Patient Reported Outcomes for Mental Health Services: Current Practice and Future Possibilities

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History of Current Practice

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- We can't deliver outcomes-informed psychotherapy if we don't systematically assess our outcomes
- Behavioral health quality measurement task force created to develop ICOT: Improving Care Outcomes Tool
- Data collection tablets used to collect multiple assessments at all behavioral health (BH) intakes and follow-up appointments
- Data from tablets are automatically scored, summarized and printed for clinicians prior to visit
- Data immediately populate database accessible in real-time for QI reporting and research
- Summary scores input into EMR by clinicians or staff

Measures

- Symptoms: PHQ-9, GAD-7
- Function: Experience of Care and Health Outcomes (ECHO®) Survey)
  - Ability to deal with daily problems
  - Ability to deal with social situations
  - Ability to accomplish things you want to do
  - Rate your problems or symptoms now
- Substance misuse: AUDIT, DAST
- therapeutic alliance questions
  - In the session, we discussed the things most important to me.
  - I feel understood and respected by my clinician.
  - I understand and agree with my treatment plan.

Real-Time Summary Data for Clinical Decision Support

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iCOT - Improving Care Outcomes Tool

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Name: _____ Gender: Female Age: 52

ID Number: 123456 Department: Mental Health

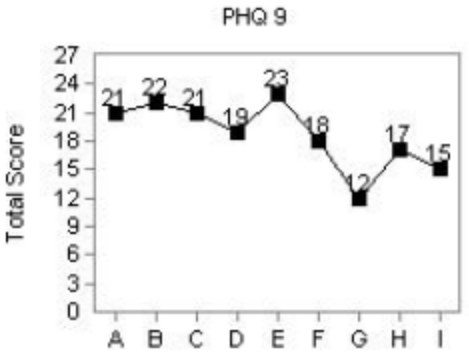
Date Tested: 11/11/2012 11:23:00 AM Provider: J Smith

	SCORE	Result
PHQ-9	15	Moderately Severe (15 - 19)
GAD-7	14	Moderate anxiety
ECHO	9	---
AUDIT	1	Negative score / Low Risk
DAST	2	Negative score / Low Risk
iCOT Total	41	---

Suicidal Ideation **Patient answered: Several days**

Recommendations:

PHQ-9 (Depression)	15-19, Brief intervention and pharmacology or brief treatment
GAD-7 (Anxiety)	10-14, Evaluate further, brief intervention, consider brief treatment or pharmacology
AUDIT	Negative - Provide positive reinforcement / Continue to screen
DAST	Negative - Provide positive reinforcement / Continue to screen



iCOT - Summary of Responses (page 2)

ID: 123456 Name: Gender: Female Age: 52

ITEM	RESPONSE	(value)
ECHO Items		**(9)**
1. Ability to deal with daily problems now	Fair	(2)
2. Ability to deal with social situations now	Fair	(2)
3. Ability to accomplish the things you want to do now	*Poor*	(3)
4. Rate your problems or symptoms now	Moderate problem or symptoms	(2)
Depression Items (PHQ)	**Moderately Severe (15 - 19)**	**(15)**
1. Little interest or pleasure in doing things	*More than half the days*	(2)
2. Feeling down, depressed, or hopeless	*More than half the days*	(2)
3. Trouble falling or staying asleep, or sleeping too much	*More than half the days*	(2)
4. Feeling tired or having little energy	**Nearly every day**	(3)
5. Poor appetite or overeating	*More than half the days*	(2)
6. Feeling bad about yourself	*More than half the days*	(2)
7. Trouble concentrating on things	Several days	(1)
8. Moving or speaking so slowly (Or the opposite)	Not at all	(0)
9. Thoughts that you would be better off dead, or hurting yourself in some way	**Several days**	(1)

Development of Acuity Levels and Recovery Curves

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Treatment Planning -- using Patient Sorting Categories as part of the process

