Shoulder Fellows 1st Alumni Meeting
The Codman Shoulder Society

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Hilton San Diego Bayfront, San Diego, CA
Saturday, June 21st, 2014 from 4-10 p.m.

Honored Guests/Speakers: James Esch, MD; Pascal Boileau, MD; Matthew Provencher, MD; Anthony Romeo, MD

Program Committee: Jonathan Ticker, MD; Uma Srikumaran, MD; Ronald Navarro, MD; Bassem ElHassan, MD, Timothy Hartshorn, MD; Anshu Singh, MD; Michael Freehill, MD

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"Give me something that is different, for there is a chance of its being better."
"Science is simply a record of the truth."
(E.A. Codman)
San Diego, CA
June 21, 2014

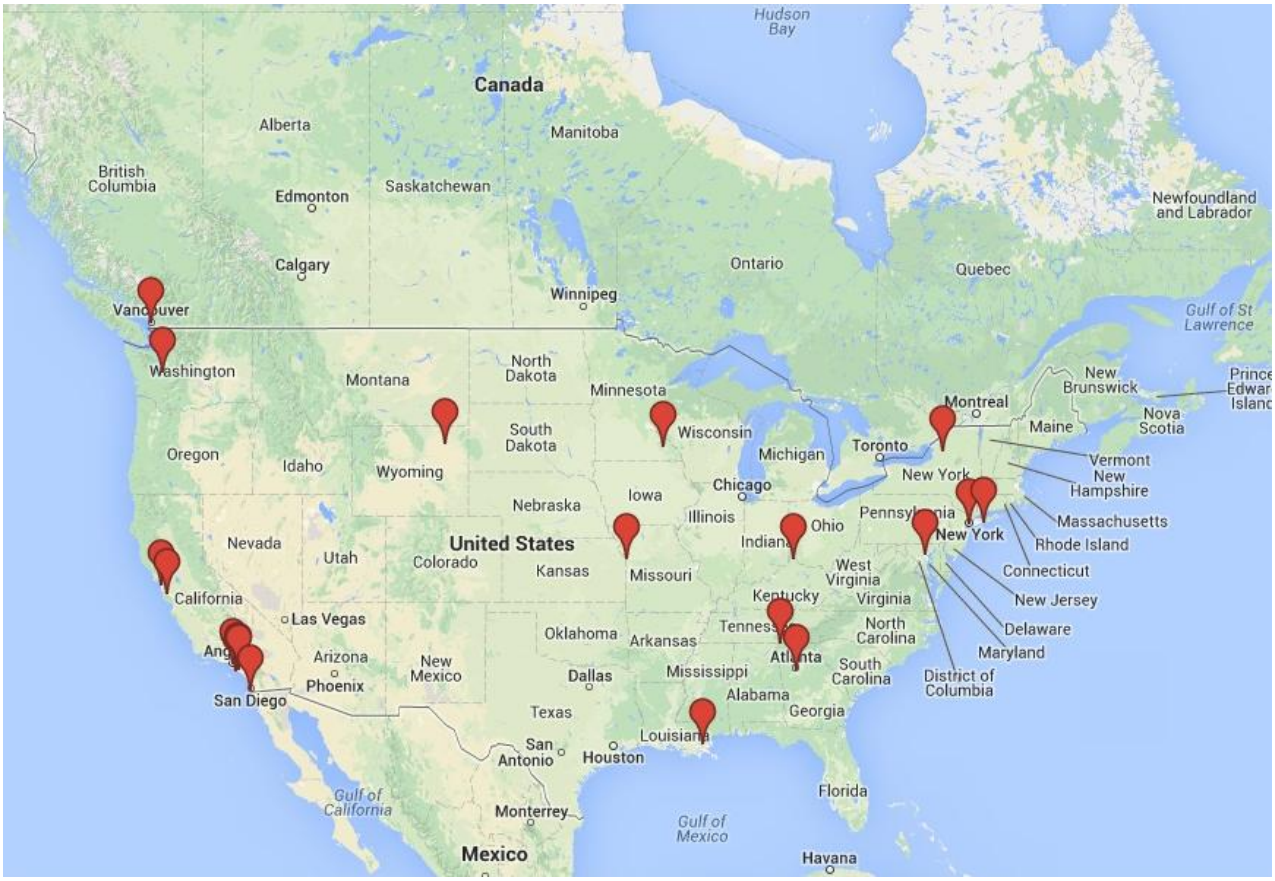
Front Row, Left to right: Monica Morman (Gillette, WY), Pascal Boileau (Nice, France), Jon JP Warner, (Boston, MA), James Esch, (San Diego, CA), Bassem ElHassan (Rochester, MN).

Second Row, Left to right: Tim Hartshorn (Huntington Beach, CA), John Goff (Larkspur, CA), Brett Sanders (Chattanooga, TN), Nata Parnes (Carthage, NY), Darren Friedman (New York, NY), Danny Goel (Vancouver, CN), Jon Ticker (Merrick, NY), Ed Yian (Anaheim, CA).

Third Row, Left to right: Anshu Singh (San Diego, CA), Ronald Navarro (Harbor City, CA), Scott Pennington (Atlanta, GA), Tyler Fox (Kansas City, MO), Robert Rolf (Cincinnati, OH), John Costouros (Palo Alto, CA), Joseph Eichenger (Tacoma, WA), Uma Srikumaran (Baltimore, MD).

Not Pictured: Matt Provencher (Boston, MA), George (Rick) Hatch (Los Angeles, CA), Anthony Romeo (Chicago, IL).

Distribution of Former Fellows in Attendance at Alumni Meeting in San Diego, CA on June 21, 2014



JP WARNER FELLOWSHIP ALUMNI INAUGURAL MEETING
SATURDAY, JUNE 21, 2014 (4-10PM)

4:00-5:00	Welcome cocktail reception Hilton 30th Floor Elevation Room
4:50-5:00	Group Photo
5:00-5:10	**JP Warner**: Welcome and introduction

SESSION I: SHOULDER ARTHROPLASTY

5:10-5:25	**Pascal Boileau**: "Past, Present and Future of Shoulder Arthroplasty"
5:25-5:40	**Ron Navarro**: "The Value of Shoulder Arthroplasty Registries: What we can do?"
5:40-5:50	**JP Warner** (Moderator) - Panel discussion on important questions to ask and answer (Pascal Boileau, Ron Navarro, John Costouros, Uma Srikumaran, Joe Eichinger)

KEYNOTE SPEAKER:

5:50-6:20	**James Esch**: "30 Years of Shoulder Education: Where we have been and where we are going"
6:20-6:35	Discussion

SESSION II: ROTATOR CUFF DISEASE & INSTABILITY

6:35-6:50	**Tony Romeo**: Optimizing Treatment for Rotator Cuff Disease despite Low Levels of Evidence
6:50-7:05	**Matt Provencher**: What questions do we need to ask regarding shoulder instability?
7:05-7:25	**Matt Provencher** (Moderator) - Panel discussion on important questions to ask and answer (Tony Romeo, Bassem ElHassan, Ed Yian, Tim Hartshorn, Anshu Singh)

SESSION III: FUTURE CHALLENGES IN SHOULDER CARE

7:25-7:40	**JP Warner**: What is Value-Based Care? How can I define my value in caring for shoulder patients?
7:40-8:00	**JP Warner & Jon Ticker:** Discussion on practice issues and playing a role in our own future

Final thoughts and discussion of future meetings

- Formation of shoulder study group
- Discussion of group name (Codman Society?; mission/vision statements)

8:00-10:00 Dinner

On behalf of JP Warner and the Alumni group, we would like to formally thank Dr. James Esch, Larky Blunck, and the San Diego Shoulder Institute for their generous support and sponsorship.

