**Minutes CORTICES Annual Meeting**

**Philadelphia 11/17-11/18**

**Hosts: Keith Baldwin, Alex Arkader.**

**8:30 AM Welcome to Philadelphia- Ben Shore**

Shore: Thanked members for coming, acknowledge funds received from Orthopediatrics for this and meetings for the next 3 years. Highlighted recent published papers and congratulated those that submitted abstracts to POSNA.

Recent Papers:

* Ishaan Swarup: Variations in the Management of Closed Salter-Harris II Distal Tibia Fractures – paper published
* Jessica Burns-MSKI SA -paper published.
* Keith Baldwin-Floating Elbow -paper accepted, proofs pending.

**Housekeeping:**

* Send Fernanda (maria.canizares@childrens.harvard.edu) the name and email of your current research team members.
* BCH new Clinical Research Assistant: Meghana Venkatesh (meghana.venkatesh@childrens.harvard.edu)

**8:45-10:30 Old Business- Progress reports**

**845-9-AM- Thoracolumbar Burst fractures Shore/ Hedequist/Birch:**

* Background: Scarce literature in spine trauma and management. Concept 2 up and 2 down fixation model – does that still apply in pediatric orthopedics?.
* Updates:
	+ Question has not moved forward much, Hedequist sent email to request numbers, but fell through.
	+ Just 2 members do spine trauma in CORTICES group, but if interested reach out to Boston.
	+ It would be interesting to describe Type of fractures and management at CORTICES institutions.

**Action Items**:

* + Ying Li and Ishaan Swarup indicated interest in participating – will set up a call with Dan Hedequist and Craig Birch to outline the next steps
	+ Ask the Boston group to circle back to delineate the research question, for those interested find out your numbers at each institution and who covers trauma call.
	+ Boston to create a more flushed study proposal and data dictionary.

**900-AM- Septic Arthritis vs Lyme’s Arthritis-Li**

* Background: Using MSKI database can we come up with diagnostic criteria to differentiate SA vs. Lyme.
* Updates: Developed an algorithm
* 119 patients SA and 36 with Lyme
* Found 5 predictive factors: Age less 4 years, NWB, WBC 13K,
* CRP was not significant. Only 47% culture positive.
* Audience comments: What about the other 53%, they don’t have SA? What about regional differences in Lyme incidence i.e Northeast? For paper, reviewers might ask about culture negative cases.
* Future look as a group in a prospective study.

**Action items:**

* Before submission for publication, look at the negative cultures, identify Northeast cases, exclude those patients and repeat the analysis without them. The reason for revision of the data is to make sure that we have Lyme accounted for in the northeast where it is so prevalent. Small changes to the data but may have profound effect on the final message.

**910-AM- Tibia IMN study-Miller**

* Background: Primary Aim: Quantify iatrogenic deformity proximal Tibia for rigid antegrate nails in skeletally immature children. First study will be retrospective to help us define the problem and study question so that in the future we will be more likely to garner funding for prospective research.
* Updates:
* Created protocol and Data Dictionary. REDCap created and ready for beta testing with 5 sites.
* Inclusion Criteria: CPT code doesn’t differentiate between flexible and rigid. Teams will have to get all cases and exclude flexible nails and identify if skeletally immature.
* To get most up to date information of current practices sites will need to modify CORTICES IRBs to “present date” or alternatively -**June 2023**.
* Bone age: Use Rainbow bone age app.
* WUSTL, Campbell clinic, Colorado, Nationwide, Vandi volunteered to be sites for beta testing REDCap.

**Action Items:**

* Before data collection WUSTL and Boston will reach out to beta test sites to make sure they have contract in place or they get an SSA when needed, as well as IRB amendment (when needed) and update end date to present date or June 2023.

**930 AM- Pelvic/Acetabular study- Sanders (virtual) Julia on Maternity Leave.**

* Background: Goal to create and algorithm for pelvic acetabular trauma.
* Updates:
* Abstract submitted to POSNA, writing manuscript
* Survey sent to members based on cases
* Rare cases even at tertiary care institutions
* Clinical equipoise for op vs non-op
* 25-50% Pedi Ortho
* Audience comments:
	+ What would be the focus of the manuscript in terms of creating an algorithm of treatment, when there is so much logistical variability across systems?
	+ Should this be a QSVI Initiative for POSNA?
	+ Find hard to see how the manuscript will help them when there are so many logistics involved in the treatment of acute pelvic trauma. Should we instead do a Consensus Statement working with Trauma surgeons?