Category #:	PHQ9 GAD7	Safety concerns	ECHO	Audit	Dast	Tx recommendation
Level 1:	None to minimal sx on both PHQ9 (4 or less) or GAD (0)	None currently; No history - phq9 item 9=0	Functioning well (4 or less)	None to minimal ETOH concerns (W: 2 or less; M: 3 or less)	None to minimal drug concerns (0)	Evaluation; refer to other resources (i.e., on-line; reference materials; handouts; etc.)
Level 2:	Mild sx on PHQ9 (5-9) AND/OR GAD7 (5 or less)	phq9 item 9=1	Adequate functioning (5 - 8)	Mild ETOH concerns (W: 3-5; M 4-5)	Mild drug concerns (1-2)	Evaluation; short course of care in MH (1-3 sessions); Consider referral to CDTS
Level 3:	Moderate sx on PHQ9 (10-14) AND/OR GAD7 (6 to 15)	phq9 item 9=2	Impaired functioning (9-12)	Moderate ETOH concerns (6-7)	Moderate drug concerns (3-5)	Evaluation; routine course of care in MH (4-6 sessions); Tapering of sessions after 6; Consider maintenance sessions over an extended period of time; Consider group options; Consider med eval; Referral to CDTS
Level 4:	Severe sx on PHQ9 (20-27) AND/OR GAD7 (16-21)	phq9 item 9=3	Poor functioning (13 to 16)	Severe ETOH concerns (8-12)	Severe drug concerns (6-**10**)	Evaluation; Intensive course of care in MH (6-8 sessions); Tapering of sessions after 8; Maintenance sessions over an extended period of time; Consider group options; Referral to med eval; Referral to CDTS
Level 5: Chronic/persistent mental illness						Maintenance sessions over an extended period of time AND/OR case management; Ongoing med management; Referral to CDTS (when appropriate)

Total Normalized Mean Scores by Intake Acuity Adjusted for Gender and Intake Values of Age, Suicide Risk, and AUDIT or DAST Positive

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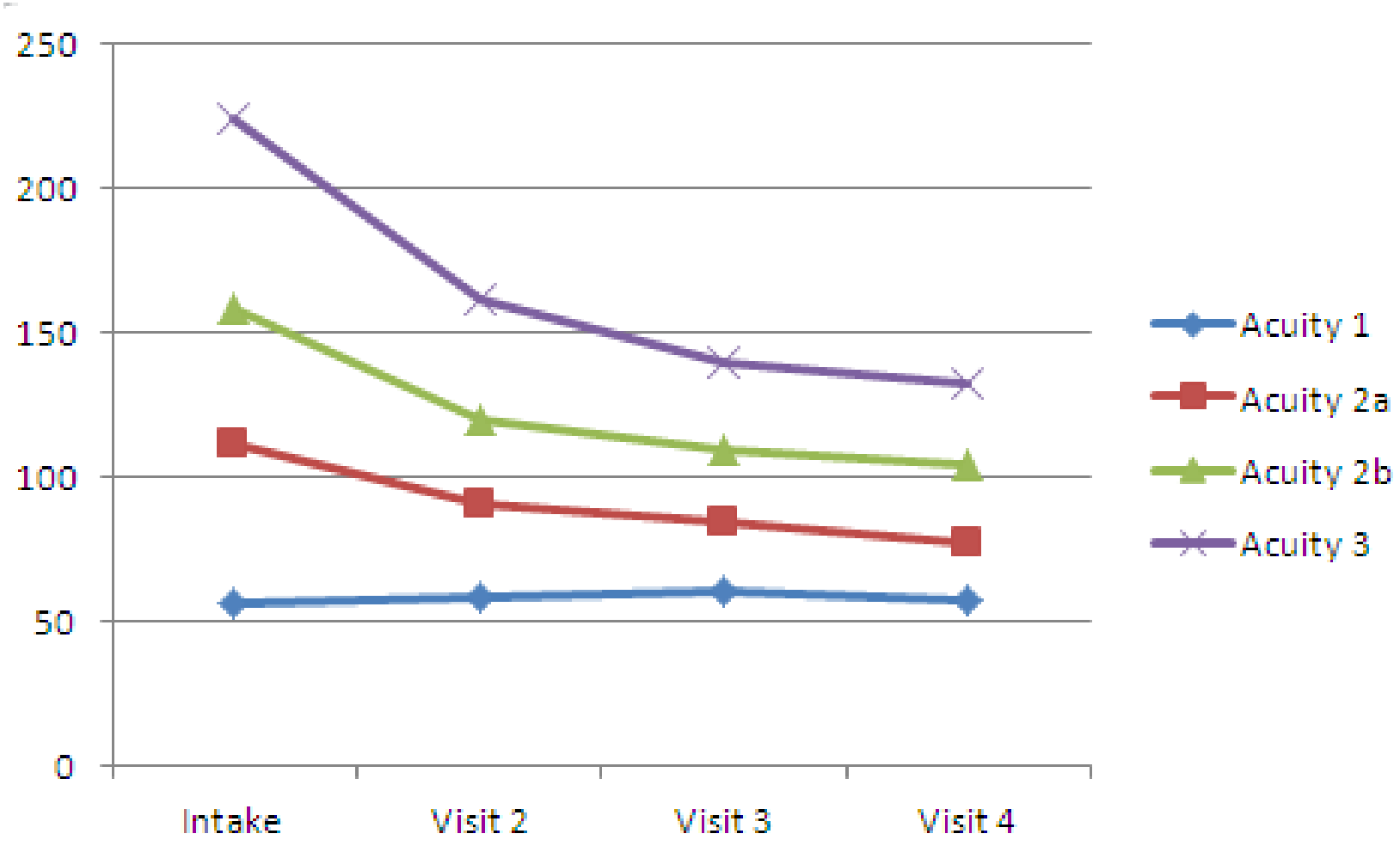

