Minutes

2014-2015 Scientific Foundations Committee Members

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<th>MEMBER</th>
<th>COURSE/ROLE</th>
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<tr>
<td>Steve Katz</td>
<td>Chair (INMD 6814 Physiology)</td>
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<td>Sharon Allen</td>
<td>INMD 6803/6804/6805 ECM 1, ECM 2, ECM 3A</td>
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<td>Richard Amado</td>
<td>INMD 6815 Human Behavior</td>
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<td>H. Brent Clark</td>
<td>INMD 6819 HHD – N &amp; P</td>
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<td>Eli Coleman</td>
<td>INMD 6816 Human Sexuality</td>
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<td>Greg Filice</td>
<td>MS 2 ID Thread</td>
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<td>Glenn Giesler</td>
<td>INMD 6813 Neuroscience</td>
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<td>Bob Kempainen</td>
<td>INMD 6808 HHD – C &amp; R</td>
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<td>Anne Minenko</td>
<td>INMD 6809 HHD – R, D &amp; O3</td>
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<td>Kaz Nelson</td>
<td>INMD 6819 HHD – N &amp; P</td>
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<td>Catherine Niewoehner</td>
<td>INMD 6810 HHD – R &amp; E-R3</td>
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<td>James Nixon</td>
<td>INMD 6803/6805/6806/6807 ECM 1, ECM 3A/B/C</td>
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<td>Jan Norrander</td>
<td>INMD 6801 Human Structure and Function</td>
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<td>Deborah Powell</td>
<td>INMD 6817 Principles of Pathology, MS2 Pathology Thread</td>
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<td>Michel Sanders</td>
<td>INMD 6802 Science of Medical Practice</td>
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<td>David Satin</td>
<td>INMD 6803/6804/6805/6806/6807 ECM 1, ECM 2, ECM 3</td>
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<td>Lisa Schimmenti</td>
<td>INMD 6802 Science of Medical Practice</td>
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<td>Peter Southern</td>
<td>INMD 6812 Microbiology</td>
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<td>Heather Thompson Buum</td>
<td>INMD 6811 HHD – GI &amp; Heme</td>
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<td>Doug Wangensteen</td>
<td>INMD 6814 Physiology</td>
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<td>Tony Weinhaus</td>
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<td>Kevin Wickman</td>
<td>INMD 6818 Principles of Pharmacology</td>
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<td>Mary Ramey</td>
<td>MS2 Lab Med/Path Coordinator</td>
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<td>Kevin Kay</td>
<td>MS2 Student Representative</td>
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<td>TBA</td>
<td>MS1 Student Representative</td>
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<td>Mark Rosenberg</td>
<td>Vice Dean for Medical Education</td>
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<td>Kathy Watson</td>
<td>Senior Associate Dean for UME</td>
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<td>Jeffrey Chipman</td>
<td>Assistant Dean for Scientific Foundations</td>
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<td>Majka Woods</td>
<td>Assistant Dean for ACE</td>
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<td>Anne Pereira</td>
<td>Assistant Dean for Clinical Education</td>
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<td>Marshall Hertz</td>
<td>Faculty Advisor</td>
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<td>Brad Clarke</td>
<td>ACE Curriculum Specialist</td>
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<td>Leslie Anderson</td>
<td>Chief of Staff, Medical Education</td>
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<td>Scott Slattery</td>
<td>Director of Learner Development</td>
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<td>TBA</td>
<td>Medical School Registrar</td>
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<tr>
<td>Brian Woods</td>
<td>Lead Course Manager</td>
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Guests: Chelsey Jernberg
The meeting was called to order at 7:33am by Steve Katz.

Minutes
Draft minutes from the August 1 meeting were reviewed. It was moved and seconded to approve the August minutes as submitted. The motion passed unanimously.

Announcements
Suzanne van den Hoogenhof would like all Annual Course Reports from 2013-2014 for the state of the curriculum report preparation. Submit directly to Suzanne by 9/12.

