Improving quality, new technology and entrepreneurship to promote healthy aging: Time to build a Tesla

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2014 Tesla
Why become a Tesla?

• Healthcare practitioner of the future—constantly upgrading & adapting to changes in practice settings; efficient, practical, accustomed to quality performance indicators. Works with the future in mind.

• Tesla adapts to the bumps in the road, is brimming with innovation, highly efficient. Full internet access; can travel 225 miles on a 5-hour battery charge. Most practical electric car on the road!

Improving Quality: Participate in PQRS

PQRS is part of a broad initiative brought about by both the government and private payers aimed at advancing quality and efficiency in health care.

It began in 2007 as a financially incentivized, voluntary program open to physicians and to other eligible professionals (in 2008) who successfully report quality measures linked to clinical services.
Origins of PQRS—2006

• The Institute of Medicine (IOM) called for variable physician payments based on quality, rather than financially rewarding only quantity of services.
• A major trigger for trend for pay-for-performance is the growth in Medicare and its projected effect on U.S. economy over a 40 year span.

(In report to Congress by health economist, Jim Hahn, December 2006)

Reasons for government controls in healthcare

• 50 years ago Congress essentially surrendered the keys to the U.S. Treasury to organized medicine and the hospital industry! (Reinhardt, U.E. 2014)
• 1965 Congress passed an amendment to the Social Security Act for a healthcare insurance program called Medicare.
Reasons for government controls in healthcare

“The sponsors of Medicare, myself included, had to concede in 1965 that there would be no real controls over hospitals and physicians. I was required to promise before the final vote in the executive session of the House Ways and Means Committee that the federal agency would exercise no control.”

Wilbur Cohen, chief architect of the law and later Secretary of Health, Education and Welfare.

• The original deal called for a one sided payment system.

• Organized medicine struck a deal that each physician was to be paid the “customary, prevailing and reasonable” fee. (CPR system)
Reasons for government controls in healthcare

• Costs escalated during the 1970s and 80s, no surprise!
• Soviet-style payment policy for Medicare: administered prices set by the government for the whole country.
• Hospitals: 1983-1986 DRGs (Reagan)
• Medicare fee schedule (RBRVS): 1989

Origins of PQRS: 2006

December 20, 2006, President Bush signed the Tax Relief and Health Care Act of 2006 that authorized a quality reporting system by CMS that will reward clinicians’ practices if they met reporting requirements for care between July and December 2007.
The PQRS train left in 2013—Last call to get onboard without penalty!

Why participate? Money helps!

Incentive payments for PQRS

<table>
<thead>
<tr>
<th>Year</th>
<th>Bonus</th>
<th>% of applicable cases to report successfully</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.5%</td>
<td>≥ 50% (reporting 3 measures)</td>
</tr>
<tr>
<td>2014</td>
<td>0.5%</td>
<td>≥ 50% (reporting 9 measures)</td>
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2014: Last chance
Under current law to make a monetary gain!

http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-instruments/PQRS/AnalysisAndPayment.html
Why participate?

- In 2015 the 1st noncompliance “payment adjustment” (i.e., penalty) occurs.
- Eligible Professionals (EPs) who do not participate in 2014 PQRS will be subject to a payment adjustment of 2% of their Medicare Physician Fee Schedule allowed charges in 2016 REGARDLESS OF THEIR PARTICIPATION IN 2015 and 2016.

Why participate?

- In the future PQRS will most likely be part of healthcare delivery for all providers who accept insurance payments.
- PQRS is not designed to be a fraud-catcher but it may be an audit trigger.
- PQRS is the door to the next major change in healthcare, Pay-for-Performance.
- Forces you to use some metrics, helps with tx plans.
- increases your impact of improving overall health of your patients.
Why participate?

- February 2014: Bipartisan companion bills from House Ways and Means, Senate Finance and House Energy and Commerce submitted to CMS to avert the 23.7% rate reduction for Medicare propose to create a merit-based incentive payment system (MIPS).
- PQRS measures will be used in the MIPS.

The bullet train is getting ready to roll and people are getting on board.
In 2014 the quality measure trains are rolling! The data collection sheet will keep you on track.

Rules of the Game

Choose a reporting mechanism:

– **Claims-based**: professionals report measures tied to clinical practice on Part B claim forms.

– **Qualified registry**: A CMS approved company that captures and stores data that is responsible for submitting measures and calculating performance rates. Annual fees average around $250-350 per provider. Discounts vary depending on grp size.

– **EHR-based**: providers may submit quality reports through their office/facility’s EHR if it is on the list approved by CMS.
Increasing your chance of success of bonus

• 50-54% Success rate for bonuses for claims based reporting
• 99% Success rate for registry reporting

(According to a registry representative at Wellcentive, Inc. (www.wellcentive.com), January 2014)

Big Rule Changes for PQRS 2014
Changes for 2014 PQRS

• In 2014 PQRS reporting options require an eligible provider (EP) or group practice to report 9 or more measures (if feasible) covering at least 3 National Quality Strategy (NQS) domains in order to qualify for the bonus...with some exceptions.