**Action Items:**

* Finish gathering transfer protocols, all sites have answered the questionnaire. l
* Rethink the final message of the paper. Final data editing and send to co-authors.

**9:40 AM- Lisfranc- Denning/Johnson/Riccio (Megan)**

* Background: Not literature in of the incidence of Lisfranc fx in children with open physis. All literature is on adults or transitional patients.
* Updates:
* Aim: Demographic, clinical and treatment characteristics vs adult population with the same fracture. Develop classification system.
* Study proposal will include all Lisfranc fx from 0-18 years of age with open physis.
* Lisfranc has to be based on imaging (XR, CT, MRI) and have 6 mo of follow up
* Exclusion: NM, metabolic disease, polytrauma. Open fractures.
* Next steps: Determine who wants to participate and reach out with protocol and Data Dictionary.
* Pilot study consideration: Survey on practice patterns? Just to highlight different practice models to help define the question you want to answer
* Audience comments: How to identify Lisfranc? CPT code is broad “Metatarsal and Tarsal Fx” has ~15 CPT codes.

**Action Items:**

* Data Dictionary to be sent to those interested.
* Megan will put together a survey with cases and that is the first paper. Show there is practice variation – justify need to study prospectively

**9:50 AM- Necrotizing Fasciitis- Ramalingam**

* Background: High mortality, not a lot of literature.
* Updates:
	+ Aim1: Characterize demographics and clinical characteristics of patients presenting with NF. Inclusion: 0-18 years, Jan 2010 March 2023. ICD9 and 10 codes. Exclusion: No tissue pathology diagnosis or op report including dishwater fluid positive finger test. Outcomes: LOS, ICU, Amputation, mortality.
	+ Aim2: Validate a scoring algorithm similar to the LRINEC adult algorithm that has not been validated in children.
	+ Copley submitted an IRB. 11 cases over 13 years, and she will be able to compare with this cohort and Vandy data.

Audience comments:

* Shore: What about immunocompromised? They will be completely difference Audience agreed that authors will have to code them differently in database, but should not exclude.
* Copley: Over the last 20 years he has been consulted for serious cellulitis and other infections but none of them were NF. The true NF diagnosis is rare and currently is being over coded. We should go through all the severe infection cases and describe the disease progression. Very few cases you will have necrosis in the tissue. We need to define differently this disease entity.
* Schoeneker: They use a sharpy to mark the area, and identify rapidly progressing cases. NF is a histopathologic dx and it this case we shouldn’t be so focused in NF as a definition, instead CORTICES members in this study should focus in identifying all kids with Rapidly Progressive Destructive Musculoskeletal Infection, rename NF so that it can include those kids that will progress to multi-organ dysfunction syndrome. For this study, investigators should keep ALL codes and try to create an algorithm that will predict rapid progression. Keep all that were labeled as NF.

**Action Items:**

* Review study protocol, review inclusion criteria and exclusion criteria and re-distribute.
* Refine Data Dictionary.
* For those interested, start checking for your severe cases in your institutions.
1. **- Open fractures- Johnson**
* Background:
* Aim1: Understanding practice variation for the treatment of type III open long bone fracture in less than 18 years old. Outcomes (infection, limb salvage, amputation, return to activity) will vary depending on the timing of the tissue coverage.
* Aim 2: Practice variation in terms of ATB protocols (type, timing, delivery).
* Aim 3: Epidemiology and distribution for treatment patterns.
* Should investigators start with survey of practice patterns before moving to retrospective?
* Audience comments:
	+ Denning: We should do QSVI time to antibiotics. Some hospitals will code gunshut shots.
	+ Spence: Found adult Study group who submitted a paper in open fx in adults. We could replicate. He will send to the group.
	+ Shore: We could have UE and LE spin offs. First step start collect patients cases grade III open fx. Quantify how bad it is to design your data dictionary.
	+ Baldwin: We have to be mindful on how to design because of variability on type of fractures.
	+ Denning: We should look at antibiotic patterns variability

