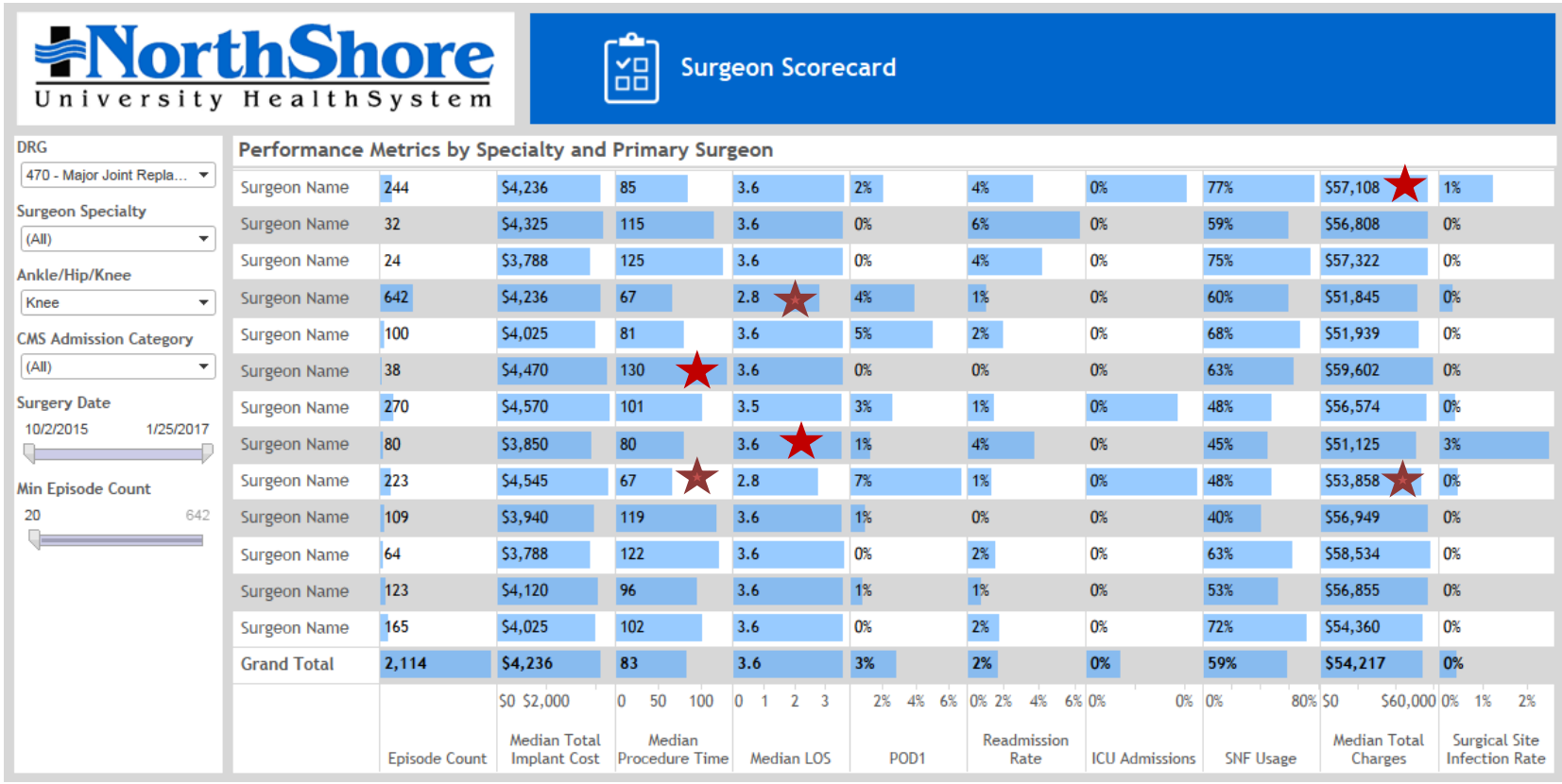
Implant charges per case: Surgeon 4

Implant	Total	Charges/case
BODY COMP WD PLTE 18 6211-0018	$ 124,800	$ 3,671
CAGE CN PAR 9X9X23 187823109	$ 89,700	$ 2,638
PLAT LCK COMP 18 6201-0018-001	$ 85,995	$ 2,529
BODY COMP WD PLTE 16 6211-0016	$ 78,000	$ 2,294
PLATE SPIRE Z 45 (9010000545)	$ 75,465	$ 2,220
CAGE CN PAR 9X7X23 187823107	$ 58,500	$ 1,721
PLAT LCK COMP 16 6201-0016-001	$ 57,330	$ 1,686
CAGE CN PAR 9X8X23 187823108	$ 46,800	$ 1,376
BODY COMP WD PLTE 14 6211-0014	$ 46,800	$ 1,376
PLATE SPIRE (9240100)	$ 39,000	$ 1,147
BONE GRAFT INFUSE MED 7510400	$ 38,165	$ 1,123
BODY WIDE 18MM 6201-0018-003	$ 31,200	$ 918
SCRW POLYAXL 7X50 179712750	$ 30,030	$ 883
SCRW POLYAXL 7X45 179712745	$ 28,860	$ 849
PLAT LCK COMP 14 6201-0014-001	$ 28,665	$ 843
SCRW SET COMP UNIV 6201-0001-0	$ 27,300	$ 803
BONE GRAFT INFUSE SM (7510200)	$ 26,918	$ 792
