Advisory Council Meeting - September 15, 2007

Agenda

The Advisory Council began a discussion and debate on the Potentials and Limitations of Distance Learning in New York City on March 17th, 2007. The first session was disrupted by a severe snowstorm and many invitees could not attend and thus did not have the opportunity to participate. The discussion will continue in a second meeting scheduled for 10:00 a.m. on September 15, 2007 at the Hilton Chicago O'Hare Airport. Council members, medical educators, regulators and medical schools using distance learning will help to define its current potentials and limitations. The Secretary of Council Section One, Professor Mala Chinoy, PhD, Pennsylvania State University School of Medicine, will tape and transcribe the meeting. The result may lead to the Council recommending guidelines or even new global accrediting standards. A transcript and documentation of the first meeting may be found on our website at http://www.iaomc.org/council.htm. All medical regulators and educators are invited to submit any additional written material they judge appropriate.

Distance Learning/E-learning

The Chair of the continued discussion will be Henry Haddad, MD, Associate Professor of Medicine, University of Sherbrooke, IAOMC Board Member and Advisory Council Committee Chair, Section Three

10 a.m. Meeting opens. The Chair will review the previous discussion and report on, "Canadian Medical Schools Utilization of Distance/E-learning"

2. James R. Hilliard, MD, Associate Provost, Human Health Affairs, Michigan State University, IAOMC Board Member and Site Visitor Panel Chair will report on; "US Medical Schools utilization of Distance learning/E-learning "

3. E. Haavi Morreim, PhD, Ethics Professor University of Tennessee, Acting Secretary of IAOMC's Ethics Committee and invited Robert Baker, PhD. Will present; "Medical Ethics – Distance learning/e-learning". Dr. Morreim will also report on the Ethics Committee email vote that has been added to the Board's agenda.

4. Surindar Cheena, PhD, Vice Chancellor Oceania University of Medicine, Samoa and Christopher Dudley, e-Medical Education, Miami, "How a distance learning/e-learning program in medical education works",

12:30 to 1:30 Break for lunch

5. Sayed Rahman, MD, member Advisory Council Section One, Assistant Professor Jawaharlal Nehru Medical College and Mala Chinoy, "India's Medical Schools Utilization of Distance Learning/e-learning."

6. Amin Ali Muhammad Gadit, MBBS, MRCP, Psych. FRCP, PhD. Member Advisory Council Section three will report on, "Pakistani Medical Schools Utilization of Distance Learning/e-learning "

7.   Reza Ghadimi, PA is a member of the New Mexico Board of Medical Examiners and a member of our Advisory Council Section Two. He serves as Chair of a sub committee on Physician Assistants. He has provided a report on "Physician Assistant Programs Utilization of Distance learning/e-learning"

8. Elizabeth Katchur, PhD., Educational Consultant, and member of IAOMC's Advisory Section One will report, "Important Ingredients for Effective Distance Learning/e-learning."

See you at the meeting!

Bernie Ferguson, JD, President

International Association of Medical Colleges

An open, democratic, not for profit, accrediting medical college association dedicated to improving medical education and its regulation.

IAOMC Advisory Council Meeting

September 15, 2007

Chairman – Let's start with everyone introducing themselves.

MG - Michael Gordon, University of Toronto, Geriatrics.

SR - Dr. Sayed Ziur Rahman, Aligardh Muslim University – Medical College, India

BF - Bernie Ferguson, President, IAOMC

BB - Bob Baker, Newland College and Newland Mt. Sinai Bioethics Program

EK- Elizabeth Kachur, education consultant.

HM - Haavi Morreim, University of Tennessee, Memphis, College Medicine, Bioethics.

CD - I'm Chris Dudley, Oceania University of Medicine based in Miami, Florida

SC - Surindar Cheema from Oceania University of Medicine

MC - Mala Chinoy from Penn State College of Medicine

HH - Henry Haddad I'm a gastroenterologist and Professor Emeritus at the University of Sherbrooke College of Medicine in Canada, and welcome to you all. Bernie asked me to chair this meeting. Can I get an idea of who has to leave and at what time?

MC - I'll be here all day.

MG - I need to leave around 4:15.

CD - 2:00 - I'm going to a football game

SC - Me too

HH - So we can stick around until 4:00 if we have to?

BF - Yes.

HH: Okay. Now what I am going to start with is Bernie had asked me to in the meeting in New York to make a presentation on my point of view and what in fact, I think, is the Canadian point of view on distance/computer learning, so I am asking you to bear with me for about a dozen minutes while I read what I have prepared.

What I would like to do is start with a quote from one of my favorite ethicist, who is Edmund Pellegrino who I had the pleasure of meeting and attending rounds with him in Georgetown. What he said is that medicine is the most scientific of the humanities, and the most human of sciences." And that is so true, and I think that is what we try to instill in our students. Now, medical schools are continuously, and I think we can all agree to that, looking at their curriculum, questioning their curriculum, wanting to make changes about the curriculum, and the question is why.

Well, first of all, there are changes in societal expectations on the part of physicians. There is a continuously changing physician/patient relationship. There is the presence of the Internet, Google, and many of us here agree that Dr. Google needs to go back to medical school. There are changes in health care delivery. There are advances in medicine. There are advances in learning technology and we are going to learn something about this here to day. The healthcare workforce is missing in a lot of parts of the world. It is in flux. Delocalization is having an effect on medicine and multi-culturalism, even in small communities like where I come from. Multiculturalism is really changing a lot in the way we look at things, the way we practice medicine. And looking at people from different cultures who don't have the same points of view as we do.

In 1981, the AAMC created the GPEP Panel. General Professional Education for Physicians, and there were two ideas behind the GPEP Panel. That was in 1981 – I am talking about 26 years ago. First of all, they wanted to have an agreement on the knowledge and skills that all physicians should possess to practice medicine in the 21st Century, which is our century, and secondly, and very important, they wanted to promote debate on the personal qualities, values and attitudes that physicians should possess.

The final report came out in 1984. In it the Panel asserted that all physicians should possess a common foundation of knowledge, skills, attitudes and values. They further recommended that each medical school faculty specify the attributes appropriate for students graduating from the school, and adopt learning objectives for the curriculum consistent with these attributes. Consensus was reached among the leaders of the medical educational community on what are the attributes that physicians need to possess to meet societal expectations and they enumerated four: Physicians must be altruistic, knowledgeable, skillful and they must be dutiful.

Have you been introduced?

RH – I'm Randy Hillard.

HH - Hi, Randy.

RH - Michigan State University.

HH - I am just getting ready to give a presentation that I should have given in New York. In 1984, my dean, after attending a meeting where a GPEP Report was presented, decided that a major, radical change to our curriculum was needed. In fact, the University of Sherbrooke was the first Canadian medical school to do a change from a traditional curriculum to a completely problem-based learning curriculum. This took the

4

form of changing our curriculum, and the traditional content-laden one to a problem-based one. This decision, and I was part of it as Vice Dean, was received with a great deal of resistance from both the chemical and basic science faculty. Many felt that the proposed changes were too drastic and not needed. Had not our students performed well at both the Provincial and National examinations, and the faculty also did well on accreditation surveys.

There had been many innovations since the faculty first received its students in 1967. That was the time when the Canadian government had opened four new faculties of medicine in Canada. One was in Newfoundland Memorial, University of Sherbrooke, McMaster, and one of the two in Alberta.

MG Edmonton.

HH: Edmonton because they were foreseeing a shortage of physicians and they opened four new medical schools. What was not realized about faculty and was a major argument …

MG: Calgary.

HH: It's Calgary? Okay. What was not realized by faculty, and was a major argument for change was that the environment in which medicine was practiced was rapidly changing and we were not keeping up. Many observers within and outside medicine, had expressed concerns that new doctors were not as well prepared as they should be to meet society's expectations of them. For more than a quarter century, that is in the 60's and 70's, and at least I lived through that, the promise of curative medicine had dominated the thinking about medical practice and medical education. That is a very important point to realize. That is what we were brought up on – curative medicine. There had been a devaluing of the humanistic dimension of medical care and dissatisfaction this had on doctors' professional behavior. People wanted doctors who were able and willing to communicate more clearly with them and their families – doctors who would respect them as persons and honor their wishes about their care.