• But first, what is a domain?


National Quality Strategy Domains

❖ 1. Patient Safety
❖ 2. Effective Clinical Care
❖ 3. Community/Population Health
  4. Person and Caregiver-Centered Experience and Outcomes
  5. Communication and Care Coordination
  6. Efficiency and Cost Reduction

❖ Measures open to psychologists & social workers fall into these domains.
What is a measure?

• A “measure” in PQRS lingo is NOT a psychological test or tool. Think “best practice.”
• In 2014, 287 measures of medical and behavioral health care for prevention and/or treatment, determined by consensus by panel of health care professionals and patients, not bureaucrats.

Government Resources for PQRS

link to the PQRS measure specs for claims and registry:
http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/MeasuresCodes.html
PLEASE print out the measure specs you choose and have them readily available for reference.

Scroll to the bottom of the page and click on “2014 PQRS Measures Specification Manual”
Click on “Accept” on the disclaimer page and the manual will open.
PQRS lingo: “Denominator”

• The denominator describes the eligible cases for a measure.
• PQRS measure denominators may include diagnostic codes, patient demographics (age, gender, etc.), and in some cases, place of service.

PQRS lingo: Denominator

For example, on measure #134, “Preventive Care and Screening: Screening for Clinical Depression and Follow up plan” the denominator is:

A patient aged 12 and older who is seen for a clinical service done during the “reporting period.” Examples of the clinical services are: CPT 90791, 96116, 96118, 96150, and psychotherapy codes (e.g., 90832, 90834,) plus Eval and Management codes done by other providers.
The MAV MAY HELP YOU GET A BONUS!

MAV: Measure Applicability Validation

If you report on < 9 individual measures from Jan. to Dec 2014 because you think less apply to your patients, and you report them on greater than or equal to 50% of eligible patients, you are subject to data analysis called the MAV. Your data will be analyzed to determine if it was reasonable to use less than 9 measures.

For info on MAV go to this CMS webpage and click on the first option in the “downloads” section at the bottom of the page.

http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/AnalysisAndPayment.html
How does the MAV work?

Example: In out-pt MH settings the following readily apply for Medicare age patients: for domain of effective clinical care, measures 106, 107; for population health, measures 128, 131, 134, 226; for Safety, measures 130 and 181.

This totals 8 measures across 3 domains. MAV will determine whether you could have submitted more measures. E.g., If you have more than 15 patients with alcohol and drug diagnoses, then you may miss the bonus because measures 247, 248 may apply also.

How does the MAV work?

Step 2: Minimum Threshold Test
Less than 15 patients for the 12 month period.

For example, if an EP submitted PQRS data on 8 measures routinely through the year, his data is subject to the MAV for the bonus. The EP had treated only two pts with S.A dx and submitted PQRS data on them (#247, 248). Then theoretically the EP should receive the bonus.
Data Mining

Measures for CPT 90791

**Domain: Effective Clinical Care**
1. 106 MDD Com Dep. Eval w/dx
2. 107 Suicide Risk
3. 247 Counsel for Alcohol w/dx
4. 248 Dep. screen w/ Substance dx

**Domain: Community/Population Health**
5. 128 BMI Screen and Follow-up
6. 131 Pain assess and Follow-up
7. 134 Depression screen and Follow-up
8. 226 Tobacco Screen & Intervention

**Domain: Patient Safety**
9. 130 Medications
10. 181 Elder Abuse Screen and Follow-up
11. 46 Medication Reconciliation
Measures for Psychotherapy codes:

**Domain: Effective Clinical Care**
1. □106 MDD Com Dep. Eval w/dx
2. □107 Suicide Risk
3. □247 Counsel for Alcohol w/dx
4. □248 Dep. screen w/ Substance dx

**Domain: Community/Population Health**
5. □128 BMI Screen and Follow-up
6. □134 Depression screen and Follow-up
7. □226 Tobacco Screen & Intervention

**Domain: Patient Safety**
8. □130 Medications
9. □181 Elder Abuse Screen and Follow-up
10. □46 Medication Reconciliation

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Measures for CPT 96152

**Domain: Effective Clinical Care**
1. □247 Counsel for Alcohol w/dx
2. □248 Dep. screen w/ Substance dx

**Domain: Community/Population Health**
3. □128 BMI Screen and Follow-up
4. □226 Tobacco Screen & Intervention

**Domain: Patient Safety**
5. □130 Medications
Measures appropriate in primary care or other medical settings:

#128: Preventive Care & Screening: Body Mass Index (BMI) Screening & follow-up (CPT 90791, 90792, 90832, 90834, 90837, 90839, 96150, 96151, 96152)