Boston Shoulder Institute 1st Alumni Meeting, San Diego Shoulder Institute, 2014

(Condensed Minutes of the Meeting and Planning for "What's next")

Executive Summary (JP Warner): Who are we & What is our Purpose? (Why do we need another meeting?)

1. Like-minded individuals who share an educational experience and who want to stay engaged in advancements in shoulder care. This will benefit our patients and continue to contribute to our knowledge which leads to improved care.
2. This includes (should include) all former Harvard Shoulder Service Fellows (now known as Boston Shoulder Institute Fellows) plus all MGH Sports Medicine Fellows who have worked with Dr. Warner plus all former UPMC Sports Medicine & Shoulder Fellows who have worked with Dr. Warner. In addition we will include in the future all International Fellows who have worked with Dr. Warner for > 6 months.
3. Codman believed in "The End Result" and the value of the patient's outcome as the most important measure of shoulder care. This is the equivalent of Value-Based Shoulder care now. We believe in this principle.
4. Codman also said "Give me something that is different, for there is a chance of its being better". This is a commitment to always ask questions about the status quo of treatment and look for something better for our patients.
5. This group offers the opportunity to meet once a year and discuss important Shoulder Care issues, ask questions, and then offer those interested in working together the opportunity to answer them.
6. There is an opportunity to facilitate studies, registries, etc (I would be happy to support and coordinate).
7. There is an opportunity to support and advance the careers of all former fellows through academic productivity, which may lead ultimately to successful entrance into the ASES.
8. San Diego is the perfect location given the weather and accessibility and the opportunity to attend the best Shoulder Course in the United States each year, The SDSI.

What did we accomplish in our Inaugural Meeting this year?

- We had an attendance of 24 former fellows from around the USA (See picture and map)
- We had five guest speakers who posed questions about the status quo:
    - **Pascal Boileau (Nice, France): *"Shoulder Arthroplasty Planning – "Surgery without Error":*** Planning as accurately as possible prior to surgery will add enormous value in the future as it will reduce complications due to surgeon error and improve on efficiency in the operating room. The advantage of virtual surgery prior to the actual

surgery will be similar to the improved performance of pilots who use flight simulators prior to flying the actual plane.

- **Ronald Navarro (Southern California Permanente Medical Group):** ***"The Value of Shoulder Arthroplasty Registries: What we can do?":*** The commitment of Kaiser to measure Shoulder Arthroplasty outcomes leads to a culture where complications are identified and reasons for them corrected. This is Codman's vision in the modern era and it is an example of our ethical obligation in improving shoulder care for all our patients.
- **Tony Romeo (Chicago):** "***Optimizing Treatment for Rotator Cuff Disease despite Low Levels of Evidence"***: Dr. Romeo shared his insights of a huge experience with caring for rotator cuff disease and highlighted the dilemma of evidence and its potential effect on our future practice of shoulder care in this area. There are many opportunities to provide more clarity on the best approaches in treating this growing problem.
- **Matt Provencher (Boston):** "***What questions do we need to ask regarding shoulder instability?":*** Instability is not one condition and the pathology which contributes to the problem defines its natural history and response to treatment. Dr. Provencher considers all of these factors and gives us insight into the important questions awaiting answers.
- **Jon J.P. Warner (Boston):** "***What is Value-Based Care? How can I define my value in caring for shoulder patients?":*** The concept of Value is a modern extension of Codman's End-Result concept. The unprecedented socioeconomic change confronting all of us mandates that we play an active role in defining what value means to our patients; and we must hold all stakeholders accountable for the process of shoulder care delivery.
- **James Esch (San Diego):** ***Keynote Address to the Group- "30 Years of Shoulder Education: Where we have been and where we are going":*** Dr. Esch is the consummate educator and shares with us his perspective of the history of shoulder care and especially shoulder arthroscopy. He makes the point that only by being educators can we improve the standards of care since we must constantly apply critical introspection in order to teach the latest techniques based on accountability for the inadequacy of our prior techniques.

- ***Pascal Boileau: "Shoulder Arthroplasty Planning – 'Surgery without Error'"***
  - The past has been development of arthroplasty concepts based on Neer's observations and original design.
  - Modularity was introduced with no evidence it improved outcomes and, in fact, it may have resulted in worse outcomes due to failures in restoration of proper anatomy.

- Walch and others have defined the parameters of anatomical arthroplasty and have led to the categorization of glenoid morphology which impacts reconstruction of the arthritic shoulder.
- 3rd generation arthroplasty has successfully considered and restored humeral anatomy but problems with glenoid reconstruction remain an issue.
- CT scan study gives us useful insight into glenoid deformities but only 2-dimensional guidelines for reconstruction.
- There is no evidence that one arthroplasty system is better than another.
- Arthroplasty systems have become more complex.
- Cost of arthroplasty implants has increased without evidence of added value.
- Reverse prosthesis is growing faster than primary prosthesis and revision surgery is growing 3x as fast as primary arthroplasty surgery.
- Convertibility from non-constrained to reverse prosthesis is a concept newly introduced but not entirely validated or achievable with many systems.
- The glenoid design has changed little since Neer's original design.
- Metal-backed glenoids are inferior to all poly glenoids.
- One possible advancement in the future: Shoulder Arthroplasty planning "Surgery without error" or "Trial without error." Virtual arthroplasty is important in order to have more reproducible outcomes and anticipate what you can and cannot do in a given shoulder *("Do the operation in your mind first" – C. Gerber*).
- Why do virtual planning?
    - Glenoid loosening is the major complication of TSA: Errors include poor placement, poor bony support, and lack of appreciation of anatomy.
    - Malpositioning of glenoid or humerus will lead to failure prematurely.
    - Excessive reaming of the glenoid in order to correct retroversion may compromise bone quality and lead to premature failure (Walch). Aim is to remove minimal bone and preserve subchondral bone.
    - We need a better way to deal with eccentric bone loss (Walch B-2 and C glenoids are more common than appreciated by most surgeons).
- How would it be to have the possibility of virtual planning which the surgeon can do; and this includes simulation of the operation similar to the way pilots can simulate take-off and landing at different airports. So the future can be:
    - Fully automated 3-dimensional representation of the glenohumeral anatomy, which is done on your laptop in a matter of minutes.
    - DICOM images are assembled based on 3-D automated scapular anatomy reconstruction.
    - Tools exist to allow the surgeon to apply different components and ream the glenoid and position the component(s) in space to optimize correction of the deformity and limit bony removal.
    - The system is surgeon-friendly and makes suggestions for optimal placement.
    - The final plan can be saved and a guide computed based on what the surgeon selects as optimal positioning.
    - The entire process can take 5 minutes or less for each case.

