

Tracks:

- Improving Health Outcomes
 - Schools
 - Johns Hopkins Applied Physics Lab
 - Johns Hopkins Biomedical Engineering
 - SubTopics
 - Preventative Medicine
 - Predictive Health
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- Post-Operative Care
 - Jhpiego
 - Challenges in low resource settings
- Global Management of Chronic Disease
 - Schools
 - Johns Hopkins School of Nursing
 - Only Dr and MBA combined degree
 - Johns Hopkins Center for Humanitarian Health
 - Johns Hopkins University Center for Bioengineering Innovation & Design
 - MedHacks for a year
 - Accept 24 students a year
 - Deadline: Jan 1
 - How to deal with the most vulnerable people & give them the care they deserve
 - Recurring in nature > heavily VC funded startups

Elsevier

- Chris Larkin & Mevan Samarasinghe
- How to become a CTO?
 - "There is no try there is only do and not do"- Yoda
 - Hes wrong: we are trying this weekend
- How to take patient data and answer high level questions
- Pulling content data: what we should do about a problem
- It's not about pushing alg it's about understating the clinical response
- Turn information into actionable clinical decision support
- What are the questions being asked? 13q account for 80% of queries

Healthworx

- Aaron Feierstein
- CareFirst BlueCross BlueShield
- Opening innovation Center next year
- Seed Stage Funding

BME

- Data science
- Project based learning
- Promoting internships
- Masters
 - Doubled in size over the last 2 years
 - DATA SCIENCE is a track

MLH

- Hack.mlh.io
- Cup stacking 8PM
- Season Tshirts AFTER

PostOp Care

- HR
 - Having 1 nurse take care of multiple patients
 - Monitoring
 - Blood pressure pressure
 - Temperature
 - Urine output
- Equipment and Supplies
- Clinical Decision Support Systems
 - Montior's beep - Algorithm to monitor vitals
 - Green
 - Yellow
 - Red ACT FAST
 - Treatment recommendations based on output
- Resource utilizations
- Women that are dying from cesarean infection
 - Hemorrhage
 - Infection

- ANEMIA
- Hemoglobin of 5: 3x lower compared to avg
- Early identification and management
- People are dying because they are identifying problems too late on
 - Determine they do need surgery
 - Give antibiotics and iron if needed
 - Proper skin prep
 - Planning for the post operative care
 - We miss 70% of infections after they go home
 - Send pic to doctor
 - Maybe need to educate nurse aids to prevent infections
 - Patient education and proper care
- Standard operating procedures
 - Creating a universal standard
 - You would have to abstract data samples from each geographic location and then run some sort of model @ to abstract the most efficient version for each culture

Global Management of Chronic Disease Pitch Session:

- Problem: traditional diseases are still around but not as relevant. Nowadays, more focus on heart disease, diabetes, asthma, high blood pressure
- Managing non communicative diseases are harder to manage than malaria, tuberculosis, etc.
 - People are dying from these diseases.
- Need to improve supply chain.
- Dealing with refugees
 - Syrian: people with high education are fleeing their countries.
- People are living longer.
 - Kids and old people are not dying faster.
 - Have to deal with these groups' health issues
 - People are gaining weight (obesity)
 - High fructose corn syrup, alcohol.
 - People dying from car accidents is almost as much as kids dying of diarrhea.
- Can divide people into 2 groups
 - Natural
 - Typhoon, earthquake

- People's records and prescriptions being lost
 - Conflict
 - Syria
- Standardize treatment
 - People are dissatisfied with care so they find other clinics, solutions
 - Records need to move from place to place
 - Need prescriptions and disease record
- What we need to do to help physicians treat patients correctly
 - Up to date treatments
- Patients do not understand their own diseases
 - Some doctors do not thorough job of explaining problem and treatment
- Improve quality of care
 - Treatment
 - Training
 - Standardization
- Where to get needed medicine
 - May not be stocked in certain clinics
 - Go to private pharmacies for needed medicine
 - Real or fake drugs
 - Readability
 - Expiration
 - Damaged?
- Adequacy of clinical support
 - Adequate laboratory tests
 - X-ray sources
 - Specialist referral available
 - Access to routine check ups
- Build health literacy
- Managing lifestyle changes
 - Food
 - Drugs
 - Alcohol
- Continuity of care
- Solutions tried w/ problems
 - Paper records kept by patients or family/clinic or hospital/pharmacy
 - Electronic records in clinic or hospital/cloud

- Records on sim card, usb, e-drive
- **Some problems to solve:**
 - Think of something better that will help maintain continuity of care for displaced populations
 - How to find displaced people with NCDs?
 - How to be sure staff provide high quality up-to-date care
 - How to make sure right medicines are in the right place, right time
 - People know about their disease (Health Literacy)
- IDEAS:
 - Central DB?
 - Verification using id number or ssn or something along those lines
 - Assuming people have id numbers in their respective countries
 - Cell phone numbers???? Most people have phones