**Action Items:**

* + Finalize protocol, reach out to those interested, collect few cases of Type III Open fractures and use them to create a data dictionary that is very inclusive of several type of fractures.
1. **- VTE- Shore**
* Update: VTE finalized data collection. Data from CHLA was not accurate. 13 centers gave us VTE cases. And we had to recheck CHLA data.
* Background: 10 million patients, Overall Incidence 2.1 /10,000 for all peds. 8/10,000 Ortho patients.
* 100 VTEs in 13 CORTICES centers.
* Only 34% of VTE had heparin prophylaxis.
* Risk Factors: Bacteremia, CVC, Trauma.
* About to submit to JBJS
* Audience Comments:
	+ Schoenecker: Be careful in discussion about prophylaxis for elective cases, because this cohort also includes patients with bacteremia and CVC. At Vandy they have got rid of guidelines all receive prophylaxis.
	+ Heyworth: If you remove bacteremia and CVC the incidence will be so so low that we don’t imply that every elective case needs prophylaxis. Be careful about the message of the paper.

**Action Items:** If you got an email from Shore respond to be an author. Shore will revisit the discussion to make sure we have the right message and make sure that prophylaxis is not the message within….

1. **Secondary surgery MSKI- Shore**
* Background: Trying to resuscitate a project that was submitted as an abstract to POSNA years ago.
* Aim: Who needs a second surgery in OM vs SA. Neither are pure and hard to differentiate.
* 646 patients with isolated SA
* 17% got secondary surgery
* Age, admission ESR, CRP, Platelets were significant
* AUC curve: with all 4 factors only covers 54% of the curve: Age, ESR, CRP, Culture.
* Hesitant to put a message that will hurt us in the future.
* CRP: Has different scales whether lab has mg/dL, or mg/L. In mg/L 1 is normal.
* Audience comments:
* Heyworth: It’s informative but it’s not saying anything about who needs a washout.
* Schoenecker: Be careful not to call it isolated SA, because database didn’t get an MRI to confirm. This were things that were treated as isolated as SA.

**Action Items:** Shore will continue to work on manuscript and message hopefully have something before POSNA.

**1020 AM**- Questions/ comments/ editorials

**10:30- Gloat fest (All confirmed)**

**1035- Floating elbow (Baldwin)**

* Presented at OTA
* Accepted in JPO
* Does not really cause compartment syndrome.
* Established a good workflow process: Data Dictionary-Alpha test 5 cases at CHOP, Beta test only at CHOP for all cases, then opening to all sites.
* Strength of this group: created the first CORTICES classification.
* Lessons learned: Consider future questions when designing the database, to get more papers out of it.

**1040- Descriptive Epi UE SA (Li)**

* Descriptive characteristics of UE SA from MSKI databse
* 10% patients presented UESA in MSKI database.
* Elbow most common site
* MSSA most common organism.
* 4 complication, 1 readmission, 3 recurrence.

**1045- SH variation (Swarup)(virtual)**

* Background: Started as a napkin idea in 2021 and evolved with input from everyone (especially Ben and Keith).  Good to have a few members review and try survey. Keeping it simple worked well for us.
* Future Directions – Retrospective study at CORTICES centers.
* Aims:  Determine whether there is true variability in practice. Evaluate rate of PPC and factors associated with PPC
* Methods: Include patients based on ICD 10 codes
* Data Collection:  Demographics, clinical data (MOI, # of reduction attempts, definitive management – factors that have been associated with PPC).
* Identify subset of patients with >6mo of follow-up and evaluate for PPC (based on clinical notes, radiographs including contralateral XRs, or CT)
* We just did a pilot version of this at our institution and it worked pretty well. We did find a PPC rate of 25% so maybe it is higher than we think.  The SD paper reported 40% based on CT (attached).
* Audience Comments:
	+ Good points about clinically acceptable angulation by Alex and long-term implications. Relatively unknown based on my review of the literature but some guidance from limb deformity “normals.”
	+ Heyworth: Other sites have seeing more than 2% of physeal arrest? At Boston, we treatment very aggressive to avoid physeal arrest.
	+ Salil: Worth to see retrospectively.
	+ CHOP: do we have a clinical significant threshold? AP clinical significant tilt?
	+ Larson: The outcome is OA and that’s hard to quantify because we don’t follow kids until adulthood.
* **Action Items:** Think about an aim that is feasible with data coming from a retrospective study. If there is interest, Ishaan can formalize this into a data dictionary. I do think there is an opportunity to better define the rate of PPC (myth-buster) and factors associated with PPC.
	+ **Ishaan to work with Keith and Shore to flush this question out further**