        - The guide computed comes with a 3-D printed sterile model of the glenoid and scapula.
        - Advantages specific to reverse prosthesis:
            - Allows for optimum component placement in order to reduce instability and notching.
            - Allows for calculation of bone grafting necessary.
            - Allows for specific selection of best size and configuration of prosthesis.
    - Ultimate advantages of Preoperative planning and Virtual Surgery:
        1. Faster surgery
        2. Less inventory needed
        3. Optimum implant patient guaranteed
        4. Anticipate need for bone grafting
        5. Better durability of implant is likely the outcome
        6. Trial and error in planning not in the patient
        7. Likely less complications as a result of component malpositioning
        8. Value for the Patient
        9. Value for the Surgeon
        10. Value for the Hospital
        11. Value for the O.R. Staff
        12. Value for the Insurance Company
        13. Value for the Government
    - **Questions from the Group**:
        - **Tony Romeo**: The focus is on the glenoid side not the humeral side so why not do a better job on the humeral side as well and avoid need for reverse prosthesis in some cases? (JPW Answer: The glenoid is the principle issue in anatomical challenge and this cannot be compensated by humeral anatomy adaptations in order to place a non-constrained component. I believe we will therefore need either solutions on the glenoid side for non-constrained implants or must go to reverse prosthesis. We already do a good job with humeral anatomical reconstruction with many systems.)
        - **Boileau answer**: If you make the glenoid more anatomical in cases of eccentric erosion it may be difficult to adapt the soft-tissue so subscapularis reattachment may not be possible anyway. This is the same if you lateralize on the humeral side. The next step in virtual planning will be to try and model the soft-tissue limits and possibilities as well.
        - **Bassem ElHassan**: If you correct retroversion and medialization by using an intercalated graft (BIO-RSA glenoid) to lateralize the joint line, will this be maintained? (Boileau answer: Since 2006 this approach has worked with no bone resorption or failure of the construct. Soft-tissues may require a compromise since lateralization may limit the possibility for subscapularis reattachment.)

- **Bassem ElHassan**: Is only Tornier possible to use with this or can another system be used? (Boileau answer: This is in the planning stages. That is yet to be decided.)
- **Bassem ElHassan**: If you have a revision case can the computer help with anatomical solutions in this situation?
- **Boileau answer**: Artifact due to metal makes it difficult for the CT scan to be accurately computed into 3D model. We hope to solve this in the future.
- **Ron Navarro**: For this planning is the labrum taken down and why use 4 points not 3 points for planning the guide?
- **Boileau answer**: Yes the labrum is removed. 4 points is more accurate and more stable than 3.
- **Former Fellow**: As software improves can we move from bone graft to augmented glenoids? (Boileau answer: The next step is patient-specific implants, so yes.)

- ***Ron Navarro: "The Value of Shoulder Arthroplasty Registries: What we can do?"***
  - What and why of registries – lead you to question yourself and ask where you are and how can they help me and the world of shoulder surgery.
  - Codman believed in the "End Result" and "Hospital Efficiency". Registries allow us improve in both categories by measuring without bias.
  - What is value? *"Price is what you pay. Value is what you get."* (Warren Buffet)
  - *"Nothing can have value without being an object of utility."* (Karl Marx)
  - *"What we can obtain too cheap we esteem too lightly."* (Thomas Paine)
  - *"Value is defined as outcomes relative to cost, it encompasses efficiency."* (Michael Porter)
  - Kaiser Permanente Registry has been in existence since 2001 and is now the largest of its kind in the USA.
  - The registry allows data to drive use of implants.
  - If value is Quality/Cost then the registry improves value by reducing revisions and return to the operating room.
  - How does a registry work?
    - ✓ Local, regional, and national
    - ✓ Accumulation of data that provides meaningful information to reach goals and provide surveillance of implants to allow for early failure detection – if everyone is sharing information, may be able to identify a failing implant much more quickly and get it off the market
    - ✓ Look at data for QI: infection, etc
    - ✓ Definitions – must know before you start – how do you define failure? Is it just loosening of the glenoid, or failure that requires revision? – We all need to agree on one definition for many different things

- ✓ Respondent burden: surgeon first – must fill out the forms – if don't fill out forms, it is not a registry – it won't work – went to smallest group that will lead to highest accomplishment rate – want high participation and low respondent burden – critical to success – minimal data set – missing data = not functional registry Next is the patients – need high participation
- ✓ Patient recorded outcomes are hot – everyone wants it – but compliance is poor – able to write papers on 40% return rates? Have to do studies to prove if results look the same – huge hurdle that we have to figure out how to pass – government will mandate patient outcomes
- ✓ In their registry, they don't have patient reported outcomes – national ones don't do it either
- ✓ Incredible cost – must fund for the long term – missing money also leads to dead registries

- There are many shoulder arthroplasty registries around the world in various states of development
  - ✓ Australia, England, Sweden, HSS, Mayo, Denmark, New Zealand, Norway, Finland -> Japan, Brazil, Argentina and South Korea soon
  - ✓ Unlike total knee and hip – those are large numbers so a single registry can figure out failures at a fast rate
  - ✓ Even though rate of Shoulder Arthroplasty is increasing, we still don't see catastrophic failures
- Some of our experience in the Kaiser Permanente Shoulder Arthroplasty Registry:
  - ✓ Developed in 2009 in Southern California; Northern CA next to join
  - ✓ 2012 – all KP regions participating – surgeons complete intraoperative form – could retroactively add cases from 2005 onward
  - ✓ Procedures: track all different ones – data collected: patient, surgery, and surgeon data (BMI, ASA, different approaches, fellowship, length of stay, anesthesia type)
  - ✓ Registry Smart Form – shows how fast can do it in the OR – get right through it
  - ✓ June 2013 – TSA 3869 cases – can see all the numbers and show information they can gather
  - ✓ Shows kind of information – OA, fracture, etc – look at failures/complications as well – based on all arthroplasties and all subset types
  - ✓ Also participated in recalls – bring to the fore any catastrophic failures – gets things off the market that don't need to be there
  - ✓ Is any of this stimulating – do you to want to participate? Can you collaborate with others in your medical center and across a continuum?

- ✓ We hope registries also help satisfy the value equation in broad based form – can you be involved? Study your end results? Can you intersect quality and efficiency?