Over the course of their education, medical students need to develop an identity that involves a deep upper understanding of what it means to be and what is expected of them as physicians. These essential tasks must be cultivated at the start of the medical education by a structured system that is focused on professionalism. The content of the curriculum must be aligned with evolving societal needs, practice patterns, and scientific developments. We must produce physicians who are prepared to serve the fundamental purposes of medicine. To this end, physicians must possess the attributes that are necessary to meet their individual and collective responsibility to society. They must be altruistic, knowledgeable, skillful and dutiful.

Continuing on the same line of thought, in 1996, the Royal College and physicians and surgeons in Canada defined what they felt were essential roles and key competencies required of all physicians, in its CanMEDS 2000 document. Their main objective in delineating this competency framework, was to assist future physicians to respond to the innumerable health challenges as health care providers, challenges that require them to function in an ever-changing healthcare system.

This framework was based on EFPO, that is Educating Future Physicians Ontario and originally was the work of four, no five, med schools in Ontario. What are these competencies – and we stress very much when we are assessed by the Royal College to help with accomplishing these factors. Medical expert, communicator, collaborator,

manager, health advocate, scholar and professional. And these are the competencies that are followed – very strictly in Canadian medical schools.

Our job description as educators has changed since I first started some thirty years ago. I was informed by my dean at that time that my responsibilities were to preserve knowledge, transmit knowledge and develop new knowledge. There was not much talk about professionalism then. Had they established in broad terms what I feel is our responsibility, today – today as medical educators, to our students, our profession and society as a whole – what role do I see that CBL (computer based learning) has in this vision?

1. CBL is not a new instructional tool. Computers have been envisioned for educational purposes since shortly after their advent. By the end of the millennium, the web was well entrenched in medical education. Numerous studies on CBL have been put out. What have we learned? Adding CBL to a course usually improves knowledge and sometimes improves skill.

2. Education of future physicians can be enhanced when medical informatics is introduced into a curriculum in conjunction with PBL (problem-based learning). Computer based learning is usually as good as traditional courses. CBL is usually well received by learners and in enthusiasm, they win over time. People like interactivity. I think we have to admit that CBL is here to stay.

3. Computers will have a role in medical education and you also have to admit that CBL will not always be the best tool to facilitate learning. What are the potential advantages? Distance learning, the economy scale, flexible scheduling, ease in updating, individualized instruction, globalization, especially between institutions.

There are also very serious disadvantages: Social isolation, interaction with peers, mentorship – they all suffer. De-individualized instruction, contact with patients is a stimulus to learning. Danger that students with few social skills will thrive. Doctor-patient communication is in danger of being neglected. The humanist environment itself maximizes its students' personal and professional development. It is very important. Campus life is very important. We lived in campus life. It is very important in professional development. High development and maintenance costs – and technical problems. I'm just about finished.

What all of this says is that we should not use CBL for the sake of CBL. CBL must be at the service of apprenticeship and not apprenticeship at the service of CBL. I do support the integration of technology and medical education for delivery of the educational program, as well as for management and evaluation of the curriculum. But I do fear that learning outcomes will be negatively affected and technology and medical education if sufficient attention is not paid to creating high quality, interpersonal learning experiences. Our stated goal as medical educators is to foster caring relationships.

Many of us have come a long way from the traditional content-heavy curriculum which we can agree has less and less place in meeting the expectations that society has of today's and tomorrow's physicians. Let us not replace the lecture hall by a computer room. Yes, computers have a role. The right balance of in-person and computer-mediated communication must be found. Education cannot and must not be all virtual. The balance will vary by the nature of the activity or attributes to be mastered. Instead of deciding to use CBL and then working to fit into the curriculum instructional objectives should be defined first and CBL only used when it appears to be the most effective means of achieving them.

Instead of deciding to use CBL and then working to fit it into the curriculum, instructional objectives should be defined first, then CBL used only where it appears to be the most effective means of achieving them. So that is, I think, and I think it is the opinion of most Canadian universities – medical faculties.

MG: I am from Toronto, and I sit on the Council of College of Physicians of Ontario, so that is our regular trade party, and also the Royal College, and there is more and more recognition and movement to focus on what is perceived as a lesson of the concept of professionalism. So a lot of colleges, particularly colleges in Canada, we are all refocusing on professionalism because there is a sense that it has been lost and certainly the Royal College, and the College of Family Physicians really is emphasizing the importance. And something interesting, we have a program – at the University of Toronto, is a computer-based evaluation of educational experience, so then nobody is afraid of doing an assessment that will turn around and reflect on them when they are being assessed, so both the trainer and trainee can do it anonymously and then. They know how they are assessed without being individualized. Of the commentaries, many, many, many, many relate to the Mentorship quality, the interpersonal quality, the relationship quality, separate from the content. Most of us have content – we can do content, but a lot of the commentaries, pro and con, relate to how they see us as individuals relating to those we care for. So I think this supports conception that we are talking about and certainly that is the perspective that I have. And even though I come from the world of technology and I use it a lot, I agree with you completely.

HH: Even the Canadian Medical Association is spending an enormous amount of energy, time and money on the issue of professionalism. Even our negotiating partner, the Provincial Divisions are spending a lot of money on looking at professionalism. There are really a lot of people – the hot tenders in Canada are professionalism. As a former dean of McGill and his wife, Richard Cruse and Sylvia Cruse, they are Americans but they moved to McGill and he was an orthopedic surgeon and became Dean at McGill and retired. He spent his whole career on professionalism. He has written extensively. He has lectured all around the world. I saw recently he was flying to China to lecture on professionalism. So, Richard Cruse and Sylvia Cruse have really the – they are very much in demand to talk to / on professionalism. I don't know if you have any questions, but I think that Michael agrees that is the point of view and I have stated that it is just a personal point of view, but it is really the point of view of the accrediting bodies in Canada, the licensing bodies in Canada. And I think our medical schools also.

What I would tell you, Ben had asked me to send out a little inquiry to the Canadian medical schools and I did my duty. I called the Association of Canadian Medical Colleges, it was presented to the Chair, to the Vice Dean in charge of undergraduate education. I talked to the CEO and he was very happy about this. The questionnaire was sent out twice. My feeling was we weren't "clear, clear" on what we meant about distance learning. I have three answers. I got two from our oldest medical schools, UFT and McGill. And one from the newest medical school, the North Medical School. The one from UFT said, and again she was – she said, "If I referred strictly to core teaching via computer-based means for those distanced on the academic center, the answer is no, we don't do that."

MG: That's Kathy Weissan?

HH: Adrian Brown is a Director of Medical Education. From the Northern Country Medical School, now they do a lot of CBL but I don't think it's distance learning. They do 75%, their teaching, from what he gives me here, says "All courses all years, we do

about 75% of the teaching using computer-base." From what I read, and I went on their website, and I tried to find out, it doesn't look like what we mean by a virtual medical school. "Many of the students' learning materials are provided through electronic communication – CD Rom, Internet and interactive two-way transmission. Much of the learning, however, is done in small groups, patient-centered and case-based learning. In fact, this medical is centered in the lot of small communities in Ontario. The main liaison – the reason for existing is to produce doctors for outlying areas. General practitioners who practice in outlying areas, and that is why it was founded, in fact, and it is Canada's seventeenth medical school.

I received from McGill, and again I think McGill had some confusion about what we meant. What I gathered by looking at their documents, is that, in their clerkship – geriatrics, maybe you know something about that, and obstetrics gynecology – those two clerkships, ten to fifteen percent of the teaching is done by computer-based learning but it is not distance learning. It is computer-based learning. And these are both trans-curricular programs; Geriatrics and obstetrics-gynecology.

I can also mention because I know what is going on with the faculties in Quebec. University of Montreal, Laval and Sherbrooke do not use distance learning, but they do, as our other Canadian medical schools, use computer-based learning. They have computers in the library, a lot of computer rooms, and they have a lot of programs to look at anatomy and some of the units – everything is computer based – the case histories and so on. So I don't know if that answers your question. But that is the best I could do. Now, Item Two, James (Randy) – you want to talk to us – report to us on the US Medical School utilization of distance learning.