USMLE changes to begin in 2016:
   Step 1—additional focus on QI, patient safety. We’ve already begun integrating these in our curriculum through ECM and will be expanded into other courses.
   Step 2 CK—QI, public safety/health, interprofessionalism. We’ll continue our initiatives in these areas that have already begun in clerkships.

More information is available on multiple bulletins on the USMLE web site but they are not clearly or easily available, however. USMLE is trying to integrate clinical realities into Step 1. There will be sessions about these changes at the fall AAMC meeting. Early registration fees end at the end of September.

The QI/patient safety workgroup, led by David Satin, will begin in December 2014 to integrate QI/patient safety in all courses in years 1 & 2.

Annual Course Reports
Principles of Pathology – Deborah Powell
See attached ACR document for details.
Course objectives are available on the ACR.

Evidence of outcomes being achieved:
No students failed this year! That’s a 1st, but the grading rules had to be changed. Minimum scores were adjusted for seven students who barely failed either the lab or the written exam. Two of the seven have availed themselves of the opportunity offered by Dr Powell to talk to her about their course performance.

Students believe the objectives were met this year.

Working well:
Lab comments are getting better. The lab is becoming more participatory and case-based; it’s not a mini-lecture, but is more hands-on. One continuing area of concern here is the variability of the lab instructors. Comments relate to the ability of the lab instructors.

At this point, there is a lack of faculty for labs. In the past, senior residents have been used. Dr Powell tries to have two faculty members per group, extending from the 1st year all the way through the 2nd year pathology threads. But it’s time-intensive for the faculty, and recruiting is difficult.

Bad comments are dwindling.

Areas of Concern:
Not enough practice questions or old exams. Students always want more. This is a topic to be discussed in a future SFC meeting.
ANKI cards have been created for students, last year with the help of students. However, there were no student volunteers in 2014 to help create the cards, so students were annoyed that they did not get them sooner!

ISP cases: just one part of the course. In groups of 4, they get they get an image. Using the image, they decide the diagnosis, check that it’s correct with the lab advisor, and then write a 3-4 page paper explaining the diagnosis, citing sources and references. This is a team exercise as well as diagnostic test. The quality of the case reports was higher this year, as there was a sample provided to the students. There was a prize for the best presentation and there is also peer evaluation for the projects.

Students did not like the grading process. The ISP grading will be adjusted for next year, as the required points to pass were too low. This project constitutes only @13% of the total points.

Areas for Improvement:
There are now opportunities to attend an autopsy at the Medical Examiner’s office during ILT time. The Medical Examiner will come to give a lecture, as well.

Grading for Honors & the ISP cases will change. Weekly review questions will be added. The lectures will be reordered to redistribute material more evenly throughout the course.

Challenges this year:
Number of faculty—There are not enough.
Course evaluation process—This year’s evaluation didn’t get done in time with MEDED office personnel changes. The student Peer Evaluation didn’t get sent out/opened in time. The evaluation deadline needed to be changed because of this. And students don’t take it seriously, even though it’s part of the grade calculation. Also lab instructors were left off of the course evaluations, so this year’s lab instructors have no data on their teaching.

Questions/Comments:
Evaluations
The Pharmacology evaluation didn’t go out when supposed to, as well. There was a small glitch in Physiology. Microbiology had an extra, extraneous section on its evaluation.

Dr Watson emphasized that UME take course evaluations very seriously and is working to get the evaluation process clearly laid out and functioning smoothly. Dr Powell emphasized that Course Directors need to work with the evaluation manager to get their evaluation formatted and reviewed early in their course, in order to include questions that are unique to a course, as well as the standard core questions for all courses.

Dr Katz mentioned that the dental school requires evaluations in order for students to get grades! Dr Watson agrees that students should not get points if they don’t submit the evaluation if it’s required, but that students need to know clearly how the evaluations are used and the importance of the feedback.