- **Questions from the Group:**
  - **JP Warner**: With what we have seen does this offer more useful and reliable data than surgeons looking at their own results? If so, how can we not look at outcomes this way?
  - **Tony Romeo**: Fantastic, very valuable, but different purposes – valuable surveillance information – tells us what is going wrong but little about what went wrong and how to make it better – don't just be critical, but actually come up with a solution for problems. Great for public health and public policy – if high revision rate, can tell upfront and early so can shut down – information that is being collected – trying to go to least common denominator – not able to say why metal on metal is wrong – just saying something is wrong, but not why
  - **Ron Navarro (answer):** At ACL meeting had similar discussion and conversation – does a registry do everything? NO – need to do directed studies in smaller subsets – may not give power to answer question in best possible way. You can use registry to give patient data set, then have to go back into individual grouping and get subset groups. At least already have aggregated data – role for both
  - **Tony Romeo:** We have seen on a worldwide basis – can generate types of studies that give answers with something more than just a registry – what Pascal etc have done – use multicenter studies to not just observe a problem but to answer the problem – have set bar high for those types of studies – room for different analysis
  - **Danny Goel:** list of countries that have single registries – this is 3rd in US – well established at Mayo and HSS – if I am in Charlotte and want to contribute to registry, I cannot do that – what I get is that you have done however many arthroplasties, volume allows fewer complications – how is that relevant to me and what I can tell my patients? – I can't contribute information from my 20 cases
  - **Ron Navarro (answer):** There is a construct that allows you to submit your information elsewhere – how does my info help you in your practice
  - **Danny Goel**: Why create 3 registries in the same country? Why not 1?
  - **Ron Navarro (answer):** Registries are mandated in other countries – have to study it – government is the only payer so they create infrastructure – in USA: do we need to have multiple registries? At some point will be drive to create one national registry (AJRR – trying to be construct to put all registries into one) – different people managing that, people are wary – memorandum of understanding – don't allow full fledged dumping

of information into a hole – wouldn't give individual patient data because of relation with patient – level 1 may be able to contribute but not on single patient level. Payers have helped to supply registry with funding and infrastructure- say if you don't put your data into this, will have to think about patients that we send you – pressure to participate based on another economic driver

- **Matt Provencher**: Curious what thoughts are – time in UK – aggregate and patient specific data – one of biggest concerns by cardiothoracic – concern over individual surgeon data collected – tricky concept – depends on referral pattern - how many patients you have a year, very variable
- **Ron Navarro (answer):** Risk adjustment should be in play so your patient cohort is graded in such a way as to account for comorbidities and variability of your patient set so you are not downgraded artificially. Transparency in information is coming – produce quarterly quality reports broken down by medical center - aggregate for medical center as well as by doctor – getting doctors ready for eventually their information being out there for people to look up – concern and respect for concept of transparency
- **JP Warner**: In the interest of time, move along – I believe we are all accountable for what we do – as a patient want doctor to be accountable – when pick doctor, want to know what I am going to get – we are going to be measured – do we want to do that or do we want someone else to do that – would rather have another party collecting data on me than me reporting it – establish metrics on my own rather than letting someone else
- **Former Fellow**: When you go behind the scenes you find errors; all data that you keep track of in O.R.'s – when audit the data, a lot of it is wrong – quality control process to ensure that this data is accurate
- **JP Warner:** There is no chance for us if we do not collect our own data – need assessment and measure of our outcomes and what they are – may not be a registry, but needs to be something that is discoverable and transparent – sharing things and questions
- **Tony Romeo:** Use this group to form a group that can take registry – collect more valuable data to surgeons (Tornier and MOON group) – be an adjunct or enhancement to work being done at Kaiser – look at problems they identify very early on, then look at data collectively to get the answers
- **JP Warner**: We are a group – share things in common – all use different prostheses and implants - wouldn't want it any other way – maybe that doesn't matter so much – maybe it is just a score

- ***James Esch: Keynote Address to the Group- "30 Years of Shoulder Education: Where we have been and where we are going"***

- Education should lead you to ask, *"How does my ego handle the realization that my results are not as good as yours? Do I educate myself to improve my outcomes?"*
- In 1976 I bought my first arthroscope. In 1982 I scoped my first shoulder.
- Our study group for the knee evolved into one for the shoulder.
- I've been studying the shoulder for 30 years.
- Education: *"Do you trust what you learn at meetings is accurate and do you use this information to become the best possible surgeon for your patient? Do you create a learning environment?"*
- To understand education start with the concept of a mentor. When Odysseus started his journey he chose Telemachus as a mentor for his son.
- My mentors: M.S. Burman; Dr. Wiley started scoping shoulders in 1972 in Toronto; Lanny Johnson, taught me how to scope a knee and a shoulder; Detrisac and Johnson wrote their book on shoulder arthroscopy.
- Bailey and Kessel wrote their book on Shoulder in 1972.
- A group of surgeons started meeting in 1984 and wondered what the labrum did; Lanny Johnson did 2 arthroscopic labrum repairs in 1982 and then 10 more cases in 1983 using a metal staple.
- Eugene Wolf developed metal screws rather than staples.
- Russ Warren started using Surtacs arthroscopically in 1991.
- Craig Morgan introduced arthroscopic sutures and showed us how to tie knots.
- John Richmond reported use of push-in anchors, G2 from Mitek.
- Dick Caspari developed and used instruments for placing sutures through tissue, and he was the first to show that the 5-year results were worse than the 2-year results for arthroscopic Bankart repairs.
- John O. Hayhurst had the first patent on push-in anchors in which a hole was made and an anchor inserted.
- Steve Snyder developed suture shuttle and spectrum device.
- Tom Weisel created Expresso instruments for suture passage.
- Thermal Capsularrhaphy started and results were terrible.
- Then arthroscopic Latarjet was championed by Lafosse and Taverna…doing many of these. Seems to be a French bias for treatment.
- Harvard Ellman was first to describe arthroscopic subacromial decompression (doing what Neer did open).
- Lonnie Paulos described mini-open rotator cuff repair.
- Steve Snyder developed instruments for mini-open rotator cuff repair.
- Lonnie Paulos said, *"Benefits of diagnostic arthroscopy are so great that this procedure should precede or accompany most shoulder surgery."*
- Charles Rockwood wrote an editorial in the JBJS condemning arthroscopy of the shoulder. He said instability surgery through a scope seems to be worse than open stabilization; same for rotator cuff repair.
- Sandy Kirkley, who gave us the Western Ontario Shoulder Index (WOSI), was first to look at what instability is.

- Pascal Boileau presented the Instability Severity Index Score for risk of recurrence of instability after arthroscopic Bankart repair.
- Steve Snyder developed the Alex teaching model for arthroscopy.
- The story of shoulder arthroscopy has moved "from disdain, to disruption, to transformation" of care. (Burkhart)
- Then we actually looked at our results and have seen we are not as good as we think we are.
- Now for rotator cuff, what to do? Single vs. Double row? Registries may be the answer for real evidence.
- Cochrane collaboration: Scottish surgeon – originally with British ambulance unit – POW in WWII – no evidence for anything that we do – what Cochrane studies came out of – if go to site and look up rotator cuff, see all of this information: 14 RCR trials show surgery does not always work.
- Some want us to create educational meetings only based on Level 1 evidence.
  - ✓ Department of Justice (DOJ)…
    - Feels we are not being fair enough selecting speakers
    - No one should give a lecture who has any conflict of interest
    - These people brought us the COI guidelines
- AAOS brought us Clinical Practice Guidelines (CPG's) and Appropriate Use Criteria (AUC) …upset many surgeons; offer little guidance; Evidence criteria very restrictive.
- Christian Gerber's "Church of Shoulder Surgery": "I believe that…"
- The ACCME says you should plan a program, implement it, then change it – also says you should have bibliography for this meeting and there is always a right answer – obviously there is NOT a right answer – need this data if we are going to teach what is right or not right – where group can make a difference.
- Teaching or learning - Confucius: *"To know what you don't know is the first stage of learning."* You may be a good learner but are you a good teacher?
- Oscar Wilde – *"Education is an admirable thing, but it is well to remember from time to time that nothing that is worth learning can be taught."*
- My charge is to BALANCE: provide the best learning experience and find mentors that I can trust (NO BS GUYS) – who moderate their ego and balance what they have to say – look at evidence evolving and learning interactions.
- The real challenge is to find how to work together, collect data, and look at what we are doing.
- It is good to challenge people on what they are doing.
- **Questions from the Group:**
  - **JP Warner**: Jim made a comment – I'm a better surgeon than this guy – I am a better surgeon because I listen to another guy – better by listening to someone else who isn't me – building on what I learn from others - since I can't observe Matt (Provencher) operating (since he

works on a different day than I), it impedes my ability to learn because I can't see what others are doing.