JRH: Yeah, I go by Randy. Okay, just in July I had been at the University of Cincinnati for twenty-three years. I moved now to Michigan State University, Associate Provost of Human Health.

BF: Randy, Can you speak up a little bit?

JRH: Got it. Okay. So, July I moved to Michigan State University, Associate Provost in Human Health, so I am in charge of the MD College there, the DO College there, as well as the Notion College. I was just realizing that not only am the only MD that is responsible for a DO College in the world today, I think I am the only one in history and to come back a little back to DO education – it is growing very rapidly. There are eight new DO schools currently in the process of starting now, to go along with the 18 that currently are. So this likely will be a whole new patch for a large number of physicians in the US. Anyway, both the MD College and the DO college at Michigan State are starting new campuses, so the MD college is in Lansing, the state capital. It is starting a new campus in Grand Rapids, which is about 80 miles West. The osteopathic college is starting new campuses in downtown Detroit and suburban Detroit, which is about 80 miles the other direction. So what is a major issue facing both of these colleges is, to what extent do you want to have separate faculty in each site. Clearly, you know, most of the basic science faculty in US medical schools deliver a handful of lectures a year so it is nothing short of ridiculous to like hire a whole new basic science faculty on each side of the state. So the concept has been, either do we send our faculty members to drive back and forth, which again given the relatively small number of lectures, let's say, would not be that much to ask. On the other hand, all of the lectures are currently taped and available online, so the students who can't wake up early enough in the morning to make it to the lectures can watch them. So, an alternative which is being discussed this summer, all of this is to make the distance learning available on the remote campuses. To may be have one of the faculty members go out and be there, definitely to have one

of the faculty members at the remote campus there to discuss with the students. So, we will see. I think that is going to be the predominant mode for both colleges.

Michigan State University, College of Human Medicine – they also have a College of Veterinarian Medicine, which is how we ended up with that name. Most places just have a College of Medicine. They claim to be the inventor of problem-based learning. Some people think they stole it from McGill. Everyone agrees that they stole it from McMaster.

MG – McMaster?

RH - McMaster, and/or MSU? So, the concept of the problem based learning is intensive in terms of the leader – what we tried to do is have the leaders of the problem-based learning modules in East Lansing, be practicing physicians rather than basic scientist, just because I think that teaches more of the professionalism, more of the professional problem solving, and so the concept is going to be as much as possible to have standard problem-based learning resources that can be referred to, but have small groups led by local physicians in each of the sites. And I guess, you know, overall I would say that United States' medical education is very ambivalent about distance learning, that the RN education has been based on quite a bit more, so that at Michigan State there was a BS in completion programs, people who have RN degrees and want a bachelor of science in nursing, and that is all online. And it competes with the University of Phoenix, which offers an all online on a BSN completion program.

I think American medical education is really ambivalent about distance learning because it was great when we realized we could share our content between East Lansing and Grand Rapids or Detroit. If we can do that, why can't the same content be shared between there and anywhere else in the world. Or worse yet from the US Medical Education Accrediting point of view, why can't it be here from anywhere in the world, with the United States. I think it is pretty clear now that if all of us had to put together the content for the first three years of medical school by Monday, we could go on the web and find all of the content we would need for the first two years. Now, clearly we do need to teach something about patient relationships and something about professionalism, but in terms of content, I do not think there is anything that we couldn't find that people would need in the curriculum.

I was able to do a survey of five different institutions – of what they are doing with distance learning and computer based instruction. The first of course is Michigan State, which I have talked about so far. The other is University of Illinois, University of Cincinnati Ohio State. WWAMI, which is the Western Consortium; Washington, Wyoming, Alaska,. Montana, and Idaho and for many years they have shared distance learning. All are decent places and I think it is safe to say that all of the universities in the United States would say that they do learning for continuing medical education – that all of them use teleconferencing. All of them use some aspects of online modules often sponsored by the pharmaceutical industry. I think all of them, all of the ones that I have had a chance to talk to in detail, and I think all of the universities in the United States would now say that they are using computer-based instruction which is asynchronous, so that recording lectures recording content, making it available to their students individually rather than coming to campus.

Ohio State University has had an interesting program for the last few years. They have two tracks, one of which is the lecture track and the other is the individual study track. I think, in fact, all American medical schools have had this sort of informally over the years. Some people went to lectures and other people didn't, and in fact, my dean at the University of Cincinnati said his belief was – but he never did any scientific studies - but

the people who either don't come to medical school lectures wound up to be the faculty. They were more likely to have been the ones who didn't go to the lectures, but just kind of read the class notes.

But anyway, Ohio University systematized and the reason that they did that was not really for any kind of pedagogical reason, but the physical cost to them was not big enough to accommodate more students and since a lot of the students were not showing up anyway, but anyhow, all of these schools offer that kind of asynchronous learning in terms of time. All of the ones that have more than one campus have asynchronous learning in terms of space. At the distance campuses we have gotten in the first two years at Michigan State. In addition, the Human Medicine College has six other regional campuses all over the state. Some of them are up to 300 miles away, which share common programming for the clinical years. The University of Illinois has campuses for the first two years both in Chicago and then in Champaign Urbana and has two other regional campuses in Rockford and Peoria. So they share a lot of the content for the first two years between here and Champaign and an extensive content in terms of lectures of the last two years between both of these sites and Rockford and Peoria. There is a lot of material coming back the other direction. These schools have enormous distance to deal with and they pride themselves on the amount of distance learning that they have piped to all of the different sites. University of Cincinnati and Ohio State do not have it, at this point, anything other than asynchronous in terms of place learning except for continuing medical education. The main reason for that is that they only each have one campus so I think nationwide we probably find something similar. At this point medical schools, all of them will all be bragging about how much computer based instructions they have on their web-sites, contents they have on the webs for the students to refer back to learn from. Virtually all of them that have distributed campus during the preclinical and clinical years are bragging about the extent to which they are able to share the contents between their different sites. And, in addition of these six programs I talked about, all of the ones that have satellite campuses are also proud to have the learning that is asynchronous learning facilities in time and place, allowing to creating one facility to be accessed at separate times and the others at other times. I think, about half of these programs have synchronous learning. Either the video-conference or web-conference as a part of their instructional material.

MG: May I ask question?

RJH: Yes.

HH: Do these apply to traditional lecture based material or does it also apply to PBL? We have two campuses at Sherbrooke.

RJH: Yes, in fact, it applies very extensively in terms of the traditional curriculum content.

HH: Lecture based.

RJH: And, then in terms of PBL most places are not trying to standardize PBL and are criticized. At Michigan State the MD College uses PBL and the DO College doesn't. The concept are trying to come up with the same reference materials for the PBL, including the video tapes can be referred to which are available for all sites. We have talked about having the same PBL group across different sites, but we have not made that jump yet. Are there any other questions at this stage as to what any of these institutions are doing?

HH: CBL can be much more problematic than problem based curriculum. Because it is small group, like what we have at the University of Sherbrooke where there is one teacher for 8-10 students. We have two campuses, one campuses one in northern Quebec and another campus in Brunswick which is Mountain. And also, the teaching is done by PBL at those institutions, but they use the same material for PBL that was developed by the main campus.

RJH: Yes, I think that may turn out to be the best model. Now again, MSU has tried at one point for the MD program to go all PBL to eliminate all lectures. And like most places it wound up with some back-sliding. So it is a combination really of PBL and lecture based instruction, probably better. It may the standard evolving towards what can be taught by lectures can be as well taught by computer based instruction or may be even better so. Now that LCME….

MG: Maybe I live in a time warp**.** But, if I believed that all you needed to do in the lecture or anything else is to get the content across, you could do it anyway you want. I have been a lecturer. I can remember the best lectures of my life. I remember them. My daughter is a professor of English at one of the Canadian schools and lectures. For sure the content is I hope, not the only thing you do in the lecture. Because content is easier to get from other ways. If the lecturer is not combining content with inspiration, with perspective, with something, with narrative, with stories as far as I'm concerned shouldn't be there. So the question to me is what is the purpose of the lecture? If it is pure content, there are better ways. If it is content plus that comes across in a non-personal way that may be okay. I do not know, I have watched lectures that are given sort of like going to a stand up comedian. In person you have one experience and watching on television it is a very different experience. I am not sure what you get out of lecture, when it is provided not personal or just content, or someone just giving a third chapter of physiology text book there are better ways to get it. So that's to me the whole concern I have with the whole idea of even translating the contents or I hope it is beyond content.