If anyone has suggestions about how to get students to complete the Peer Evaluations, send those suggestions to Dr Powell.

Student Issues/Concerns/Questions
No Agenda Items
Discussion

2014 Summer Enrichment pilot – Scott Slattery

Slides included at end of minutes. Highlights include:

The program prepares students before enrollment in order to get them set for the ‘firehose’ of information that they encounter. It includes both academic & cultural (acclimation) components. This year was a pilot program in order to see what would be effective.

There were 6 different touchpoints to select students. BCPM = Biology/chemistry/physics/math. 8 students of 22 from the risk-factor categories responded to the invitation; 8 students from the general class invitation responded; there were 16 students total admitted to the program.

4 objectives

- focused on academic preparation
- medical school acclimation
- longitudinal support: weekly contact with a peer mentor throughout the 1st year
- pilot program: what works, what can be changed for successive years, ongoing assessments

The program schedule ran over seven days, with a combination of academic experiences and wellbeing resources. Additional elements included lunches with faculty & staff, longitudinal support, and assessment and evaluation. There was a self-assessment at the first meeting and again after the program was completed. (The post-program evaluation was very positive. The key feature is that connections with the MS2 peers and tips/ advice from them were most valuable.) Additional self-assessments will come at the end of semester, the end of year, and bi-weekly throughout the year.

There was concern expressed by the committee that one of the mentors was a student who had failed courses in the first semester. Dr Slattery explained how the peer mentors were chosen, and views the mentors who struggled academically as representative of students who struggle and they were there for the experiential side of the student experience.

Dr Filice wondered if the year 2 students who struggle are the same in year 1? Sometimes yes/sometimes no. There is no way to predict with certainty; circumstances are a major factor. This program will be a good way to watch certain students through the two years.

Students highly recommend the program for next year. Getting to meet the staff and faculty was important. Future considerations include: assessments, use as a recruitment tool for admissions, formal study of the program and its participants, assess the cost effectiveness of the program.

Data Integration Project – Mark Rosenberg

Slides included at end of minutes. Highlights include:

Three observations to begin:
1. What we do in MedEd should be data driven. 2. There are many stakeholders with many different questions. 3. There is a lot of data, in many different places, in many different kinds of spreadsheets.

Some big questions are: Can we predict who will be a good doctor? What are those characteristics? Does where you train effect your practice?
Not a week goes by when OME is not asked by someone for some kind of data. At this point, there are lots of data sources, so most of the digging is a manual process to gather & sift this data. Research is important, as well.

OME is collaborating with AHC-IT to develop a data integration interface to report <70 data sources in a clear fashion, perhaps in a dashboard-type format. There are also aspects of sensitivity of the data, i.e. human subject approval for scholarship, and who gets access to the data. But the project is underway. It’s not easy & it’s not cheap & there is no timeline at this point, but OME is working with AHC-IT to develop that timeline.

Course Directors should submit the kinds of questions or data needs they want. Students were also asked about what guides their success and academic process. Questions from Data Integration paths are primary. This is a problem and a process that many medical schools across the country are struggling with?

Question: How far back should be go? 5 years, when new curriculum was in place? When certain requirements were dropped? The general question is more important: has the change in requirements affected the track and number of failures?

Question: Can we poll other schools, such as the Carlson School, who may need the same kind of measurements? How can we find out the quality of a doctor after they graduate from med school? Is this even trackable in the short & long-term? Prediction is very hard, as is tracking, as once a student graduates, the Med School does not keep in touch with them.

The goal is to have all the data in a single database warehouse. This is challenging because all the sources don’t talk to each other, correlate with each other, nor is the data labeled in the same way.

The NBME & AAMC data commons can be a guide for how we organize/sift data. OME and the AHC-IT could connect and investigate how this was accomplished.