Reporting Function for QI Using Real-Time Data

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Compute

iCOT - Frequency Table

Back

Practice: Kaiser Permanente Colorado **Date:** 5/4/2012 4:27:02 PM

Start Date: 01/01/2012 (xx/xx/xxxx) End Date: 05/01/2012 (xx/xx/xxxx)

Gender --- Site --- Provider ---

Gender		
1) Male	2394	32.4%
2) Female	4984	67.5%
Total	7379	100.0%
Mean	1.7	
Standard Deviation	0.47	

PHQ-9 Result		
0) Minimal Symptoms (0 - 4)	167	3.6%
1) Mild (5 - 9)	1353	28.9%
2) Moderate (10 - 14)	1334	28.5%
3) Moderately Severe (15 - 19)	1025	21.9%
4) Severe (20+)	803	17.2%
Total	4682	100.0%
Mean	2.2	
Standard Deviation	1.14	

Research

- Real time identification of patients for recruitment into research studies or identification of comparison groups:
  - Using PHQ-9 scores to recruit patients for open trial of online mindfulness-based cognitive therapy
  - Using PHQ item 9 scores to recruit patients into pragmatic trial of suicide prevention
  - Selection of a comparison group for propensity matching to patients receiving treatment intervention

Challenges and Lessons

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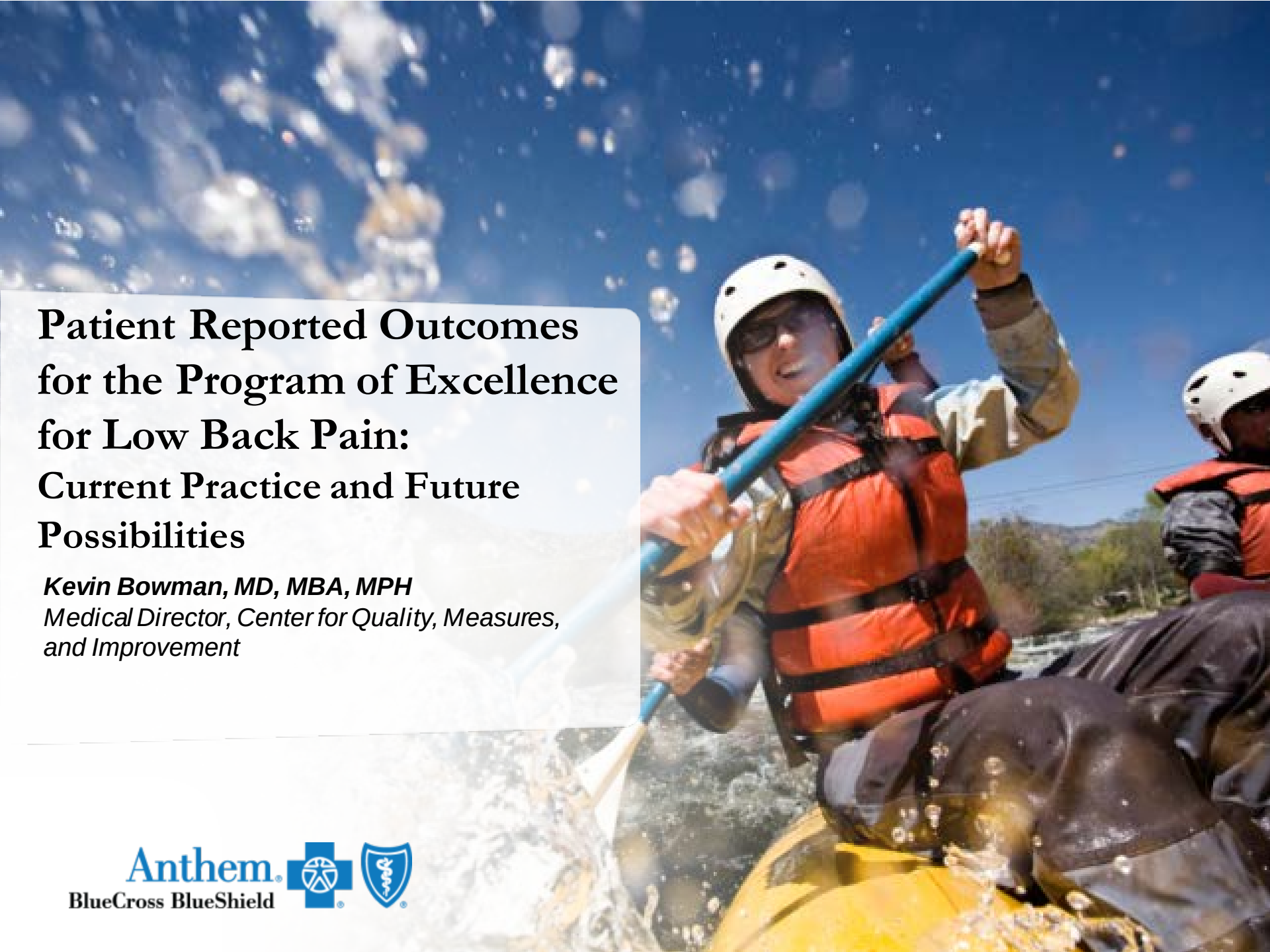
- Achieving the sweet spot between research, QI, and clinical decision support
- Must systematically address implementation issues (it's not about the technology)
  - Co-development of processes with clinical and operational partners
  - Integrating the acquisition of PROs into clinical workflows
  - Integrating PRO data into clinical care pathways
- Use more branching logic / computer adapted technology for PRO data collection
  - To reduce burden of data collection
  - tailor to patient characteristics and risk



Patient Reported Outcomes for the Program of Excellence for Low Back Pain: Current Practice and Future Possibilities

Kevin Bowman, MD, MBA, MPH
Medical Director, Center for Quality, Measures, and Improvement