- **JP Warner**: Jim emphasizes the whole process as one of asking questions and changing opinions/perspective – if we get comfortable with where we are then there is no way to advance– go to meetings to get uncomfortable – become aware of what we are doing and the direction that we need to go in.
- **Former Fellow**: How would you recommend when in tertiary care center – present cases from other Kaiser centers – a lot of my cases are revisions – my infection rate will be higher than physician who sends those types of cases to a tertiary care center – certain physicians will have more complicated patients which will impact their results – how do we deal with that?
- **JP Warner**: It is a question – measure and share data internally to improve; organization must decide how transparent to be; Cleveland Clinic collects data across an entire service line – not helpful: may be an entire range.
    - When build a bundle, must decide on risk adjustment and outliers – will force you to do that
    - Must compare apples to apples not apples to oranges
- **Tony Romeo**: Intellectual and academic argument, but in many places won't be applicable/implemented for a very long time – only in certain regions.
    - If no change in liability, then won't get the transparency.
    - People like Ron who we have to trust and we do trust – if individual like that rises to administrative level – have tendency to think this is good for patients, we must do it – they have to keep fighting for and helping those of us that are doing a good job – won't be as transparent as some things.
- **Jim Esch** (answer): Had to beat up infectious disease people to split up primary from revision; but they fought you on it.
- **Former Fellow**: Do this for total knee and total hip – scary because when numbers get to payers, it will cause problems – must be more on top of ways to figure out how to define how this information is presented.
    - Make sure people with certain interests don't report that data.
- **Jim Esch** (answer): People come to you because you are top guy in that field.
- **Tony Romeo**: Very little reward to take care of revisions – penalty to take care of people with obesity and higher BMIs because we know from evidence that they have worse results.
    - If I am being scored by healthcare system, won't take on the patients with higher BMI, etc. – need people fighting to make sure this is understood at higher level.
    - Partner last year was president of AAOS – less than 100 total joints a year – he doesn't know what a busy clinical practice is

like – make administrative decisions that don't represent 20,000 orthopaedic surgeons on the ground doing this daily – need to have some balance on that.

- **JP Warner**: There is a method to deal with this – can change this paradigm to deal with the concerns that you have – can't be done on individual level – cannot leave this to the academy – they will continue to fumble the ball.

- ***Tony Romeo: Optimizing Treatment for Rotator Cuff Disease despite Low Levels of Evidence***
  - Stimulate thoughts about what you can do as a group to answer questions that are out there.
  - Small group of people who have decided to change our coverage benefits for the things that we do.
  - Must know what our disclosures are – relationship with Arthrex – may impact some of what he says – will try to be unbiased but hard to be completely unbiased.
  - Rotator cuff footprint – anatomy
  - Work by Japanese group to show how infraspinatus and supraspinatus interact.
  - Make sure get infraspinatus in the right spot and understand supraspinatus is valuable if generates pain - but may not be that important for function.
  - Yamaguchi's work – know prevalence of RCT prominent especially in older population.
  - Most prevalent age group is now 22 years old.
  - Two tiered symptoms.
  - Asymptomatic tears become more prevalent as one gets older.
  - Academy put together a group to come up with good clinical practice guidelines.
  - Full thickness tears and asymptomatic patients – consensus is in absence of reliable evidence, not of the opinion that surgery should be performed.
  - Symptomatic: recommendation for surgery is limited – strength of recommendation is limited.
  - Acute traumatic RCT and surgery: surgical repair is an option – strength of recommendation is limited.
  - Only level I and level II – could not extend it.
  - If didn't have evidence, couldn't come to conclusion – absence of evidence: bias was non surgical even though no evidence – set consensus.
  - If surgically oriented, said limited recommendation or no evidence – extreme bias.
  - One step further – changed it even more and started using minimally important clinical differences – was never designed to look at outcomes of patients to discern whether would be valuable for a single individual
  - Physical exam: area must pay attention to in order to better understand.
  - How to come up with evaluation: inspection, palpation.

- Look for scapular dyskinesia, range of motion, active and passive.
- What part is really valuable in deciding if need surgery? Key point is loss of external rotation strength – once drop off that curve, functional deficits are permanent and difficult to resolve with surgical treatment if don't go sooner rather than later.
- Only way to reproduce close to normal function is to repair RC
- SUBSCAPULARIS – another important tendon – belly press test – another area where earlier intervention is preferable to waiting – could learn more.
- AC joint pain and biceps – need to know the clinical status of problems before the O.R. because in the O.R. won't know - need to know from patient.
- IMAGING: MRI will start to see more and more interesting things as get more sophisticated MRI.
- Big push in terms of value is ultrasound – will never work in the US – not forefront of RC imaging.
- Forefront of RC imaging is the MRI – Medicare is paying $300 for this - will be readily available and cost effective.
- Look at benefits of MRI and what aspects will tell if repairable or not repairable – what is important for clinician when looking at MRI and deciding if need surgery or not – when do I have to divert to something other than soft tissue surgery.
- Nonoperative versus operative treatment – know many patients treated nonoperatively – think more active do better with surgery – failure of nonoperative management.
- Consequences we are aware of: tear gets larger and atrophy progresses.
- Nonoperative treatment: all of us do these things – cortisone, physical therapy – AAOS guidelines on management of RC – we cannot recommend for or against subacromial injections OR physical therapy.
- Management of RCT with anti-inflammatories, massage – cannot recommend for or against any of these devices – all that we usually use, our academy practice guidelines say the evidence is inconclusive – how much longer will people want to pay for inconclusive treatments?
- PARTIAL TEARS – still lots of arguments on this – guideline – 75% partial tear in baseball player – likelihood of getting back is less than 10% - for a housewife, on the other hand, we will fix it – frequently default to debridement alone and see how they do.
- Example: 26 year old baseball player – 75% tear, SLAP tear – came to surgery because tore anterior capsule – 110 to 125 external rotation – had severe pain – repaired capsule and did debridement – didn't touch biceps, RC, labrum – now he is number 2 starting pitcher.
- Acromioplasty and DC resection – acromioplasty is a good surgery, want to prove it is a worthwhile operation.
- Looked at patient.
- Patient evaluation – age plays a role (in some countries it plays a role in whether get surgery or not).