Question: Are the benefits of the database worth the cost of producing it? Are these data numbers going to change who is accepted or whether changes are made to the curriculum? Would OME be doing it just to do it? The information would be used as a data-driven approach to drive strategy.

It will be important and interesting to see the correlations between data and student performance, and there needs to be a clear process for how the data will be used. Two ideas: 1. Perhaps this can be a way to refine and focus medical education; 2. Perhaps this data project can help support guidance during a student’s time in medical school.

FUTURE AGENDA ITEMS

Suggestions from Course Directors for future SFC meeting topics:

- Testing/practice questions
- ExamSoft & BlackBag assessments
- ILT feedback
- BlackBag search functionality

The next SFC meeting is October 3, 2014.
The meeting was adjourned at 9:03 am.

Respectfully submitted,
Brian Woods
Annual Course Review (ACR)
University of Minnesota Medical School

Course: Principles of Pathology – INMD 6817

Course Director(s): Deborah Powell, MD

Instructional Review Timeframe (End of Course):

1. Briefly describe the learning outcomes for your course
   1. To develop an understanding of the primary processes underlying the various types of human disease (cell death, inflammation, repair, Neoplasia, etc.)
   2. To develop a fundamental understanding of the morphologic consequences of various disease processes and the effects of disease treatments.
   3. To develop an understanding of the relationships between abnormal function and altered morphology

2. Describe what evidence you have that the outcomes are being achieved. Include student review information.

   No students failed the course this year.

   “The course objectives were made clear to me.” – 4.1/5
   “There was close agreement between the stated course and session objectives and the information taught.” – 4.0/5
   “Overall, I have acquired an understanding of the stated course objectives.” – 4.1/5
   “The objectives addressed within the course were well integrated.” – 4.0/5
   “The clinical relevance of the objectives covered within the course was clear.” – 4.3/5

3. Describe what is working well in your course.

   We are getting much better comments overall about the labs.

   “I liked the case-based format. Based on talking to classmates, it sounded like the quality of the lab lectures varied significantly from group to group. I personally had a great experience in lab, but unfortunately I know that many of my classmates did not have a similar experience.”

   “Lab was awesome. I thought the format was great, and I don’t know that I would change much.”

   “The posted answers and instructor Powerpoints were very helpful for lab. It was also very kind of the instructors to make Anki decks. THANK YOU!”

   “Also, our regular faculty member, whose name I cannot remember just now – starts with a W, tall thin man with curly grey hair and glasses – he was amazing. SUCH a wonderful teacher, allowing us to come to answers on our own, correcting us when we were wrong and guiding us to the information we needed. So
helpful. The cases that my group worked on will stay in my mind for a long time now because we had to figure it out on our own, rather than being passively sponging information from a professor.”

“I really enjoyed the lab. I felt the material really helped to solidify our knowledge and material of the course. The coagulation lab was fantastic! The instructor we had that day had great energy and really was passionate about the material, which only helps further to be excited about the material and learn it. The one thing I could complain about was that the lab went by way too quickly, so I did not have enough time to keep up and take good notes.”

“I liked the interactive format of lab sessions. It would be great if the labeled slides and anki cards could be released after each session, instead of all at the end. A practice lab exam about halfway through the course would be so helpful as well.”

4. Describe any areas of concern.

“There were adequate opportunities for non-graded self-assessments (i.e. quizzes, discussion questions, practice or review questions.” – 2.6/5

Some lectures created problems, especially on exams. “The graded assessment(s) appropriately tested the course objectives.” – 3.5/5

ISP cases – There was some concern about the grading of the ISP cases (too few points for P). Also concern that it was a group exercise with a peer evaluation.*

5. Describe any changes you intend to make for the next academic year.

1. Added an opportunity for students to attend an autopsy of the ME office – will extend this to 2nd year as well and will add a lecture by the Medical Examiner on the autopsy.
2. Will change grading for Honors and ISP cases.
3. Will add some more weekly review questions.
4. Will reorder some lectures in response to student comments. This second part of the course was too intense.