 **1050- OM biopsy/ practice variation (Upasani) (virtual)**

* Practice Variation 14 centers. Isolated OM.
* 3 groups
* Next Paper: All kids with Culture Negative OM
* 118 tissue negative patients
* Age and CRP
* At Rady, created a prospective algorithm. For long term outcomes, we need a prospective study. Consider this as our next step for NIH with the help of Schoenecker

**1100 AM Membership discussion Beebe/ Laine (virtual)**

* While we have not increased sites, we are busy and many would like to have more people added.
* Should we revisit point systems.
* Allan: Adding people has not diluted point system.
* We will review applications:

**Members for vote:**

**Jaclyn Hill-UCSF.** She is a transfer. She got letters of support. She was at Texas.

* **Vote:** Approved transfer.

**Kristen Livingston:** Boston Children's Hospital. New Director of Trauma

* **Vote:** All agreed to add.

**Emmalynn Sigrist: Gillette**

* **Vote:** All agreed to add.

**Chris Souder**: Rady Children’s

Vote: All agreed to add.

**Basel Touban:** Texas Children’s

* **Vote:** Pause membership, consider him in a year.

**Jessica McGrath:** Texas Children’s

* **Vote:** All agreed to add.

**Discussion:**

* Clarify rule: If more than 2 members come to meeting, that person (site) will have to pay extra for meeting, like a registration fee – the fee will be decided by BOD in conjunction with site host.
* Since there are sites with more members, should votes for membership be institutional? **Vote:** Yes.
* Li: Keep it smaller and be mindful with how many PIs per institution.
* Shore: How to protect integrity of the group? Reinitiate point system.
* Spence: Make it the addition of members/sites on an individual basis.
* Beebe: We don’t have an open application system.
* We are small enough to have meaningful conversations, but large enough to have institutional weight when publishing.

*Motion to vote in the future*:

* For adding members in the bylaws we need 2/3 votes of institutions.

11:45 PM Group photo Buerger Garden

12:00 PM Lunch at HUB- Continued discussion about admin stuff/website/bylaws

**12:30 PM-New Study prop 1-Schoenecker**

Consensus Building-measuring intuition

* For the first study is learning curve for PG1 to PG3 when they manage junior call.
* There is no text book to triage patients and residents are confused.
* We have to help them order things according to priority.
* We need to come up with consensus of diagnosis that they see in the ED.
* Also when do you want to go to the OR.
* Wants to come up with CORTICES Consensus of ER call of the most common pediatric orthopedic conditions.

Live consensus building exercise using ROCKLAKE EDUCATIONAL PLATFORM:

* Aim: Us a group come up with order to clinical intuition of different pathologies according to time that in your mind they ideally would have to be done. Not your current practice patterns in your hospital, but what you think is best.
* <1hr
* <2hr
* <6hr
* <24hr
* <1 week
	+ Do your measurements in the app and we will revisits results tomorrow.
	+ This is the first step, and then we can introduce ranking pathologies.
	+ Action item – Schoenecker to send us the next round of cases to decide upon.

**12:45 PM- New Study prop 2- Arkader (Hip dislocation)**

* 3-15% Traumatic hip dislocations result in AVN
* There are some FR in the literature that are very consistent in the literature. CHOP published a paper experience 2 AVN/34 patients.
* Baldwin got a systematic review accepted
* Aim: Use the power of CORTICES to describe Risk Factors of AVN, outcomes after AVN.
* What is the best management? Most of us say to the resident: reduce. Does it matter if you do ED, or OR. Do you do an MRI after?
* What is the minimal treatment needed (crutches). Return to sports?