CAGE CN PAR 9X10X27 187827110	$ 23,400	$ 688
SCRW MAS 4X14 6958814	$ 23,400	$ 688
SCRW POLY 7.5X40 179712040	$ 22,620	$ 665
CAGE CN PAR 9X10X23 187823110	$ 21,450	$ 631
BONE GRAFT INFUSE LG2 7510800	$ 21,091	$ 620
SCRW SET INNER 179702000	$ 19,500	$ 574
CONN CROSS MED SZ A5 189401405	$ 17,648	$ 519
SCRW VIPER F2 FACET FIX 5X20MM	$ 15,795	$ 465
BODY COMP WD PLTE 12 6211-0012	$ 15,600	$ 459
BODY COMP WD PLTE 8 6211-0008-	$ 15,600	$ 459
CONN STD W WASH (175450110)	$ 13,260	$ 390
SP FIX PEEK BAR 16MM (388.516)	$ 13,205	$ 388
SCRW POLYAXL 6X45 179712645	$ 12,480	$ 367

Reactions?

- Why do the Surgeons trust the data?
- How were we able to get them engaged?
- What's in it for them?
- Other thoughts?

The Value Dashboard Scorecard
Total Joint Replacements



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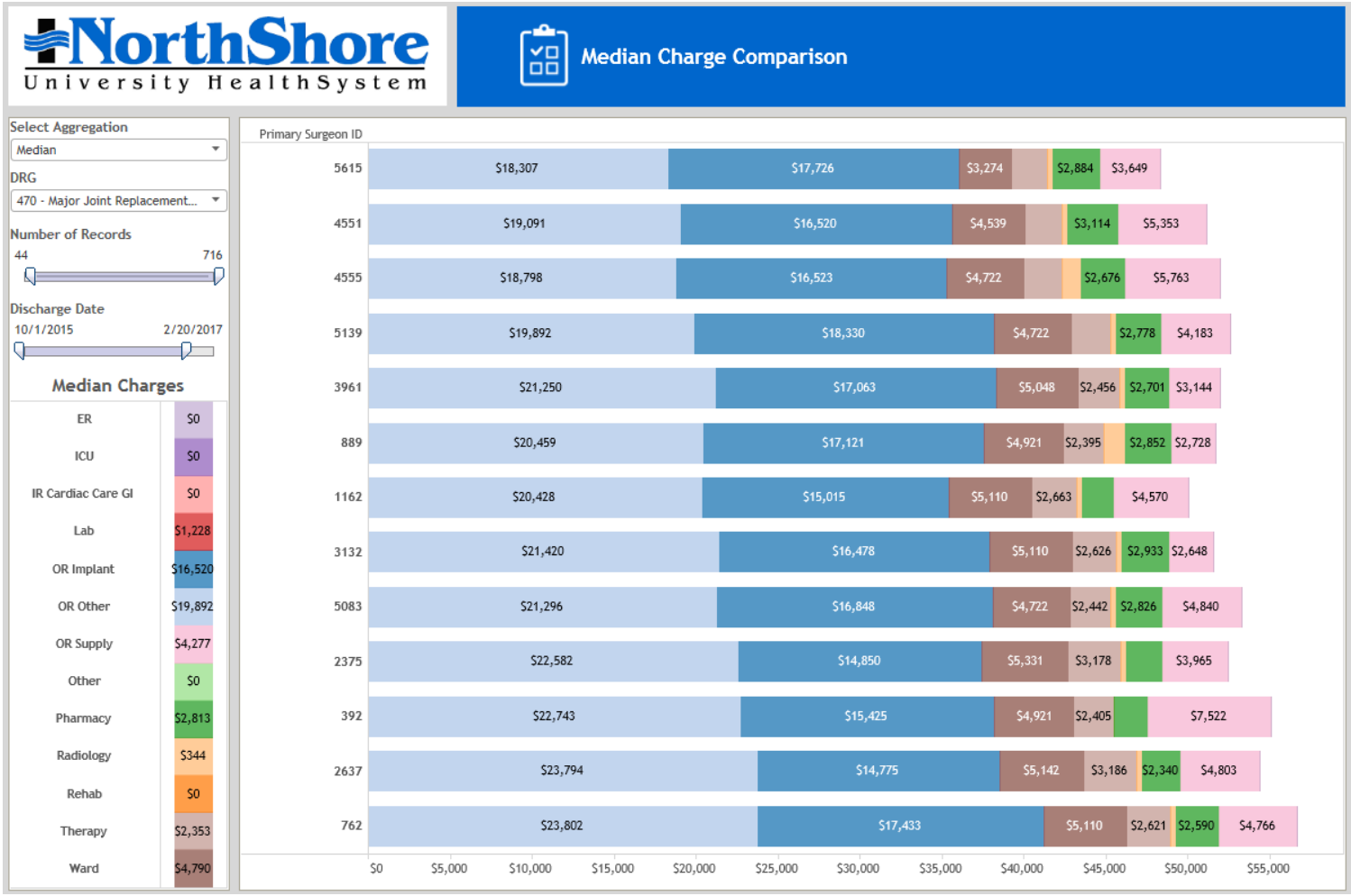
The Value Dashboard Scorecard
Charge Comparisons