*6. Challenges this year.

1. Course evaluation.
2. Numbers of faculty
2014
Enrichment
University of Minnesota Medical School
Rationale

- Mitigate 1º transition flush/rush (drinking from the firehose)
  - Academically
  - Culturally (acclimation)
- Optimize academic performance through promotion of protective factors / buffers -
  - Belonging
  - Confidence / empowerment
Selection (7 touchpoints)

- MCAT ≤ 27
- Age ≥ 25 y.o.
- Last school year ≤ 2011
- Self-identified disadvantaged
- BCPM gpa ≤ 3.30
- Non-sciences ugrad major
Cohort

- **Phase 1:**
  - 3+ factors ($n=15$)
  - 2 factors ($n=5$; MCAT + BCPM)
  - 2 factors ($n=2$; BCPM + non-science)
  - **N=22 invites; n=8 participants**

- **Phase 2:**
  - ‘Open’ invitation to MS1 class
  - n=25 responded; **8 accepted** (5 had 1-2 factors)
  - N=16 total participants
Objectives

1. Academic preparation for MS1 (clear academic focus vs. Orientation week foci)
2. Acclimation to the Medical School (culture, faculty, staff, ‘basics’)
3. Longitudinal support (to promote --- factors such as ‘belonging’ & self-efficacy, and consolidation of effective practices throughout MS1)
4. Pilot program
   1. Assess efficacy of approach + cost-effectiveness of program structure;
   2. Create initial online ‘presence’ and infrastructure;
   3. Create procedures and means for evaluation / assessment.
Program Schedule

- **Thursday**: Welcome / Pre-program assessment
  - Peer mentor introductions
  - Green Line + Lowertown dinner)
- **Friday**: Academic approaches / strategies
- **Weekend**: Campus/Community Exploration
- **Monday**: Fall course introductions
  - Sample lectures
  - MS2 peer mentor ‘tips’
- **Tuesday**: Applications
  - Resources ‘lab’ (Tuesday)
  - Technology resources
  - Bio Med library intro
- **Wednesday**: Closing / Post-program assessment
Additional elements

- **“Connections” luncheons**
  - Friday: MedEd staff
  - Monday: Student groups / student council
  - Tuesday: Spring/Summer Course Directors & Course Managers

- **Longitudinal support**
  - Ongoing, weekly consultation with peer mentor / tutor throughout MS1

- **Assessment/ Evaluation**
  - Belonging
  - Self-efficacy
  - Within group comparison
  - Matched sample exploration
Post-Program Touchpoints
(4.00 scale)

- Met expectations? 3.73
- Would recommend for 2015? 3.93
- Better prepared? 3.93
- More confident (re: expectations)? 3.67
- More confident (re: awareness of resources)? 3.87
- More connected to peers/Med. School? 3.67
Post-Program Touchpoints
(4.00 scale)

- Approaches for acad. Efficiency/Effect.? 3.80
- Enhanced overall conf. to manage academics 3.73
- Helpful suggestions from Course Dirs.? 3.47
- Provided opp. To meet variety of staff, etc.? 3.67
- Intro. to options for informed choices? 3.73
- Better understanding of the culture, etc.? 3.67
Most helpful?

- M2 sharing their study strategies and struggles was most meaningful. Also meeting with course directors was also very helpful, most importantly what to expect for the first day of class;

- Getting to know my mentor and having access to my mentor all year;

- I found the specifics of the different technological avenues available for our use was very helpful. I also found talking in small groups about your fears, relationships, culture of medical school, etc. extremely helpful;

- I found the time and stress management session to be the most helpful;

- I think that having the peer mentors share their experiences and providing specific input about the classes and the demands of each class was extremely helpful. I still think the material is difficult but after hearing the advice from the peer mentors, at least it feels manageable;

- Everything to be honest.
Would recommend?  cont.