RJH: Yes. And again, why can't we just have this whole meeting here by DL, but clearly we all think that it is valuable enough to be here in person and we all dealt with through the homeland security or highway system to get here. The crucial element really is not just medical education but higher education in general is the availability of first-rate computer based instruction has really put a challenge to people who have done lectures as a transmittal of information because clearly there is no reason to do that anymore. So the question is how you optimize some of the other elements, where clearly the big lecture classes have always been a challenge.

MC: I just wanted to make a remark on both your comments. That we have a mixed PBL as well as didactic. In some courses we prefer more PBL because that is what students want it that way. We want the student's feedback in designing courses. Some of the courses we absolutely prefer didactic, and our experience through getting feed back from the students is that it is sometimes the visual and the sound - the dual learning, as they are seeing what the teachers are projecting and also they are seeing and also listening at the same time, so it is a reemphasis.. They are also taking notes at the same time even if the lectures are available as notes or power-points, as recorded talks, or on the web-site. So this is on the spot learning, reemphasis – the double learning that is happening simultaneously in the class-room and several students prefer that rather than just PBL. PBL has its own advantages where it is personal motivation, their own researching ability and relating to the other students at the table and trying to do a lot of self-learning. But not everyone can do that because several of them come from the systems where they have not been trained to do so. So, we have been struggling with

the system of PBL with certain percentage of students, not all. I just wanted to make a remark that it depends on the group of students you have as some students have excellent self-learning abilities and some do not. I personally feel in the first two years of medical schools some didactic teaching is important, as it also helps students to relate to their faculty and prepares them to go to the third and fourth years. As they have already made that connection with the teaching faculty it allows them the freedom to approach the faculty, as they met some of them during the first two years, and can ask them questions and makes the professional relationship a little more easier and a little more open. That is just a remark.

HH: Thank you. Any more comments? No comments!

RJH: One of the other things related to that in a lot of medical schools is that most of the content lectures in the first two years are delivered by the basic science faculty. So, I think that the model that is evolving now is having more contact with the clinical faculty during the first two years decreasing the passive data transmission and that is one of the advantages of PBL.

MC: The way we have slightly tried to resolve that is by not having only basic science faculty teaching first two years. We have course directors and teaching faculty from basic sciences as well as from clinical background. It is sort of a requirement at my medical school right from first year onwards that one course director is from basic science and one from clinical background. In first two years, teaching is not done only by the basic science faculty, it is half and half. Even in basic science teachingThere are no courses without these shared responsibilities of teaching. Not just led or directed by the basic science faculty. It also generates interest in students, as the clinical faculty can related some of the material to the real life clinical stories. Of course, students can't wait to get to the third and fourth year, but they have to have the patience and foundation to go there.

MG: They want to meet Mrs. Krebs so we can figure out the --

MC: And I think we have learned over years, through student feedback, and, of course, they have to have their patients their third year to really get into a clinical area. But I think storytelling can come only from the clinical faculty and not from the basic science faculty. Or maybe clinical stories can only from clinical faculty, I should say. So, I think, I mean, we spice it up a little bit and make it a little more interesting and they know that they are getting there.

MG: I agree. At my medical school, all PBL learning is, whether it's basic science or clinical, is done by both faculty. Basic sciences and clinical problem basis, both faculties are there. Of course, the students prefer to have clinicians teach them PBL. But we have basic science, you know, GI physiologists or some other teaching cirrhosis or their supervising problem-based learning on cirrhosis or mal-absorption or something. And it works out well. They're not there to teach. They're there to do something else. Their job is not teaching. But what I like about PBL is you see students when they come in from the first weeks learn to develop interpersonal relationships which they don't learn before, respect of peers which they didn't have before, and they learn rapidly to establish relationship and be able to express themselves without fear of being laughed at or reprisal or something. And it's wonderful to see the development on these young men and women over the course of a few months. I mean, they're not the same people after a few months. And of course, you know, once you cut through a lot of other stuff, the main criticism of problem-based learning is that, well, it's too expensive.

HH - It is.

MG - But, again, I think, over time, the only way we preserve problem-based learning is by decreasing the expense in terms of the lectures and transmitting more of that to computer-based instruction. And, you know, since we already have the basic scientists around, most of them have tenure, you know, it's good to include them in courses. If we were starting from scratch, I'm not sure that a lot of the stuff that they contribute couldn't be done off of computer-based instruction. So, I think that's a -- for logistic reasons that something's going happen right away, but may be more of a future that we're headed to.

It's funny. I trained in Scotland, and it was a very, very traditional curriculum -- but the thing that was -- I remember anatomy. So, anatomy the lectures were done by anatomists. But the dissections, the supervisions were done by clinicians, mostly because, that's who was available. And those are the ones who also make a little extra -- because they -- train you. So, I remember mine happened to be an orthopedic surgeon, who became a very famous orthopedic surgeon, but the thing that you had the anatomy, pure science, all the -- and Cunningham's and Grays, and then you had a clinician who as he was -- she -- it was mostly men then, teaching anatomy who was always referring to the clinical experience. He said, ach, the time I cut this -- was terrible. And you were watching this thing and you realize that's not hard to cut that --.

So, clearly, we have a need for content, whoever gets the content, and the -- of stories and narrative, because that's why most of us have gone into clinical medicine. We create our stories and we learn from the stories, which is why the -- Journal, all those really popular parts of it are the stories. I don't know if you've read --'s --, it's a great book. I think it's a must read. It's full of stories which tell you how we think, or how we shouldn't think, or why we've been forced to think, et cetera. So, however, we come up with and this, again, is with a -- to accreditation of other places, we have to make sure we preserve the essential components, of which distant learning can be a part. And as long as we know what part it is, and not as a replacement for you might say some of the essential core components that make us professionals and doctors, it's a useful technique.

And there are a couple of other trends.

In the first two years, anatomy is taking nationwide a much smaller part of the curriculum, year to year, and, you know, some of the argument there is, well, you know, think about your gross anatomy group in medical school. How well did you really do at finding those cranial nerves? And so, instead, we can come up with a virtual reality thing. You're three dimensional now. It really helps you see like the lymphatic system and stuff that, you know, really weren't able to dissect as well. In addition, like microbiology labs have been decreasing in the amount of the curricular time they have available in most places, as well, because you can show pictures of like all the stuff that's so hard to find on the slides.

Now, clearly, we're losing something in this that, you know, if we're not careful, you know, it's too much like playing video games. And, you know, some of our traditional rationale for why we did gross anatomy, I don't think really got to the point that it wasn't so much to learn, you know, what node supplied the rhomboids as it was to actually see that people are bodies in a way that throughout most the rest of our lives and most civilians really are able to deny, that, you know, we're souls who just happen to be around here for a while, which are probably true as well. But really having a body there, being able to touch it, to open it up, has a different kind of emotional impact that's a little

harder to quantify. Same thing about making a smear and looking at it through a microscope as opposed to getting the same information from a computer screen.

--, -- University. Consistent with that, if we created some of the direct exposure, okay, the laying on of hands on a cadaver is in many ways a student's first exposure to uncertainty, the patient that didn't read the damn book, as it is said in the clinical setting. That, wait a minute, this node was supposed to here. It was really nice and clear in the book, but and now you realize, wait a minute, anatomy isn't -- according to the book or the other things. And, as you noted a moment ago, it's one thing to watch fireworks on television. It's quite another to see human fireworks in person, as it were, in the form of a good lecture. So, in a way, the question may be not so much, are we losing something by losing the human presence as, are there ways to make up for it? By -- what can we make up for by variations of interactivity in a computer-based learning, and what things cannot be made up for. And then the real threshold question, which is, are there things that are so important that standards will not permit computer based, distance or otherwise.