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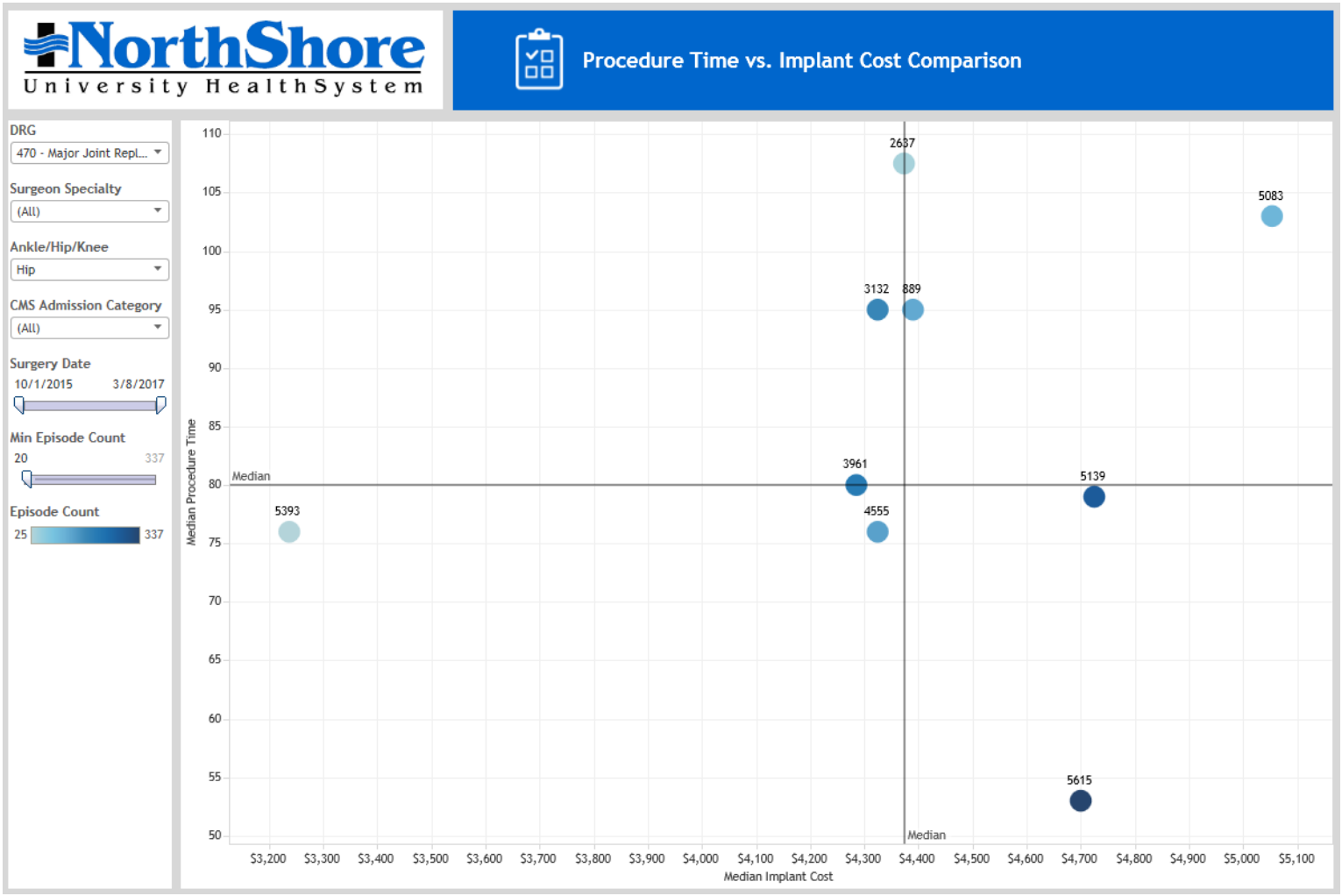
The Value Dashboard Scorecard
Physician Comparisons – Implants & OR Time