- Yamaguchi – if older don't heal as well.
- Romeo's patients – selected those with single tendon tears or slight into supraspinatus – did well – don't make decision based on age – not sure if choosing to stay away from surgery is a good idea – base it on what we see.
- Comorbid conditions – literature shows smokers, people with diabetes, and people with obesity don't do as well after surgery.
- Ideal patient is rarely seen: no smoking, no diabetes, younger than 65.
- Academy says that strength of recommendation in terms of how patient evaluation plays a role – ONLY workers compensation status has impact on worse result.
- Can design level 1 and level 2 studies that guideline committee said evidence is inconclusive - can answer questions.
- Biomechanical factors – double versus single row – know double can make things stronger – give more footprint of coverage.
- Beat this to death, but when look at clinical outcomes, there is no difference – everything is under powered.
- Academy had no recommendations on how to choose between single and double.
- Beach chair versus other – not as important; we do well with that.
- Acromioplasty – has shown it does NOT affect outcome with RC disease – don't get paid much for these anymore – academy says this is not required at time of RCR.
- Biceps tendon is area to study – a lot of opinion but not much science.
- Whether or not mobilize the tendon – variety of different tools to use to do the repair (fancy rows or more complex).
- If tendons do heal, does that help the patient?
- One study done showed double row did help with tendon healing but most studies under powered.
- Tendon to bone healing – literature limited in supporting this.
- Biological factors – think these help tendon heal down to bone better.
- Did systematic review – found no difference in outcome with PRP.
- Recent study from France – bone marrow aspirate with stem cells – has shown improved healing.
- Functional recovery after arthroscopic RCR.
- Evidence suggests a couple of different ways to do rehabilitation after repair.
- Burkhart showed when do arthroscopically – improved outcome.
- Cuff looked at this – found no difference in outcome.
- Many have looked at this – may be slight increase in stiffness but healing better with slow rehabilitation.
- Academy: ROM exercises - cannot recommend for or against a certain amount of immobilization without ROM exercises after RCR.
- Key points: lots to study – ideas on what collective group of individuals can do – steer leadership in better direction in terms of how to deal with rotator cuff repairs.

- **Questions from the Group:**
  - **JP Warner**: This is an enormous area – big dollar epidemiologic area; as a group we could look at practice of utilization of PT – examine what is appropriate for us to use – when bundles created this will be important.
  - **JP Warner**- Suggest: look at what is out there and see if can ask better question and answer better that might change academy's position.
  - **Tony Romeo**: Almost ten years ago, people at Kaiser asked if PT could get under 10 visits afterwards – laughed: in Chicago we have over 30.
  - **Ron Navarro**: PT visits hasn't become standardized but has become less and less over time.
  - **JP Warner**: Large Workers Comp Insurer – have access to their entire database across every state – amount of PT after a given treatment – data shows zero correlation to the number of PT visits and the time for return to work after RCR.
    - They tell us that shoulder is the new spine – even spine is less variable than we are.
    - Depending on state, have completely different cost structure for PT and variety of things – for workers comp cases.
  - **Tony Romeo**: 20 visits in Massachusetts and 50 in Illinois – return to work is the same – why would insurance want to pay for this?
  - **Jon Ticker**: What if we could predict who gets stiff and who does NOT? No grading of synovitis (study idea). If we know who will get stiff, can say person who won't objectively get stiff, can say who needs however many visits.
  - **Former Fellow**: Don't want insurers making decisions on how valuable PT is for patients after surgery.
  - **JP Warner**: Must make some assumptions that are reasonable based on available evidence – ongoing dialogue is basis for what is going to happen anyway – language reflects flexibility where it is needed; guidelines or possibilities that may be encountered that may justify further treatment – allow you to use your judgment, but must be fair and reasonable about the process.
  - **JP Warner**: The more we create evidence, the better we will be about creating guidelines - you are determining your own fate.
  - **Jon Ticker**: Subscapularis should be done sooner – atrophies at much faster rate than supraspinatus and infraspinatus – is there any study that shows this?
  - **Tony Romeo**: Don't know of any study that actually predicts that – results are diminished – supraspinatus is one we focus on – even if doesn't do well it does okay – once peels off back infraspinatus or supraspinatus – different ball game – less predictable the result if wait on this – can't tell you for sure if you will get result better than one I think we will get now.

- **Bassem ElHassan**: When talk about atrophy – nothing about subscapularis – no nerve impingement – biceps chronic tear doesn't affect it – why does rotator cuff affect the atrophy?

- ***Matthew T. Provencher: What questions do we need to ask regarding shoulder instability?***
  - Need to identify problems we have – go back to basics: epidemiology, clinical exam, physical.
  - High recurrence rate in young males.
  - Less probability for recurrence if reduction performed by orthopaedic surgeon.
  - You can predict instability of bone loss from exam and history – add to great work done in France.
  - Van Kampen – found only a few tests actually good in predicting instability – choose a FEW and collect aggregate large groups of data.
  - X-ray, MRI, or MRA may be helpful, but if not concerned about radiographic penetration of imaging - CT scan still gold standard, although MRA still pretty good.
  - If look at different types of bone loss – not all bone loss is the same type – need to be smarter.
  - Acute fracture versus bony loss partial resorption versus complete resorption.
  - Partial resorption was one that had the worst outcomes.
  - Must ask what TYPE of bone loss not only how much.
  - Coracoid anatomy – study looked at geometry and how much you can take before get bad results.
  - 2008 – Finally tested stability of Latarjet at Mayo.
  - Stabilizing mechanism in bone grafting of a large glenoid defect.
  - Show bone graft and how it acts biomechanically.
  - Can we provide a more congruent joint?
  - Can we normalize articular pressure better?
  - Traditional Latarjet – lateral edge.
  - Newer Latarjet – say to rotate in order to make better.
  - Iliac crest bone graft works but not sure about how it works long term.
  - Distal tibia fits humeral head – have looked at this from glenohumeral contact perspective – amazing how well body conserved throughout various joints.
  - Distal tibia allograft – fresh off the press – all military patients done in San Diego – about 35 – cut off the follow up – more than 85% healing, no one less than 60 – average Latarjet (15% goes away on CT scan).
  - At 1 year had good results but need longer term.
  - Warner – 25-30% will never restore pressure.
  - Latarjet is NOT benign procedure – hard to argue from stability perspective – those that do fewer than 10 a year, outcomes are worse.
  - Engagement made easier with bipolar glenoid loss.
  - Glenoid track concept – where arms occur – how engage.