HH - So they can omit Formaldehyde.

MG - Nothing will, -- because there is a whole cultural experience. Now, in Scotland, we went on forever. We did a year and a half, two cadavers. Maybe it was an extreme, but that's because that's part of their -- that's an historical world perspective, when you finished your -- anatomy. But there is something to the process. I mean, it was a cultural, unbelievable, the respect of the body. I mean, the fact is there was a dead body, and it was probably from fifth world country or whatever. We all knew that. But the respect, -- in the dissection room. Every now and then, somebody would give you a haircut with a dissecting -- I'm only joking. But what I'm saying was it was a very important cultural experience way beyond learning anatomy. But the thing is the uncertainty of where things really are. Even though a cadaver's still not the same, as opposed to in a book where everything was always in the same place and it's red, blue and yellow. So, you can't miss the --, because it's yellow, at least in my book.

BB - I'm a philosopher, as well as a biologist. -- as a philosophy is that Plato in several places bemoaned writing. He said, look, the problem in writing is everybody's going to lose their memory. The idea that all species would lose their memory. He was absolutely right, -- writing today. What Harvey said was, how much is the new technology. It's a new way of disseminating knowledge. What we want to do is get as much as we can. We want to make sure it doesn't displace what's intangible but valuable. The hard thing is actually figuring it out, how to do that. I think that's the trick. And nobody -- I think part of the problem of -- is -- important things will be lost but the other part is in a deeper sense, nobody knows what's going to be lost until it's actually gone.

HH - Sure.

BB - And then, it's hard to put back. So, those are the -- and when you're talking about - and I'm a distance educator, but when you're talking about distance education, you go -- and you know you're not going to lose the good stuff.

HH - Thank you, good point.

MG - Actually, in terms of -- fireworks, it makes me think about one of the -- I had in my clinical years. And I think it does get into some really, issues I -- neglect or in the past, because they are harder talk about. So, the medical education, whether it should focus

more on the stuff that was easy to talk about, like content. And, again, as I think back on the patients I saw during medical school, the only ones I really learned anything from were the ones I got emotionally involved with. And that is not something you would do with a virtual patient, I don't think, unless we can really improve the technology. I want to talk just briefly about what the LCME says about distance learning. You should all take a look at this. It's right on their website, but I think it's interesting in a number of ways. But clearly, the LCME has a guild characteristic to it, as well as a quality characteristic, and, you know, guilds were good because they did ensure quality. They also ensured that people didn't get into the profession by an unapproved bridge. So, with distance learning, CME accreditation standards, they make five points and I just want to go over them.

The first is that medical education is a community of learning. And so, the implication for distance learning they say is an educational program which has not development and implemented through collaborative faculty effort where student education occurs in isolation would not be in compliance with accreditation standards. And, again, with this community of learning, the LCME would like to see the learning being done with their other graduate professional degree programs, with this whole continuum from undergraduate, to medical, to post-graduate medical education. And to what extent is that particular issue a guild characteristic in terms of assuring quality and to what extent is that one that's a guild characteristic in terms of excluding competition.

The next one is there need to be defined objectives in a coherent curriculum. So, the implication for distance learning: an educational program that's not based in defined and agreed on objectives and which does not provide all students with effective opportunities to acquire the required knowledge, skills, attitudes and values is not in compliance with accreditation standards. So, again, I think that's one that probably we would all agree with that you, again, you didn't really have to get to computer based instruction. During the early 19th Century the way people educated themselves in medicine or law was to go to the library, take out the books, study them, talk with a local practitioner. So, again, regardless of how we're doing this, we do need to make sure we have learning objectives and, you know, a prescribed curriculum.

Next, there need to be opportunities for in-person interaction between students and faculty. And we've been talking about here. So, the implications for distance learning: a medical education program in which there is no direct interaction with faculty and students that's appropriate to the objectives of the program and to the desired educational objectives is not in compliance with accreditation standards. And that's another one, too, that I think we'd all agree with. I think, you know, the application of it, there are a variety of different ways to go, though. You know, is it necessary to have a mitochondrial specialist to talk with after you -- a mitochondria?

Fourth, responsibility for medical education. It's similar to one of the previous ones. A medical school where its chief academic officer and faculty are not responsible for the education program and for the medical school policies related to the educational program is not in compliance with the accreditation standard. And I think this is one that I think could be interpreted a variety of different ways. But to some extent, we want standardization of medical education. I think, probably more than philosophy education, for example. Because there's some things you just didn't learn about in medical school. You might have a patient who you don't know what to do with. Whereas, unlike for a humanities subject, you know, if there's something that's not covered -- should not be something you have to deal with. And so, certainly within some limits, we want the faculty of the medical college to have input into the curriculum. -- sort of designed to try to keep the --. --, for example, out of medical education, so that they could not deal with

a few clinicians some place and just get them to accept a curriculum generated entirely somewhere else.

And the final issue that the LCME mentions is obligation to meet student needs. For a medical school that doesn't provide access to the full range of student services, allows students to have input into the educational decision-making process and uses single standards for decisions about student academic progress is not compliance with the academic standard. And, so, again, how that's applied, you know, could cover a wide variety of things. Again, I think we would all agree that students having some input back into the system, and also, I think this implies some support for them outside of strictly kept classroom activity.

So, again, just to summarize, American medical education is doing distance learning practically every place and whenever it has a need to replace something extensive with it, it usually does that and then rationalizes it afterwards but then really has a -- uses professionalism as an excuse sometimes for why the educational content needs to be delivered the same way we've traditionally done it. It will be interesting to see how that plays its way out over the next years.

So, that concludes my comments. I suspect a lot of you have thoughts about this topic. It's kind of way we're here today.

HH - Thank you very much, --. Does anybody have any comments or any questions? Thank you very much.

Howard -- okay, sorry. I will -- , I'm sorry. It's a lack of sleep.

HH - You're such a quiet, demure little soul.

HM - Okay, I'm a Ethics Professor, University of Tennessee. Acting Secretary of -- MC's Ethics Committee. Medical Ethics distance learning/E-learning.

What I'm going to do is I'm going to offer a few remarks and then I'm going to turn things over to Bob --

HH - You're going to introduce Bob.

HM – Yes, among other things. But I'm going to offer a few remarks in the context of introducing Bob. My work in bioethics is quite different from Bob's. My work is exclusively clinical, so I have a very different chunk of this whole thing. Bob actually does a good bit of distance learning in bioethics. I do not. As a matter of fact, I have never taught a course in bioethics to students in a medical school. I actually taught a few courses in bioethics when I was a grad student to undergrads, okay. But we don't do teaching courses to students. We are strictly clinically based on the wards, focusing on house staff, fellows and students who are rotating through their clinical years. And so, what the kind of teaching that I do is very different from those who stand up in front of the blackboard every Monday, Wednesday, and Friday, or what have you. Mine is set in the context of rounds and conferences and noon conferences and intake rounds and -- and attending rounds and all this kind of things. And in some ways, what I do is both the most efficient and the least efficient way to teach bioethics. It is the least efficient in the sense that a lot of what I do is just sit there and listen and take it all in. It is also the most efficient in that when a relevant issue crops up, and it might very well be in the ten minutes before morning report, when I say, oh, Haavi; "We've got this case. We don't know what to do. We're tearing our hair out." And then we have a brief conversation.

Or it might be in the parking lot. Various ways, but at this point. Or it might be at special attending rounds, because; We've got a case, we've got this lady, and we're just not sure what to do". People are absolutely primed to think about this. They really need to know. They really need to figure out what the heck we're going to do. And at that point, things sunk in ways that they do not if you're sitting in the back of a lecture hall. And so, it's both the most and the least efficient.

One of the things that I've observed, and Bob is going to be talking about what things can be done with distance learning in bioethics and what things really can't. And I'll give you a pair of examples to illustrate something that Bob will be talking about toward the end, mainly, something that cannot be conveyed. And that is, one of the things that I used to do a lot more than I do now, is hooking up with a ward team for that month and being there pretty much every day during attending rounds when you talk for an hour, hour and half about the patient. You know, how's Mrs. So-and-So coming? Did we get the results for Mr. Jones? Et cetera, et cetera. And something that I would see there is the role of the attending in terms of the unspoken and intangible mentorship that was alluded to earlier. And I give two examples. One of them, I'm going to give by name, because it was so powerful and it's a very positive example.