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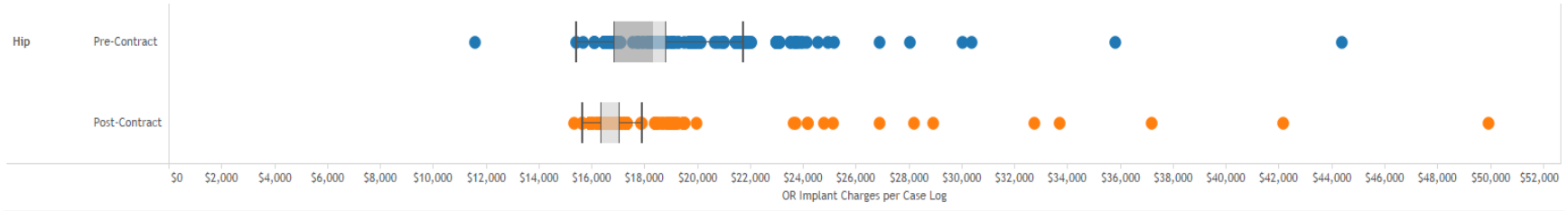
Results – Implant Cost Reductions

- In June of 2016, an agreement was made with the total Joint Vendors to standardize the costs of arthroplasty implants
- Compared 6 months of seasonally adjusted data prior to and post re-negotiation
- Using implant cost data we receive from our Lawson ERP system we measured the impact of this program – charges are shown below due to sensitivity of cost data.



$1,949 (5%) decrease in the median implant charges (p-value < .00001)
Decrease in variance was also significant (p-value < .0001)

$941 (5%) decrease in the median implant charges (p-value < .0001)
Decrease in variance was also significant (p-value < .001)

We estimate savings at approximately $1 Million annually due to this program

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WRAP UP

Radhika Parekh, MHA, Program Manager| HRET

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Additional Resources

- HRET HIIN Data Virtual Event
  - Learn how to display and use data to focus on improvement efforts
- Physician Page

MOC Part IV Credit

- Hospitals and health systems within HIIN can receive MOC Part IV credit by 21 of 24 ABMS Member Boards
- First HIIN in the country to offer this service
- FAQ Guide
- Physician Attestation Form
- Submit to hiinmociv@aha.org

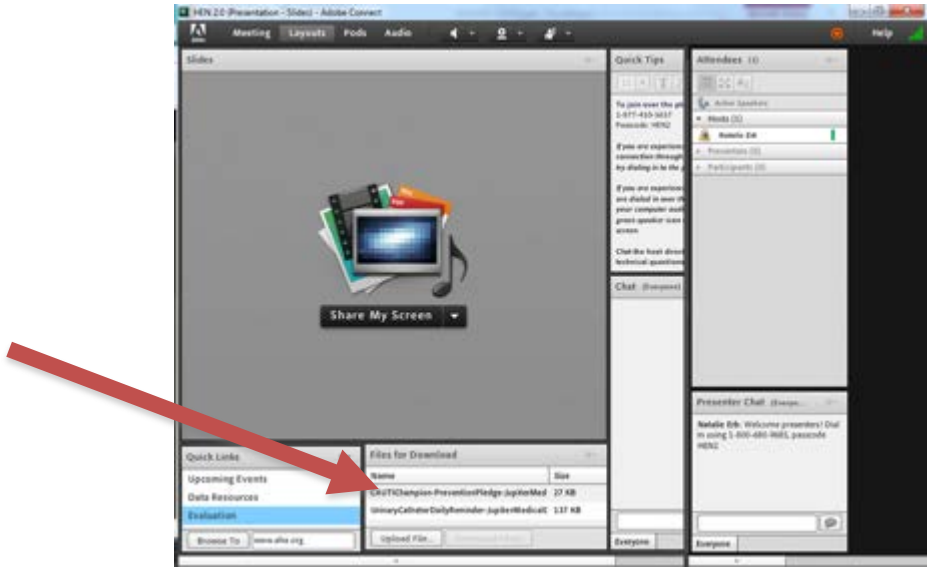
LISTSERV

- Join the LISTSERV®
  - Ask questions
  - Share best practices, tools and resources
  - Learn from subject matter experts
  - Receive follow up from this event and notice of future events

Sign up at http://www.hret-hiin.org/engage/listserv.shtml

Continuing Education Credits

- Launch the evaluation link in the bottom left hand corner of your screen.
- If viewing as a group, each viewer will need to submit separately through the CE link



Thank You!

Find more information on our website:
www.hret-hiin.org