#317: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented (CPT 90791, 90792, 90832, 90834, 90837, 90839, 90845)

For both Claims and Registry reporting


Advanced Directive Measure

Measure # 47 Advanced Care Plan

Description:

- Percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan

**NO CPT Codes** open to psychology and social workers

“The Dashboard”: It Gives You Direction

<table>
<thead>
<tr>
<th>Measure #</th>
<th>Measure Title</th>
<th>Number of Eligible Instances</th>
<th>Number of Eligible Instances Accurately Reported</th>
<th>Number of Eligible Instances not reported accurately</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan</td>
<td></td>
<td></td>
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</tbody>
</table>

Interim reports are available in late April, July, November and February. Reports are available for 2 years. (2013 reports for the first 9 months are now available.)

http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/AnalysisAndPayment.html
Suggesting a new measure?

• Q: I have an idea for another measure: for patients who have bladder and or bowel incontinence, teaching and prompting them to do Kegel exercises. Can we suggest a new one?

• A: There already is a measure #50, Urinary Incontinence: Plan of care for urinary incontinence in women age 65 years and older. The plan of care "may include behavioral interventions (e.g., bladder training, pelvic floor muscle training, prompted voiding), ...lifestyle interventions, etc. Many health psychologists such as yourself use such interventions. The problem with the PQRS measure #50 is that the denominator does not include the CPT code that psychologists can use. When I work with Quality Insights staff I will point out that Health and Behavior intervention (i.e., CPT 96152) should be considered as an addition to the denominator for this measure.

What can the public learn about quality of healthcare providers?

Q: How is the information we give on our patients used by CMS? Is there information about us as practitioners that is also being collected and used?

A: Look at the Physician Compare website. It is a work in progress. Now minimal info is on it such as location of office, MC provider status, gender of practitioner.
What can the public learn about quality of healthcare providers?

CMS news on February 21, 2014!

Quality Measures have been added to Physicians Compare website for first time. 66 group practices and 141 ACOs have quality data reported for the public to make decisions on their healthcare professionals. At this time, none of the measures for psychology are reported. Matter of time....

Entrepreneurial Opportunities in Aging

- Aging2.0® is a global organization on a mission to accelerate innovation to improve the lives of older adults around the world.

- Aging2.0 connects, educates and supports innovators through regular events, the CoverAGE newsletter and the GENERator founders program. Over the past 18 months, Aging2.0 has hosted 30 events in 10 cities across three countries, cultivating a robust ecosystem of innovators including entrepreneurs, technologists, designers, investors, long-term care providers and seniors themselves.
Entrepreneurial Opportunities in Aging

- Lumosity.com: You have to register for a free trial to get pricing info. Online $14.95 month
  - Web-based application that uses games to improve cognitive abilities. Provides information about memory, brain health and cognition.
- MindFit™ Personal Edition: $149 per person
  - MindFit is designed specifically for adults who want to maintain good memory and a sharp, agile, and vigorous mind.

Technology in aging

- *Lumosity* has 50 million subscribers in 180 countries!
- *Happy Neuron* promises “brain fitness for life.”
- Israeli firm, *Neuronix*, is developing a brain stimulation and cognitive training program called a “new hope for AD.”

In February 2014 CMS began seeking comments on a proposal that would reimburse the cost of “memory fitness activities.”
Technology in Aging

• NIH invited applications to rigorously test brain fitness training to stave off cognitive decline.

• In May 2014 the NeuroGaming Conference and Expo in San Francisco will explore the latest research and newest technology.
Not Meeting Criteria for Medical Necessity in MC—The dark side

- Charging MC for routine screening

- Regularly scheduled/interval based evaluations—such as in some memory training institutes; bariatric surgery evals are under scrutiny recently.

- Repeated evaluations without documented and valid specific purpose

Audits impact clinical practice

- Most MC providers will be audited.
- Private payers also audit.
- Insurers use anti-fraud software for “pattern recognition” or comparing one clinician’s pattern of services to that of his/her peers. Increase in data mining procedures over last few years.
Caution: Sobering and stringent sanctions

- Audits can result in demands for payback
- Penalties of $12,500 per claim plus triple damages
- Loss of Medicare provider status
- Fines under civil law
- Incarceration under criminal law

The Dark Side of Aging Entrepreneurship

“...the promotion of ‘anti-aging medicine’ represents the most malignant form of quackery yet seen in the long history of the attempts of healers to take advantage of those they strive to serve.”

Peter Whitehouse, MD (2011)
High Tech in Aging

• **Therapy Robot for Stroke Patients**
  Researchers at the University of Massachusetts-Amherst have discovered that a personal humanoid robot can help people recover from a stroke. The child-sized robot is programmed to conduct cognitive and physical therapy that includes word-retrieval games and arm movement tasks, according to *FierceHealthIT*.