This is an idea: Retrospective anyone under 18.

Exclude: Without previous AVN or previous hip pathology

* Audience comments:
	+ Miller: when he gets a call from other site, in the past he said to reduce. In the past 6 months they got a two epiphysis separations. He has changed his practice on that and asks the patient to be transferred.
	+ Schoenecker: What would be the n of the study considering patients have reduced in an outside ER. Adult trauma surgeons don’t order MRIs.
	+ Should we approach this as a survey to collect surgical variation and create consensus

**Action Items:**

* Develop protocol, create a database in a way that allows us to answer several research questions.
* After this study we could create best practice guidelines for treatment.
* Survey regarding practice variation is the first step here – outline what is important to identify – how many reduce in the ED vs in the OR. Then retrospectively look at our data to see if we can identify a superior treatment pathway and some information regarding time to treatment and prognosis.

**1:00 PM- New Study prop 3- Baldwin (Pink/Pulseless)**

What to do?

* 2019: Annals of Surgery: Dogma should not be revisited unless vascular status deteriorates
* 2010: Reduce and come back
* What if you fix and pulse doesn’t come back.
* Do you keep them for observation?
* Who do you call for backup?
* When do you call?
* How do you decide it the flow is satisfactory?
* Classic vs Alternative approach
* Do a Delphi to triangulate agreement based on cases and create CORTICES algorithm?
* Denning: Do Delphi and retrospective review, because surgeons could say one thing during Delphi, but the reality might be different.
* If we cannot agree, this is the perfect example that we need a study. Maybe use Schoenecker’s app to create a variety of different cases to see where we have consensus.

**1:15 PM- New Study prop 4- Waterproof Casts and Skin issues (Truong)**

* + Proposing Survey POSNA/OTA use of WPC: When should we use them?. Complications? Patient satisfaction. Current guidelines are not clear which patients needed vs preferred.
	+ Dogma is don’t use it for acute fractures, the idea is to review the literature come up with algorithm of best practice.
	+ Audience comments:
		- Larson. The is no difference in outcomes in regular vs WPC. We have to be careful when we say that there is no differences in outcomes, because in some places WPC is a privilege and not a right. This is a biased population.
		- Walter would like Systematic review-Meta analysis in Peds vs Adults.
		- We have to differentiate use during acute fracture management or routine outpatient setting. Those a two different cohorts.
		- Arkader: Not interested in torus fx, more interesting lower extremity fractures. We need to define the setting of where WPC is used. Are we referring to fractures in the ED, in Boston we will not even add it in the swollen arm.

**Action Items:** Flush idea, start with systematic review.

**1:30 PM- Infection update- Schoenecker**

* MSKI -> R01
* Challenge with funding is that MSKI is that comparatively low priority compared to other childhood disease and is not seeing as cost effective/outcomes.
* We have target mortality as the reason
* Kids die due to Multiorgan Dysfunction syndrome (MODS). We have to make a point that Bone and muscle are organs.
* Pathophysiology: Local MSKI Infection-> Immunocoagulopathy-> Immunothrombosis-> Multi-organ dysfunction syndrome-> Dead
* Strategy for NIH
	+ Don’t let the kid die
	+ Don’t let local infection metastasize.
	+ We need ways of measuring each pathophysiologic state i.e validate a scale that will be indicative of immunocoagulopathy.
* NIH just released a new call for grants proposals that don’t qualify or feasible with RCTs.

**Action items:**

* Next step: Submit R01 for an observational prospective study to validate measures of coagulopathy and MODS.
* We to have to prove the NIH that we can collect data prospectively.
* Each site retrospectively to see how many patients had sepsis and went to the ICU.
* Get buy in from your Infectious Disease colleagues and your Department.
* If we can submit in a year would be ideal.
* Needs help with organization, documentation from each hospital to collect data prospectively, resources, IRB.
* Divided the labs in two tiers, those that each hospital will have for sure, and others that will have to be requested.
* If we have 10 institutions would be ideal.