- Correlation of engaging Hill-Sachs injuries: clinical glenoid track.
- Can define engagement – more than 90% of time with engagement track.
- Future in terms of how treat from bipolar standpoint.
- Biomechanics of bipolar bone loss – another thing to look in to.
- Real patients – 3D printer – printed model mirrors patient – have exact model – very powerful.
- People create lesions based on what they think is best, not what is actually there.
- If had 4 mm glenoid defect, maybe about 15% with a middle of the road Hill-Sachs (150 Hill-Sachs CT scan) → could NOT get a soft tissue repair to work that well.
- Look at how Hill-Sachs impacts results – need easy ways to do these better.
- Have been looking at grading and easy ways to volumetrically and positionally define where these Hill-Sachs are.
- Can automate this to some level with software.
- Introducing other problems – posterior shoulder pain in a third of patients who didn't have pain to start with.
- Arthroscopic Latarjet procedure – Lafosse.
- Now arthroscopic non rigid fixation – plastic anchors.
- Extensive labral tears – how do these happen and how best to treat them? Need to look at aggregate data.
- Socrates outcome system.
- Arthroscopic repair of circumferential lesions.
- HAGL tears – looked at over 9 years – largest clinical study in the literature – 50% female, few complained of instability – most were pain, shoulder not working well – need to be better.
- Anchors implants and suture – great resident and fellow projects.
- Now taping.
- Knotless devices.
- Look at what type of device – from aggregate data standpoint to see how bio ones are doing and if we need to change or alter our practice.
- Look at different projectories in terms of curved anchor guides to make sure not blowing out the glenoid.
- What is new in outcomes – excellent work – brainchild with Kirkley to help with Western Ontario scores – single assessment score – helpful to understand where patients falling down – patients afraid they are going to injure it again.
- Big difference in recurrence – open had twice as much recurrence as arthroscopic.
- Pascal's work potentially population biased but brings out some of the areas that we need to look at.
- ISIS
- Need to get a revised instability score – validated by Rouleau.
- Steve Weber – found ISIS not helpful in predicting outcomes.
- Need to do this better with aggregate data.

- **Questions from the Group:**
  - **Jon Ticker** – First time dislocation talk – no idea if Hill-Sachs region increases in size with subsequent dislocations – SLAP tears (don't know about changes from 1 to other) – good observational studies.
  - **JP Warner**: Recurrence rate after arthroscopic repair is higher than what we tell patients.
    -My colleagues at MGH – asked what is their recurrence rate? (less than 10%) –but none had systematically measured.
    -Europeans all doing Latarjet, us doing Bankarts – perhaps there is a way to improve percentages.
    -Wonder about instability score (not a good study) – opportunity for prospective study looking at factors that affect recurrence in instability – collect data and see what is or is not important – can we validate that; do power study to see how much we need to do to get valuable results.
    -Something to help us make better decisions for our patients.

- ***JP Warner: What is Value-Based Care? How can I define my value in caring for shoulder patients?***
  - What is value? It's personal.
  - Monday – committee of health care reform of senate – Massachusetts.
  - Be at table when questions being answered with answers that are wrong.
  - Value is a personal issue: outcome divided by cost.
  - For patient, outcome is your value.
  - Insurers and hospitals – worried about cost and time and resources that you use.
  - Drive costs based on what is selected for diagnosis and treatment.
  - For surgeon, the outcome and the income – still comes down to that.
  - What is the value for our service? Outcome divided by cost.
  - Outcome defined by patient satisfaction without complications.
  - How do we measure cost? Hospital does its thing, we do what we do – analysis leads to no conclusion other than that hospital is ball and chain around our ankle.
  - Problem is lack of alignment.
  - Patient defines value as improvement in quality of life – elimination of pain.
  - Physician: standard model of fee for service rewards you for providing care but NOT outcome – paying for process but not OUTCOME.
  - Hospital gets paid as well.
  - Insurance tries to set parameters and boundaries for what people pay.
  - Government sets boundaries.
  - Implant companies get paid and are required by shareholders to generate profits.
  - How to align things? We control the numerator AND the denominator – only ones that control both.

- Hospital harping on you for cost – but has nothing to do with the outcome; reputation allows them to charge a lot.
- Implant companies must generate profit.
- Government and insurance companies control cost.
- How to bring the price of healthcare out into the open? Different prices for different services.
- Heart failure and shock at various places – BUT don't know value because you don't know the outcome - if we do NOT measure we will be equal and will be commoditized - bad issue.
- If look at value equation – if only look at cost, not looking at value.
- Patients shop on convenience – where is easy to get to.
- They also don't know the cost of services they receive – will start to become savvier as they pay more and more.
- They become consumers after first operation fails – go on internet and search.
- They also overestimate what we are paid.
- They value our style – how we provide care – in a service industry.
- Kevin Bozic – physician manner ranked number 1 in terms of relative importance in selecting a provider.
- Believe choice of surgeon will have impact on outcome – believe that there is a big difference in quality of care among orthopaedic surgeons.
- Factors that influence provider selection for total joint arthroplasty – Bozic et al (CORR 2013) – SENT TO EVERYONE.
- We control the perception of our patients.
- Perception is not what we are really getting currently.
- Hospitalization cost – TSA: surgeon accounts for 8% of overall payment of the service.
- For reverse, that drops to 6% of payments of service for that institution.
- Insurers want lower costs and don't consider outcomes.
- Surgeon payments have decreased by over 60%.
- Lower payments are perverse – leads to motivation to do more surgery – leads to expanded indications for surgery, higher revisions and failure rates, leads to lower motivation for doing complex/revision surgery.
- Data showing growth of prosthetic use in US over 4 year period – growth of revision was 115% - 40% overall – 60% reverse.
- Government emphasizes processes rather than outcomes.
- Meaningful use has nothing to do with outcomes.
- If can foresee future maybe have something to do with it – higher co-pays.
- Less favorable insurance products available.
- Evolving two tier system like in UK – find in and out of network option – out of network option more affordable.
- Find us faced with higher overhead and lower revenue – give us higher administrative burden and higher hospital employee rate.
- Read tea leaves and know it is going to hurt.
- Three books necessary to read.

- The Quality Cure by David Cutler – three priorities are lower cost, better access, and better quality (has advised Obama).
- Redefining Health Care by Michael Porter (fundamental task of delivering value to patient is in conflict with all economic incentives in current health care system).
- Who Killed Health Care? by Regina Herzlinger (excessive costs occur in unnecessary services, insufficient care and services, excessive administration, fraud, etc).
- Want these people to be your friends otherwise there will be commoditization.
- Need to MEASURE and report transparently.
- Complication rates for reverse at Boston Shoulder Institute – complication rates went down over time.
- Same for revision – when compare apples to apples get same curve.
- Look at registries – from International Society of Arthroplasty Registries – JP only shoulder surgeon there - poster from Australia shows total versus reverse prostheses – in first three months after surgery, complication rate in Australia was three times what it would be for conventional.
- At 6 years, complication rate much higher for anatomical rather than reverse.
- Seeing faster growth of reverse – could talk about indication – where no rotator cuff tear – power of registry to show you the future.
- Registries to avoid conflict of ego.
- Graph shows correlation of PT with time to return to work for workers comp cases – NO CORRELATION.
- Bundle in mind where we control the PT and assume responsibility in the process.
- Consider impact of what you use – we control these cost drivers.
- We must play a role in what is being used because it is part of whole proposition.
- Utilization of imaging studies – we are more than two times use of MRIs compared to the next highest developed country's use of MRIs – enormous cost driver – if give some of this back, gain credibility.
- Mayo primary THR margin by surgeon – there were some who were in the net negative margin – NOT good.
- HARD PART – what does it really cost?
- Actual costs.
- Allocated costs.
- TDABC – time determined activity based costing.
- Measure resource capacity and capacity cost rates.
- Realize that what you think things cost is not what they actually cost.
- Hospital uses magical accounting.
- Methodology: direct and indirect costs as well as billable costs – most businesses do NOT use this.