Anthem BlueCross BlueShield

Program Goals & Guiding Principles:
Program of Excellence for Low Back Pain

GOALS	Improve clinical outcomes Increase member satisfaction Increase appropriate utilization of services (↓ cost of care)
GUIDING PRINCIPLES	Promote the use of evidence-based guidelines Promote advanced systems of care and care coordination Incentivize providers to practice high quality care and recognize them for it Collaborate with national specialty societies and professional organizations Encourage patient preference through education and shared decision-making tools

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Program Overview:
Program of Excellence for Low Back Pain

Physicians form a multidisciplinary team that must include:

- Primary Care Physicians
- Spine Surgeons
- Other team members as needed to cover competencies in:
  - Care coordination
  - Exercise-based therapy
  - Behavioral medicine (with training in pain management)

Other preferred competencies include:

- Non-surgical, non-invasive interventions (e.g., injections)
- Spinal manipulation
- Occupational medicine

Physicians do not have to be in the same practice location

Physicians must have established communication processes for difficult cases, sharing of outcome data, and assessment of their program

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Program Overview:
Program of Excellence for Low Back Pain

Multidisciplinary team must agree to follow an evidence-based protocol:

- Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society on the diagnosis and treatment of low back pain (Ann Intern Med. 2007;147:478-49)
- Interventional Therapies, Surgery, and Interdisciplinary Rehabilitation for Low Back Pain: An Evidence-Based Clinical Practice Guideline from the American Pain Society (Spine; 34:10:1066-1077).

Protocol must include:

- Assessment for serious underlying medical conditions
- Assessment for behavioral health status
- Use of shared decision-making tools
- Measurement of pain and functional status at certain time points

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Program Overview:
Program of Excellence for Low Back Pain

Team members required to complete a CME module[1] developed by the American College of Physicians that includes information on:

- American College of Physicians and American Pain Society practice guidelines[2]
- Shared decision-making tools
- Pain and functional status measurement

Physician incentives:

- Physicians are given education, support and a structured framework for treating low back pain patients
- Case management fee

Maintenance of Certification Credit:

- The Anthem Program of Excellence for Low Back Pain is recognized by the American Board of Internal Medicine (ABIM) as an Approved Quality Improvement (AQI) Pathway and physicians can earn Maintenance of Certification (MOC) credits for participating in the program[3].

[1]**http://www.acponline.org/education_recertification/recordings/recertification_prep/2010/boston/cme/lbp/**

[2]American College of Physicians Clinical Practice Guidelines; Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society.
http://www.acponline.org/mobile/clinicalguidelines/guidelines/low_back_pain_1007.html

[3]**http://www.abim.org/moc/earning-points/productinfo-demo-ordering.aspx**

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Future Possibilities

Improving appropriate use of procedures (reduce unwarranted variation)

- Combine PRO and other tools to:
  - Ensure treatment choices are more aligned with patient preferences
  - Reduce unnecessary procedures and costs associated with averted procedures

Improving management and optimal timing of procedures

- Combine PRO and other tools to:
  - Optimize preoperative and postoperative management to improve outcomes
    - Reduce hospital length of stay and inpatient rehabilitation
    - Reduce skilled nursing facility and long term care
    - Reduce postoperative physical therapy after discharge

Patient Reported Outcomes in the National Patient-Centered Clinical Research Network

Rachael L. Fleurence, PhD
November 20th, 2013

Patient-Centered Outcomes Research Institute

National Patient-Centered Clinical Research Network

National Patient-Centered Clinical Research Network

The **goal** of PCORI's National Patient-Centered Clinical Research Network Program is to **improve the nation's capacity to conduct CER** efficiently, **by creating a large, highly representative, national patient-centered clinical research network.**

The **vision** is to support a **learning US healthcare system**, which would allow for **large-scale research** to be conducted with **enhanced accuracy and efficiency**.

National Patient-Centered Clinical Research Network

The **core components** of this network will be:

- **Clinical Data Research Networks (CDRNs)**, which are **system-based networks** that have the potential to become an ideal electronic network.
- **Patient-Powered Research Networks (PPRNs)**, which are **groups of patients** interested in forming a research network and in participating in research.
- A **Coordinating Center** which will provide **technical and logistical assistance** under the direction of the Steering Committee and PCORI Staff.