**1:45 PM- Jill Larson- Femoral neck fractures**

* There is limited lit out there and personally see few fractures per year.
* All require surgery, we don’t know RF, incidence and nothing about outcomes.
* Recently a systematic review since 1960
* There is heterogeneous AVN rates.
* Aim: What is the incidence of adverse outcomes and the risk factors associated.
* Proposing retrospective study 2011, patient older than 2 years.
* Inclusion and exclusion criteria: Anything below the physis proximal lesser troch.
* Injury films, intra or post-op, post-op. Xrays sent to them.
* They will use ICD 9 and ICD10 codes to collect demographic characteristics, including zip codes, clinical and treatment characteristics. Using zip codes they will calculate ADI.
* Wants Images to be sent to LURIE.
	+ Audience Comments:
	+ Schoenecker: Do you get bone scans.
	+ Shore: Xray data cannot be sent to LURIE as all the agreements are between BCH and institutions.
	+ Baldwin: Send the data dictionary and have instructions of how to measure for each site.
	+ Larson: they wanted to measure xrays, and they are trying to avoid variability about having different people to measure xrays.
	+ Shore: Pooya as WU had mentioned this idea, but he relinquished.
	+ Old paper: Spike cast in reduction of AVN. Think about collecting immobilization methods.
	+ Spence: How to define injury time. Larson, they have 3 times injury to ED, ED to OR.
	+ Skeletal maturity? They will use Xrays.
* **Action items:** We have to check if DUA amendments are needed for DICOM file transfers. XRays will have to be housed at BCH or each institution measures locally. Discuss study question and identify what variables are needed and then we can start to move forward.

**3:00PM NPO from Campbell clinic**

* What does data show? 1.1/10,000 Aspiration in Adults and 1.3/10,000
* Children standard guidelines are extended NPOs
* Hypothesis: Pediatric patient undergoing emergent surgery don’t have increased risk of pulmonary complications.
* In their institutional experience: Very few complications. But to power the study they will need ~2000 patients.
* Comments: Need Anesthesiologist on board.
* JSchoeneker: Do a non-inferiorioty analysis.
* **Action Items:** Revisit protocol with stats team and see if non-inferiority changes number required. Complete protocol and resend. Ask Spence to send data to BCH and paper so we can look at the numbers to try and identify what the “N” would be to do this study

**Saturday 11/18/2023**

**730 AM- Scott Rosenfeld- Non accidental trauma**

* Supported for POSNA QSVI, submitted final report
* Small studies led to AAOS recommendations for screening child abuse. Not sure how was indeed implemented.
* TCH has done background work: calculator with regression analysis with age being the stronger risk factor. Still not published and criticisms have been race and negative probability.

NAT with CORTICES:

* NAT variation: Bali et al. Aimed to describe institutional guidelines.
* 15 sites with NAT protocols:
	+ 25% age based
	+ 19 injury based
	+ 56% combination
* <50% protocols list RedFlags
* Paper being written. I will go JPO, JPOSNA, Pediatrics, Pediatric Emergency Medicine?
* NAT Retrospective Study
* 1263 patients
* 15 sites
* 23 months, 57% transferred to CORTICES institution. Qx: More NAT in transfers?
* Screening compliance? 56% Screened. 44% not screening-> 41% considered, but not formal follow up for NAT.
* Logistic regression: Decision to screen. Age, race, insurance, ADI, MOI:
* Multiregression:
	+ Age <15 months
	+ Black race Odds 3
	+ ADI More disadvantage increases the risk of ADI
	+ Race
	+ Both ADI and Black race remained positive risk factors.

Audience Comments:

* + Schoenecker: We have to be careful when we consider age, or race when you consider them in isolation. Making sure to have a model that can help screening but base it on age. Our punch line should be 18 months and under more sensitive and above 18 months other factors should be injury. Expanding to other fracture? i.e fractures under age of 1.
* Spence: For resource allocation, we shouldn’t leave from the discussion race and ADI. Maybe make it a different paper that talks more about disparities.
* Baldwin: If you take your stronger variable out (i.e age) and look what else contributes to the % under AUC.

**Action items:**

* + Rosenfeld to craft message carefully
	+ 3 Papers: Variation in screening protocols, Age cutoff for Ortho surgeons, other social risk factors for advocating resources.
	+ BCH Review Sites 32 and 38 ~0% NAT???
	+ Shore and Rosenfeld to meet with Trisha and to follow up with sites to clarify how NAT was classified and make sure that the results are consistent across our groups

**745 AM- Mark Miller- Tibia survey**

* Presented cases with Tibia Fractures and responses.