Writing in the journal *Asphasiology*, the researchers share a case study in which their robot delivered speech and physical therapy to a 72-year-old male stroke patient. They write that the patient made “notable gains in the frequency and range of the upper-limb movements” as well as gains in verbal expression.

High Tech in Aging

• **Need a Hearing Aid? There’s an App for That**
  A free mobile app developed by researchers in the United Kingdom uses an Apple iPhone or iPod to assist users with hearing impairments. BioAid doesn’t just amplify all sounds like basic hearing aids. Instead, users can adjust its fine-tuning settings to “find the perfect match for their impairment,” according to *FierceMobileHealthcare*.

The app could represent a low-cost alternative to expensive hearing aids. Anyone with an iPhone or iPod can figure out which setting works best for them without the help of a hearing care professional, according to the company.
High Tech in Aging

- **Blood Testing on the Go**
- Swiss scientists have developed a tiny implantable device that acts like a portable, personal blood testing laboratory. Researchers hope their device will be available commercially in 4 years.

  The device has 5 sensors that can detect proteins and organic acids in the blood, according to *IEEE Spectrum*. It measures about 14 millimeters and is implanted just under the skin. The implant uses radio waves to transmit information via Bluetooth to a mobile phone.

  The implant could be useful in treating patients with chronic disease. It could send alerts to the physician about any emerging conditions before symptoms appear. Physicians could respond by prescribing medications to prevent an exacerbation of the condition.

High Tech in Aging

- **Computer Game Helps Blind Individuals Navigate Unknown Territory**
- Researchers at Massachusetts Eye and Ear Infirmary and Harvard Medical School have developed a computer game to help blind individuals improve their navigation skills in unfamiliar buildings and public locations.

  The technology uses computer-generated layouts of public buildings and spatial sensory feedback to create a virtual version of a real building, according to *Medical News Today*. Gamers must find jewels and carry them out of the building before roaming monsters intercept them. They interact with the virtual building by using a keyboard and wearing headphones that play auditory cues.

  The game helps users generate an accurate mental layout of the mimicked building. That image will stay with them when they enter the real building.
Low to high tech:
Small Business Innovation Research (SBIR)

- Established under the Small Business Innovation Development Act of 1982
- A set-aside program (2.8% of an agency's extramural budget in FY2014) for domestic small business concerns to engage in Research and Development that has the potential for commercialization.
- To date, over $16 billion has been awarded by the SBIR program to various small businesses.

SBIR Grants
Supportive Wayfinding in LTC

- Purpose: to develop and test a signage system for care communities that supports wayfinding in residents with dementia, along with practical means of allowing staff to effectively train residents in its usage.
- Population: residents of long term care communities who have early to moderate stage dementia.
Small Business Innovation Research

A Nutrition Education System for Persons with Dementia

• Participants: adults with early to moderate dementia living in assisted living facilities plus activity staff.
• Location of Participants: Assisted living facilities in four states.
• Purpose: To develop for commercialization a new agricultural sciences/nutrition education program to provide a purposeful social group activity for residents with early to moderate dementia.

Small Business Innovation Research

Dementia Care and the Dramatic Arts

• Market potential exists for development of works of drama that can be performed in facilities providing care for persons with dementia, and which can involve such residents interactively.
• Access to the arts, creative expression, and engagement with stimulating activity are elements of a person-centered approach to dementia care.
Dementia Care and the Dramatic Arts

Examples of the objectives of the research:

1. To revise 2 interactive plays for persons with dementia and to create 2 new interactive plays
2. To determine if engagement is differentially affected by standard programming versus taking part in a play in residents with dementia

Product to be developed: A Drama Box that will contain training materials, props, scripts, and other resources need to successfully implement the intervention.
Entrepreneurial Opportunities in Aging

- The Memory Magic™ Program, a comprehensive therapeutic intervention, uses Montessori principles with a person-centered approach. Engages individuals, small or large groups with a broad range of cognitive abilities for 60-minutes with one leader. The set for 8 participants is $399.00.

Some of the components of the program:

**Program Boards:** Each Board holds 4 self-storing Program Cards and is equipped with 9 moveable shades. It fits on table tops and laps and is stackable for easy storage. The plastic board is easily sanitized.

**Program Cards:** A total of 16 different Programs (2 Programs or games on each side of each card), with easy-to-read large print words in highly contrasting black and white. The plastic surface is easy to sanitize and they can be stored effortlessly 4 Cards to a Board.
“No Tech” entrepreneurship in aging: Clubs for Cognitive Health and Emotional Wellness

MEMO Club™
Pen Cat
Zen Cat
Caring Cat