I was at the University of Virginia when I started all this, and an endocrinologist, Dr. Bob Carey, who later became Dean of the Medical School at UVA, Bob was kind of the -- and I assume still is -- kind of the quintessential example of respect for patients and how a good physician goes about this. We would go into the room with the usual thundering herd. He would greet the patient, and then he would, as they were about to talk about whatever is going on with Mrs. Jones, he would turn to Mrs. Jones and say, Mrs. Jones, if you don't mind, we're going to talk about you for a moment. And then, he would turn to the students and house staff, maybe pick up Mrs. Jones's hands and say, you'll notice that Mrs. Jones's fingernails da, da, da, da, da, and then, he would, you know, return her hand to her. And then, at the end, he would say, Mrs. Jones, do you have any questions or do you have anything to add. So, that kind of respect is utterly contagious and when I would see his house staff and students on rounds, they would treat the patient that way.

In contrast, another attending, let's just say the fellow had a bawdy sense of humor, and during the time, not just during attending rounds, be especially before. Before the attending got there, the atmosphere was a men's locker room. It was absolutely a men's locker room. Students and house staff were basically -- and it was the model that this attending had presented, by his own bawdy humor. There would be essentially a competition to see who could tell the dirtiest joke. You can imagine they were sexist as hell, but also who could most effectively and humorously, quote-quote, mock the patients and their poverty. This was every bit as contagious as Dr. Carey's example. And the power of it is, I think it really isn't recognized by the faculty what influence they have in that setting. But, obviously, this is not the kind of thing that any distance based learning, because it starts with respect for a human being that I speak with every day.
So, Bob, I don't know if you are ready yet?

HH - Which discipline was your second guy from?

HM - Doesn't matter. He happened to be a pediatrician.

HH - Oh, that's surprising.

HM - Yeah, yes, that's surprising. And the thing is; I like the guy. I like the guy a lot.

HH - That's surprising.

HM - And everybody knew that he just had this sort of a bawdy sense of humor, and, as a matter of fact -- we'll put this up -- whether -- just as an example, you know, he might come up to just a group of people might be standing out in the lobby before grand rounds or in the orientation presentation before a consult, whatever, he would come up and in a group of people a woman might be there, and he'd come up to her and he'd say, oh, God, you were good last night. I mean, that was it. And he's very funny in the contact, if you know the guy. But that kind of humor, which amused the students and house staff no end, had that important effect on rounds, that I think the faculty member himself had no idea he was having that influence.

HH - Today, this faculty member would be dismissed as a professor at the faculty. There is no doubt this kind of behavior would lead to dismissal from the medical school. I tell you, you would see

MG - We had had a number of people like that.

HH - They were toast. We just fired somebody --

HM - He was not at the University of Virginia. I've been in several places.

HH - We just fired somebody who was disrespectful toward some female residents. They complained. They did an investigation and the Dean fired him, absolutely just fired him.

MG - it was from a magazine of, not a bawdy magazine, a regular, but a scantily clad person was trying to make a point. He was toast.

HM - In the United States there is lawsuits.

HH - A very quick firing, trust me.

MG - We don't do lawsuits as much. We have other ways.

HM - We have our ways, right?

MG -- that one was interesting because there was a dean who had no tolerance for any -- especially now that medical schools are 50 percent woman.

HM - I would not picture him doing this routine of God you were great last night to a resident, if a faculty member, okay, but still it would be the bawdy sense of humor, you know, referring to the patient's genitalia with a slang term. Not necessarily a vile slang term, but --

HH - It has no place.

HM - Yeah. Clearly. The upshot is that you're going to have variations and gradations. I'll give you one other example, which is an interesting one. And this was a person very highly placed in a department, and this was in pediatrics rounds where this person is no longer employed probably. We have a problem in pediatrics.

MG - I was only joking.

HM - Okay. This guy actually is gone. But it was a situation where a mom had come in, had finally got admitted and the child was with mom at like 5:00 in the morning. So, here comes the usual thundering herd into the room, and mom is sleeping soundly at his point and she's got curlers in and all this kind of thing. And all of a sudden, she's waking up with the thundering herd around her, and she is humiliated beyond words. She starts reaching, oh, my, all these doctors, all these doctors, and she's pulling the covers up, you know, because she's in bed with her little child to comfort him. And the attending's response was well, we won't be long, instead of saying, I am so sorry. We'll come back later. And this is what the students learned on that day in the house staff is rounds have its own rhythm. We go on with rounds.

HH - Furthermore, in Quebec the medical law is very clear that a physician who is disrespectful of the staff, abusive of staff, talks badly to staff, can lose his privileges and be kicked out on his rear-end and stop practicing medicine. He will never find another place to practice medicine unless he goes way, way up in the boondocks where they really need doctors. It's very clear. And I assisted a number of years ago, where we took all of the privileges of a physician who was an anesthesiologist strictly for that reason.

HM – He was not being impolite, he was being very polite. But the upshot is it illustrates that the students were learning something.

HH – Doctor Baker

BB – Just a brief word. I'm going to talk about what works and what doesn't work. I've been working for six years in distance education. Very quickly, how I got started in education was in the distance graduate education was with an upstate liberal arts college, Union College in New York, I also been working with Albany Medical College and other medical colleges for decades and a college for deaf kids. There is a request to start a bioethics program form hospital committees for medical students in the upstate area. The problem with upstate is a problem in rotation. There isn't enough population in one place to support a graduate program. So what we did was we created a consolidated faculty and we went on line. Recently I changed from Albany to Mt. Sinai in New York City because Albany decided we don't need all this faculty we can do a program for ourselves. That was one program that Union and Mt. Sinai had jointly in bioethics for about six years. About four years ago we got a grant form from NIH-Fogerty to join with a program to develop an advanced certificate program in research ethics for countries in Central and Eastern Europe and parts of the former Soviet Union. We took the model we developed in upstate New York. We basically said if it will work in upstate New York it would work in Central and Eastern Europe.

MG – Upstate Europe.

BB . Basically from Mt. Sinai in New York City and that is where the faculty came from. About three years ago we did some research and came up with a course. The students came from all over the world including the former Soviet Union, Lithuania and Eastern Europe. Now they are mainly from upstate New York.

MG – Did you teach in Lithuanian or in English?

BB - The language of instruction in both programs was English. There were international students in both programs. Basic data on the programs was they were Master's programs. We have alumni now. We had 42 current members, fourteen dropped out for one reason or other. Five on site, these were mostly medical students from Albany med.

with a major in bioethics. Four that went to the Albany med. program decided to continue in that program. Our attrition rate was 15%. If you take a look at most distance learning programs attrition rates is much closer to 50%. The difference here and I'm going to quote this, high quality interpersonal relationships are the core of a good education whether on line or on site. And if you can sustain that you'll hold your students. If you can't do that you won't hold your students. On the NIH program you got 35 students to start it we have 13 alumni, 17 are current, five have dropped out. That's basically the two programs. Here are the pictures of our distance learning students (Introducing the student names and their mother country) This is a picture of local medical students. (Introducing their names)

Most courses are built on human relationships. This is a highly interactive program. Lots of things are happening in distance education.   After the lecture you have five questions. The last one is interactive and it ends with a student discussion in which the professor joins in. The interesting thing about on line discussions is that you can tell stories and the entire class can join in. That's the most popular thing we do.   The heart of the discussion is asynchronous learning with your peers and the professor joins in so you get on line classroom. You can tell stories - you can prod students – they can tell stories. This is the most competent part of what we do. You can send an email to the student you don't want to share with the class.

MG – So you're saying it's in real time.

BB - Its asynchronous is important because what that means – take a look at that picture there are about 12 different time zones represented there.

MG – So how do they communicate?

BB – First they post. And I get back within 24 hours.

MG - Just so I understand this, as an individual or as a group?

BB – As an entire group. Or I can choose to get back to some individual.