- Yes. It's a great way to preview the material and demands of medical school in a low-stress environment. The MS2s were invaluable resources of advice and information about how to effectively tackle Year 1;

- This program has been very beneficial in familiarizing me with the school, staff and students while simultaneously providing me with so many helpful tips in regards to resources and preparing academically. It is hard for me to imagine how this program would not be beneficial to any future participant, as even for someone like me who went to the UMN for undergraduate I have learned a lot from the program. It was definitely a great experience socially and academically to connect with the medical school;

- I would definitely recommend this program to other students. I think it is very beneficial and gives you a sense of relief and empowerment prior to starting school, especially if you have been out of school for a few years.
Would recommend?

- Yes, I would without a doubt. It was a lot, a lot of information; perhaps a bit overwhelming. Yet I would much rather be a bit overwhelmed but still have all the information, than to not have any of this helpful information at all. That would be even more overwhelming, I am sure;

- Definitely would recommend! I would also suggest to extend the program to maybe 2 full weeks so students can have more time to explore and reflect their understanding of what medical school might be;

- The people were wonderful, and it was a great transition into this new chapter of my life. I feel more comfortable with the UMN campus, I am less anxious about meeting my classmates, and I think I will be able to go at the academic work with a strong plan in place. It was wonderful.
Surprises?

- The Friday session about stress and time management. I really didn't think I had anymore to learn/improve in those areas but found out that I actually do;

- I found just having the faculty/staff members of the school be around us for many of the activities and lunches really allowed me to be more comfortable in their presence;

- I found the workshop presented by Jim to be helpful. The resources will be used during FCT and ECM. As a future physician, it is important to be informed and up to date of medical research and technology;

- I didn't expect that meeting and getting exposed to the Med Ed staff would feel so empowering, but I really feel that I have resources available to me that I'm not sure I would have known existed.
Future considerations

- Assess outcomes / performance of participants + value of ongoing peer mentor groups (longitudinal component);
- Explore formal study of Enrichment participants vs. controls in MS1 class;
- Include as recruitment tool;
- Expand on-campus offering:
  - "Local" option (June)
  - Out-of-state option (late July)
- Refine online (Black Bag) component;
- Assess cost effectiveness (refine as indicated).
University of Minnesota Medical School Data Integration Project

SFC – 9/5/14
Objectives

- Educational improvement
- Identification of trends and predictors
- Reporting efficiencies, e.g. LCME
- Provide a secure and appropriate access point to data
- Eliminate redundancies and conflicting data
- Reduce costs
Project Scope

- Project Sponsors - identification and measurement of key metrics and analyses.
- Technical Team - development of data integration interface:
  - dashboard
  - canned reports
  - ad hoc reporting and downloads
Deliverables

- Executive Dashboard (mobile friendly)
- Canned reports and *ad hoc* functionality
- Query and export of raw data
- Technical documentation
- Recommendation for future expansion
Risks

- Sensitivity of data
- Multiple stakeholders with different views of which outcomes are most important
- Shift in web or mobile technology
- Data that is unreliable or outdated
Work accomplished since 2012

- Identified analyses and key metrics necessary to support Medical School strategy
- Analyzed 70 data sources from which to measure
- Determined most intuitive method of measurement and delivery
- Developing a data integration interface
Data Integration Paths

- How do prematriculation factors predict performance in year 1?
- How do year 1 milestones in professional & academic development (exams, etc) predict clerkship performance?
- What factors contribute to failure or success in year 3 & 4 clerkships?
- What are factors that indicate a high risk for not matching?
Student questions

1. What did successful students do (research, publications etc) in order to match into the specialty of their choice, specifically more competitive specialties(orthopedics, urology, dermatology)? How can this guide student choices?

2. How important in the grand scheme of things are 1st and 2nd year grades as long as you pass your course work i.e. (is honors really something a student should put at the top of their priority list.)?