Audience comments:

* Shore: Present % of agreement. Choose a threshold of 70 or 80% agreement to say that a case reached consensus.
* A lot of controversy (good spirited) about casting vs rigid nailers
* Abstract
* Future directions: Prospective study and continue doing your regular practice with PROs.

**8:00 Schoenecker –SCFE**

* What kids are going to get AVN with SCFE?
* Etiology of AVN: Hematoma?, Torsion?, Avulsion?
* Predicting SCFE: Determine stability, reduce unstable, what to do with those avulsion?
* Survey CORTICES tool: Can we predict stability before the OR based on Xrays? No, it’s safer to take to the OR and check.
* How do you measure flow before going to the OR? Hard with Ultrasound.
* Need to find technique to measuring intraop, maybe similar sensor to what spine surgeons have.
* Or alternatively find test after right after surgery to see if you can determine flow after fixation.
* Future steps:
	+ 1) Abstracts for several meetings.
	+ 2) Come up with a protocol classification system in the OR of SCFE from CORTICES.
	+ 3) Look at your institution and inquire your hip colleagues.

**8:15 Schoenecker – ROCKLAKE EDUCATIONAL PLATFORM survey Decision making.**

Answer what is the thing ideally you would do, not what you will do in the current reality.

The idea is to do what is the BEST thing for the child?

Define within this timelines:

* Now less 1hr: -> Drop everything ED to OR
* Hot < 2 hours: -> I will go next after this case: 31.82%
* Cold < 6hours -> Next morning:
* Urgent <24hours
* Elective <1 week

**8:30 POSNA Tuesday afternoon meeting?**

Yes, 3-5pm or 4-6pm meeting and then dinner. Venmo Shore.

**9:30 AM Finances update:**

* Orthopediatrics giving us 45K as an educational grant. What are we doing in exchange so to speak? All large study groups in some shape or form the majority funded by industry. Few work-relationships were discussed in the past, but the only ones that have consistent have been OP.
* Baldwin will be working on behalf of CORTICES to develop a mini- fragment plate.
* For each project, members that want to participate with OP participants will receive Consulting fees. They are asking for 3-4 people per project. Consultant fees would then funnel back to CORTICES for research support.
* We would help them to develop a product. During development members get consultant fees. If product goes to market CORTICES receive royalty fees.

Audience Questions:

* How to do institutional disclosures?
* Would have to disclose Sunshine Act as Indirect?.
* Are other institutions receiving Orthopediatrics?

**Action Items:** Planned institutional vote in JSchoenecker app whether you support CORTICES members supporting OP for this fragment plate design. Those 3-4 that participate would receive consultancy fees, and if the project goes to market potentially royalty fees. Funds received will go to CORTICES and not individuals.

Spence: Before we settle in the motion to vote, we need a to settle in super majority like 70%.? Bylaws need some clarification and Spence/Shore will work on these gaps in the bylaws

*Motion to vote*:

* Any decision that relates to collaboration with outside entities 2/3 of individual members. (JShoenecker app)

10:00 AM Special study topics/ Napkin discussion

* FIN forearm refracture (Wash U group Zach Meyer et. al). A paper mentions 10% refracture rate with flex nails in doesn’t match current experiences.
* Ranking injuries (Vandy/ Schoenecker)
* Rosenfeld: Compartment syndrome during peripheral ECMO? There are a lot of articles already in Pubmed. Make sure we are not repeating study. Would be better to do a systematic review or a review article.
* Shore (Neonatal compartment syndrome) not for now but the future.
* Arkader Fish tail deformity for SC type II.
* Heyworth: Can we maximize the use of existing databases for infection MSKI?
* Schoenecker: He rather spend time in RO1 than trying to clean MSKI data issues.
* Heyworth: WU writing OTA online Pediatric Book Chapter, would be good for more Pedi Ortho Surgeons from CORTICES be authors of pediatric topics. Heyworth will reach out to people.
* Miller: Femur fracture brace? Experience?

11:30 AM Meeting adjourns