MG – I'm just trying to understand, so one of the 12 sends a question-

BB - and I get back either an email or a video or more likely I would post as a list serve to all of the speakers or something else. The standard would be something like this, take the Hancock case something you might be familiar with, The Vatican just came out with a statement which can be a class discussion. I might just bring that us for class discussion even though it's not on topic. I will take that topic post it as a thread and post that thread even thought you have all kinds of persons in a medical disciplinary field. I can print a text and send it. We are basically working with clinicians and its discussed

MG – When you say posting, where are you posting?

BB – It is posted as a list serve, it can go to everyone in the group. So we are in contact with a discussion. There are a variety of values 30 countries are catholic, lets not talk about the implications there are there. There are economic effects.

HM – It's basically an email discussion

BB – Right. You have immediacy, you got interaction, and you have a strong retention rate. You got great teaching materials. You can track how long you are on line and so on. There are not spacing issues. But on responding on exams, and we give on line

exams is not as good. And that speaks to the economy that Randy spoke. If you want to do distance learning economically - you don't want me I'm expensive. You get something aesthetic, you have creative blocks and that is the cheapest way I can see to do it. The most effective way of doing distance learning is the most effective way of teaching, I mean you got interactions and you got a faculty member who got student who should be grasping who aren't and to do that and have a strong retention rate which occurred is comparable to

MG – You're the supervisor, you do a lot of typing.

BB – A lot of typing, but I'm not a good typist, I'm a lousy typist but I'm on line twice a day. I'm teaching my own course where I'm teaching international students on a not very interactive site it will take about 20 minutes a day twice a day and about two hours a night. It's just the same as teaching and holding office hours. Let me speak of other things, pooling communications and collective faculty that is responsible for the material we a pool faculty from all over the world and we can deliver to students. I'm not an expert on surgical ethics I go to Ryan Mc Colough at the Board of the College of Medicine he writes a column on surgical medical ethics and I'll ask if he can give a lesson in a classroom. Ryan is part of my faculty he also gets paid for some specific work. It's the same if the hospital ethics committee wants someone on site. A swap shop where everybody exchanges cases.

MG – He gets a salary and it's the same as hired faculty.

BB – That's right, and faculty is faculty – the same way as minutes of faulty meetings. But it does solve or illuminate the time zone problem. What I do in spending money is to be giving every group of students all the faculty face to face. We have a meeting the students meet each other they meet the faculty and we start that way. I've got my aim of simplicity in presence. I know I have my own idiosyncrasies. Its not all carried out in the internet

Voice I think that's better

BB – Your dealing with people of different nationalities. Its very important that you get a sense f who they are and how they come across. And its very important that they bond with each other before they go on line. Because you can't really understand each other. Smiley faces aren't the same as a smile. And so you try that first and then you go on line and then you bring them back together at some time and explain what can't be taught. You do lay out the things for each course. And you have goals for each course. And its based on a set of knowledge and skills so in trying to access a course.
For some reason or other I started with a whole bunch of brochures of the entire program, and I can't find them and so we reviewed a lot in the last twenty minutes. How the highly interactive programs work, the assignments, how the discussion groups work. On line exams are good. And the groups, how they work together so interactive groups are a good thing.

MG – Bob how do you know it's your student taking the exam?

HM – Or some smart friend taking an exam?

BB – Well I've got two passwords and the blackberry that tells me it's thats the person who is taking the exam.

HM – You need to have a password but you can give the password to your friend.

BB – Seriously I don't think you can be right all the time**.**

BF – One point they now have a little tiny camera that sits on top of the computer and you can see the face of the person on the keyboard.

MG – And a web cam now is a dollar.

BB – You've got to know your students. When I used to teach in class and I had 300 students in a class I had no idea who was there and I think there was always a few ringers that take the exam for everybody. Then there are a few very technical gimmicks. Very occasional, why? Because they burn faculty time and energy. A pod cast is neat but you got a pod cast burns faculty time and energy. It's a push and its got a good system-

HM – Bob how is ah   which takes way more time than composing and essay.

BB – You have to edit the visual stuff.

HM – Why?

BB – If I'm going to do this and the lights are on right now. So the course will take a download and it will take a certain amount if time and I want to do it its going to take say eight minutes. So you do it a little better than I am and your getting cutting and experience. Videos, we use them and we use the a little bit because they make life interesting. But you don't put things on a pod cast or a video. Everything is in research in both courses, both programs. You've got the holocaust web site they have got the complete Nuremberg trials and there are high altitude experiments they've the scientist that do it so you can get the bio of the scientist. Hypertext and that makes you lively and that's neat.

MG - So I'm just thinking about that and to make it personal.

BB – Yea

MG - I did seminars on bioethics, they could be videoed, the question would be is that the right place? Not the whole seminar but a seminal piece of it that said they could see the piece for active discussion that goes around. So the times they can be used for something else – something about the burning of   . So you could use that mix and match

BB – Absolutely

MG – I'm just thinking of the personal component of it. You want to ice the cake. So you bring in a little bit of pod casting, a little bit of video, a lot of hypertext but not a lot of so you get lost and miss the basic lecture. You have discussion points; you want to see what it looks like. This is a discussion of the analysis of the poor study. You're in bioethics you know that was one of the great embarrassments of bioethics. If your in bioethics was the assumption was if you want physicians to talk about end of life issues they seal up they tried to educate the staff about this and what they discovered was it didn't work the patient didn't want to discuss this with anyone. It was one of the most expensive studies they have ever done for the outcome which was basically nothing.

BB - But this is a rather crude analysis of the study but the students will respond.

BB – The standard here – this is not my course it's someone else's course. But here what the Professor did was he asked the students to develop a policy. And there was two policies one was on the top – these are medical students in Florida actually. One of Florida medical schools decides to give one of their students a bioethics degree while he was in medical school so he started taking this course part time. We do have arrangements with some medical schools so what they do is they would get some credit when they were working with Haavi and he would get some credits on line. And you have another one in New York with Union on futures the do not resuscitate policy proposal and you two policy proposals. And consider if a Professor starts on top and gets on Martin Strasberg and gets; one- two- three responses, and a response from Christian you get discussion. Its not on line but you get to see the others responses, And when you get a Professor it's very much like a classroom discussion.

MG - You get something like blogging.

BB – But the Professor has to respond. It's a program as opposed to doing something on your own. What happens if you try and do that is all your time and energy that goes into teaching gets gobbled up. They tried it on their own and it didn't work. Every computer is set slightly differently. On an international program we solve this very easily. We give everybody a laptop computer configured a standard way. So that we won't have any problems. When students go into campus we ask them to bring their laptops with them and we configure. If the machines are with them we ask them to try it out. We have a tec on Board to be sure they receive it. There are one or two things that will drive you crazy and undermine any kind of distance education, unless you make sure in the beginning. These things need to be resolved, open and transparent and smooth. The internet can be a problem if transmission rates internationally are different.

This has to be resolved. Now, grading standards and work expectations. In the US with adult students coming back internationally – you have to explain what you expect in terms of work. In our courses this could be 12 hours a week and if you don't have 12 hours a week for a course, please don't take our courses. Weather it be the certificate international or in the United States. Grading units – we have problems with international students with grading units we have problems with international faculty understanding the grading units. We have problems with expectations. We try to get all faculty to agree to them it's not always easy. There are culture problems with language. Our language of instruction is English. This is an enormous problem with the eastern Europeans to speak in good English. For them to produce a blackboard comment it is a lot to expect so I recommend is to write it out in their own language and then translate that up into the internet. That is difficult so they slowly respond while English speakers go back and forth very quickly. Their English improves remarkably and we try to get together with a group so they can practice their English and this sort of thing.

Then the more difficult than the language barriers are the cultural values. You might think the cultural values are insurmountable. This is not true in bioethics. These ethics are basically the same around the world. If you bracket a group of live issues, how you line them up is usually standard around the world. How you analyze the issues in the case are pretty standard. And you can be surprised, If you are surprised you have got to do some basic research. If somebody say this is representative of his culture it may not be and if somebody says that in my culture we do such and such – you know – it pays to check. It shouldn't be awfully difficult to do. But there are these barriers.