NCRN Coordinating Center Task Forces

National Patient-Centered Clinical Research Network: *Key Areas of Focus*

- Data Standards and Interoperability
- Governance / Collaboration
- Health System Leadership Involvement / Sustainability
- Patient Engagement
- **Patient Reported Outcomes**
- Ethical Oversight
- Privacy and Security
- Biospecimens and biorepositories

Clinical Data Research Networks

CDRN Requirements at entry

- Multiple **health systems** working on data standardization and interoperability
- **Health system leadership** involved in governance
- Ability to conduct **observational and interventional** research
- Willingness to participate in research studies as part of the **national network**

Overall Requirements for the CDRNs

- **≥ 1,000,000** patients enrolled
- **Engagement** with patients for purposes of research
- Data **standardized** within network and with other awardee networks
- **Patients, system, and clinicians** engaged in governance & use
- Capable of **implementing** clinical trials

PRO Requirements for CDRNs during 18 month award

- Assumption that increased capture of **high-quality patient-reported information** will enhance CER
- Applicant CDRNs are asked to describe how they will collect patient-reported information. Interest in:
  - Efforts initiated by **delivery systems** to incorporate **routine collection** of patient-reported information into the EHR
  - Efforts by **researchers or systems** to collect **patient-reported information** by other means (e.g., surveys, mobile health applications)
- Applicants are asked to describe proposed activities under this award to expand either the **comprehensiveness or the completeness** of patient-reported data are required.

Patient Powered Research Networks

PPRN Overall Requirements

- Activated patients willing to **generate questions** and share (de-identified) data for the purposes of research
- Increase activated patient community to at **least 50,000 patients** (less for patients with **rare disorders).**
- **Explore new approaches for patient members to contribute their electronic clinical data to the PPRN**
- Willingness to explore new approaches for **patient members to collect self-reported data**.

PRO Requirements for PPRNs during 18 month award

- PPRN network should have the ability to collect data on **patient-generated** and **patient-reported outcomes**.
- PPRN should establish a **governance structure** and operating policies:
  - that ensure **patient control**
  - that can establish relationships with qualified **researchers**
  - that can generate **research questions** from the community's membership
  - and accumulate relevant **clinical and patient-reported outcomes data** from a high proportion (at least **80%**) of the membership;

NCRN PRO Task Force Aims*

*Acknowledge Coordinating Center
Task Force Leads

PRO Task Force

- Guide the selection and implementation of **patient generated data and PRO measures**, as well as analysis, interpretation, and reporting of PRO data within the NCRN;

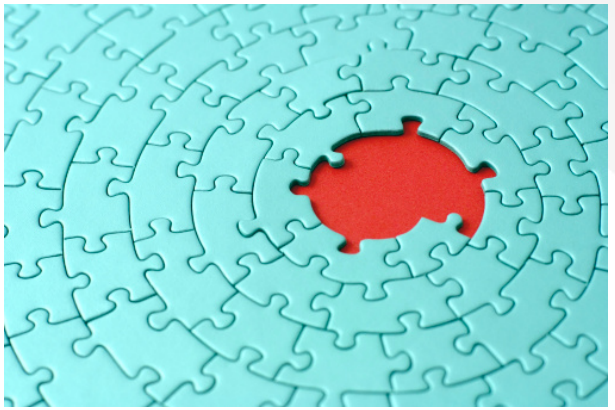
- Advise regarding **technology solutions** to be developed to successfully implement PRO solutions for CDRNs and PPRNs;

- Develop **best practice guidelines** for patient generated data and /or PRO implementation to simultaneously meet patient, research, and clinical care needs.

PRO Task Force: Barriers and Challenges

- Successful inclusion of PRO collection **into health care delivery workflow** and **patient acceptance** to provide such data

- Use of **patient-generated data** for research is emergent



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