- TDABC – hourly cost rate to run office and clinic or for the operative time, etc – everyone paid something for their time – not measured effectively.
  - Theory predicated on concept that if can't measure, can't manage, if can't manage, can't improve.
  - Seeks to link resource utilization, cost and outcomes for a specific cycle of care.
- We can control the cycle of care – i.e. for rotator cuff disease.
- Can look at personnel cost rates per minute.
- Can look at JP and Larry → salary plus benefits plus incidentals divided by clinical minutes per year.
- Can also look at equipment and space capacity cost rates – all things looked at in businesses.
  - Personnel cost represents 70% of total cycle cost.
  - PT represented 72% of overall post operative cost.
  - Space represented 24% of total cycle cost.
  - $100 more for an anchor is less of a big deal than how you use personnel etc.
- High variability of resource cost in health care – orthopaedic surgeon has higher capacity cost rate.
- Also can look at relative cost of personnel → PT is a big part of cost and they spend a lot of time with the patient; however, the surgeon is big part of the cost but spends less time with the patient. This is due to higher cost capacity rate for the physician than the PT.
- Most important players in value: the patient, surgeon, implant company, hospital, insurer – not how we are valued currently.
- Look at cost capacity rate by payer – still fee for service – can work very hard for very little return – cost capacity rate depends on who you are taking care of.
- Value initiative – ASES has brought new initiative: created a value committee – three subcommittees.
  - First: endorsed outcome measures for society – speak in one voice – must be simple and patient centric.
  - Second: make a statement as to what costs should be and how they are measured.
  - Three: put together and have a value statement that we can use politically and have for all orthopaedic surgeons out there.
- Down the road: creating a bundle – scary thing – figure out how to be at and not on the table.
  - Medical condition and cycle of care.
- Chose rotator cuff.
  - Pick the outcome measure – patient satisfaction.
  - Pick guarantee and warrantee – a year.
  - Contract duration (with insurer).
  - The outliers –who is an outlier / not included.

- What should be in the bundle? - got insurer to agree what should or should not be in bundle (biceps tenodesis not in bundle / acromioplasty is in bundle).
- Risk adjustment (diabetes, smoking, age).
- Reporting requirements – must have follow up – patient must be involved.
- Patient engagement and compliance - also must be safety valves.
- How to come up with negotiated price – if we don't do it hospital will and we will all be the same.
  - How to design a bundled payment around value (Larry Higgins – Harvard Business Review).
  - Need to generate traction for other alternatives useful for us and patients.
  - The secret to success is keeping the people who hate you away from the people who are undecided.
  - Have to find common ground with the people making the rules.
  - If go with real metrics, may be able to gain some traction.
  - **Questions from the Group:**
    - **Former Fellow**: What does a bundle cost?
    - **JP Warner**: Haven't made the bundle yet. What do you think with TDABC accounting, it'd cost from surgery date to 1 year later?
    - **Audience**: 15K-20K
    - **JP Warner**: This is cost NOT payments/charges. It is actually much lower (typical, two anchors) ; JP and Larry compared – time was almost identical to within a minute or two ; costs were interesting because cost capacity rates were different – Brigham used lower cost individuals to provide elements of the care than at MGH.
    - **Audience**: How should we create a bundle around a procedure the AAOS says has negligible value?
    - **JP Warner**: We are going to go on doing RCR – this is about lowering overall cost but reducing margin – if we do this, no one will care about the academy anymore; must leverage our position with our hospitals – now going to get insurance companies to be our allies if they understand we are the ones making these decisions.
    - **Jim Esch**: One part of insurance game: payer now says we will pay 1.5 times for RCR so that is good for you and will pay more $ to surgery center, just sign this contract – outliers and complication are NOT defined – surgeon comes in and says sign this blue plan so I will make more money and they'll direct more cases to me – surgeon and surgery center asked to sign it but outliers not defined – must be careful when sign those agreements.
    - **JP Warner**: If do in controlled environment, then it'd work – rework equation of how we are being measured right now – even Cutler said excessive administrative costs are a factor – BUT have to lower overall costs.
    - **Audience:** Developing variability within bundling? A lot of variability with PT – patient-centered perception in terms of how much they need - could perceive we are withholding care.

- **JP Warner**: This based on our therapists: bundle will probably have thing that says we can use these four therapists – we will become a little bit the payer – have to take on the risk – controlling the resource – must come to conclusion on what we want. First four weeks you aren't getting PT.
- **Audience**: Drill down more on defining the outcome – how to measure good versus bad outcome? What if patient says they want new MRI?
- **JP Warner**: We are stacking the deck here, people with single tendon tears who do not have chronic, extended tear all the rest of it – pure population (Tony said they never come to me) – want to slow pitch over the plate with bases loaded, because will then gamble – once make that work then can work on the rest of it.
- **Ron Navarro**: I see coming battle between surgeon and therapy fee – both big drivers; what say about political forces and lobbying effects of both groups? How to play into that and come out on right side?
- **JP Warner**: I'm not a politician; drive arguments with data; demonstration project to show satisfaction for everyone; PT's can be satisfied because will get paid for good services provided (won't be part of bundle network if don't provide good care) – if have success, will get traction – status quo won't fly anymore - either we will change it or it will change for us.

- ***JP Warner and Jon Ticker: Discussion on practice issues and playing a role in our own future***
  Final thoughts and discussion of future meetings
  - **Jon Ticker** – We need to figure out what we want to do – if we want to continue as a group, what we want to organize and what we want to look at as a group. This is likely going to be driven by individuals that participate and want to give thought and consideration to this initiative. We should consider our moniker and develop a mission statement.
  - **JP Warner** – "A monomaniac has been defined as a person with a mental derangement restricted to one idea or a group of ideas." This was Codman in 1910 (Bill Mallon, "Ernest Amory Codman: The End Result of a Life in Medicine." W.B. Saunders, Philadelphia, PA, 2000). Lately I've felt a lot like Codman. I believe that his End-Result Idea is still largely not accepted even in institutions such as my own, the MGH. I also believe, that we can each make a difference. So perhaps a meeting like this is an opportunity to make that difference. My good friend Christian Gerber once told me as we get older the greatest value we have are friends and time. I chose to spend my time with my former fellows and number you all among my friends.
    - Codman believed the essential factor in raising the standard of care for patients was critical review of outcomes. Perhaps we can do some of that here in this meeting by asking questions

that are meaningful rather than giving answers we already know that are largely status quo. By asking meaningful questions about shoulder care, perhaps we can achieve what Codman envisioned, which is improved outcomes. While this is a lofty goal, we share some common experiences by virtue of your training, so why not assemble for this purpose. Please send me your ideas and suggestions and please be active in participating in shared research initiatives we may develop.

- My plans are as follows:
  - 1. To develop a website dedicated to this endeavor.
  - 2. To consider our name "The Codman Shoulder Society" and trademark this.
  - 3. To help organize projects through our basecamp cloud.
  - 4. To help with each of your careers with the ultimate goal being successful membership in the ASES.
  - 5. Open this meeting to all former fellows of mine from UPMC days and also from the Sports Medicine Service at MGH.
- There are several questions we should ask:
  - 1. Is this enough to do this one time/year?
  - 2. Do we want to formalize this group into an organization with a mission statement and a purpose?
  - 3. Do we want a governance structure?

- I thank you all for participating in our first meeting and invite you to send me your ideas and thoughts.