Large chats don't work. There are internet problems, and time zones you know. However, it is a nice idea and I love to try and do it whenever I can.

MG – Let's go back to the culture. We have bioethics in Toronto which now has an international program. I used to have principally Americans. In training programs now I often have people or especially from eastern Europe or where ever and they talk about principal autonomy even though they know in their world its not --- so they have to understand where you practice somehow and how depends on what you do.

BB – A true telling for families - it is a more practical one. How it's in eastern Europe as opposed to west, that's a nice debate.

MG – Complete autonomy is absolutely wonderful issue here. We don't have a research effort here

HH – We haven't had the occasion to introduce you.

EK – I'm Elizabeth Kachur, I'm a medical education specialist. I had the pleasure of being at the previous meeting in New York.

HH- A number of us got snowed out.

EK– I live not far from there so it wasn't very difficult for me. Sorry I was late but I'm happy to be here.

HH – I have a comment and then a question. I was recently a member of the World Medical Association and I chaired some of the committees. The World Medical Association represents nearly ninety countries. It has a code of ethics and its come out recently – two years ago or three years ago – a good friend of mine, John Williams. I don't know if you ever heard of John Williams? He was a director of ethics. He's come out with a manual on ethics. Which is very, very well done. It's not a code of ethics it's a manual of ethics. We're trying to distribute it to medical students around the world. Now the code is being translated into a number of languages around the world; English, French, Spanish and other languages. So he could probably look into that. That's a very well done manual.

MG – With regard to the International course we start with international bioethics. We say they grow out of WMA which is in your charts.

HH – So they just updated the code of ethics and the code of Helsinki, the declaration of Helsinki is the standard on the ethics of research and was done by the World Health Organization. The question I have is was this done in the medical schools on the undergraduate level? And is this similar to it? I'm not talking of programs like this. But what is being out there to teach others. I know in my medical school there is very little which is computer based learning. Most of it is in small groups interactions lectures and so on.

BB - He's in Toronto he's in medical ethics and has done standardized scenarios for teaching medical students. In ethics there is very, very little for teaching on line. One of the reasons I suspect he is invited because we are one of the few programs on the education of bioethics. And to try to take it is very difficult because it is knowledge base which is different from a skill set. Let me talk a little bit about the skill set consultation. You can be on a research ethics committee, and what we are doing there which is much more difficult something like we are doing for Mt. Sinai. There are students and other students that   We work closely with people. The American Committee for Bioethics have a set of skills for clinical skills consultation and we have broken those down and we

are using standardized scenarios in teaching assessment and we are developing a competency based curriculum. I'm sorry except for Peter Insigla in Europe so that for DO research. There are DO hospital ethics committees.

MG- I run an ethics program at Bayer and I am a member of the clinical ethicist committee. One of the observations I would make is that we have an evolution in our area is much of the approach to the conflict resolution, and a component of which becomes part is it has much less to do with the underlying principals of ethics than the skills that come to the resolution and the people that excel in conflict resolution a s ethicists often come from clinical backgrounds in which conflict resolution is what they do for a living. Social work, I have a staff of two, I'm a physician, the other person is a psychologist. People say she is phenomenal in these ethics situations. She will only say the ethical component is a small part it's the ability to recognize the huge process of the human values that are being brought to the table. Some think in terms of ethics as that's principal two whatever. And if you're a psychologist the fact that each of these two children have different mothers and they think they have the same mother. So therefore they are all right in terms of what they are saying so how do you get that to the people that are learning the theoretical or person for the conflict resolution.

BB – We hire people to do exactly that. We broke it down in two parts, we have practicals. Practicals are on site and on line. We start with on line. Online practicals means that you get a disconnect – a feeding tube case. And you get a dysfunctional divided family and its all written out on paper and people talk about their strategies are negotiating strategies you know, what information do we need to get? We'll conference it to see the relationships and identify the bioethical principals at stake. We'll write it out. There's one thing to write it out and another thing to actually confront it. We do videos and this sort of thing to make it more realistic. We write it out to actually confront the people. It means working it up. There are ten weeks of courses on line and working it out on line and then we move them down to Mt. Sinai in New York and that is the last standardized thing there is. Then you can have practice commissions you can have various sophisticated philosophers and the first time where they are actually there. You can have is very simple and have typical modules and do very well. You can have treatment and you can have somebody who is skilled and we often do demonstrations ourselves. So where we start is the same case so that you can score them and a little skills. After the review on the Masters project we then come back to the capstone. We correlate it with the teaching of research efforts and cases conditions where you got a researcher who is trained to use his negotiating skills. And there you can catch them. So where we do bioethics I don't think pure on line in distance learning is going to be 100% solution. I do think you can get a nice hybrid program going. Problem is – going back to Randy's point, it's the economics that's driving it. The economics is going to want to make it cheap and that's going to squeeze out the one on one interactions. What driver interactions will there be that makes for quality programs? Quality is what we are striving for. So in a way if you are seeking standards I think to be on the mark - one of the questions you want to ask on distance learning is; what is the quality of interactions? Is there something like a capstone? How are the skills and the knowledge? I mean basically these are the kinds of criteria you want to put in place for the basic distance learning program. I really wish by the way there was somebody passed accreditation that focused on that program. Nobody has done that and say this is distance learning.

HH – Are you aware of the LCME standards on ethics teaching in the undergraduate curriculum? I haven't looked at it recently.

JH – It's required but it's very sketchy.

HH – It's the same thing in fact with a specialty in the Royal College we have to do some ethics rounds -

MG – It's coming to be much more responsible.

HH – It's becoming much more robust but it wasn't there a couple of years ago.

BF – What's really difficult with developing standards or guidelines in a field such as computer based or distance learning is that it has come at us very, very quickly. The standards of the LCME and others have in previous years took a long time to put together. It took many, many experienced people. This has come up in the last twenty year –maybe fifteen years and we are not used to things happening this fast. But it is happening around the world in an instant, meaning five years. So this is one of the few reflective discussions on standards for computer based learning and distance learning. I fault myself for the questionnaire there was a fundamental flaw in the e learning and distance learning. One is a supplement and the other is entirely by distance. It was I wasn't sufficiently familiar with this myself to ask the right questions that's why it's great to have good questions here. We should be asking is, what guidelines? We have to be careful because once we set it while this is still developing we don't want to preclude future developments, new systems.

EK – I just what to ask when you go through standardized patient exercise did it go through an international group? And if so, how did the international participants go through the negotiation what difference did it make?

BB – Negotiation and mediation for students from our East European students was incredibly hot.

MG – Ah, the good old days, I tell you what –

BB – There were various groups. When I say various it was the former Soviet Union. That's very, very true, but we had some flexibility the way we went about it. So what we are going to do was hire Debra Cohen who was first president of the Standardized Patient Society. And we have actually hired her and bring her to the next on site session. And she is going to give us a much more elaborate work through. Her husband is from Eastern Europe so she is familiar with the background and she has been there. And she is from Vilnius, which is a beautiful city by the way. So it was novel and this is – if your a bioethicists who is from central Eastern Europe and is an educator or administrator or doing research. Then chances are you got – it's like Haavi and I became bioethicists we were fired up at that point to make things better. There were some incidents and things that happened that are being particularly disturbing by what the pharmaceutical companies are doing in central and Eastern Europe. Doing on modern professions so negotiations don't explode and they want to run with it. There is no support in this field. Rather than it's an insurance form They have two jobs and they are trying it on the side. They are putting their heart and soul in this. I mean they want to learn and they are incredibly good. The American students have some interesting skills they have ethical sense, they are good students.

Voice – They are just fantastic.

BB – They are willing to learn. What I am concerned about is the ratio of these people and giving them support on line and what happens from now on.

HH – Do you have something to add to that?

HM – It's just that, in terms of Bob and this group and if so plus to make standards here – in terms of things that can be done on line I have to or find myself in an ongoing debate. Because if you say in decades and decades of clinical work I don't make out If ever, to use the Georgetown mantra, which is the principal term for ever. And I'm amazingly torn because to my way of thinking in terms of solving clinical problems there isn't a damn thing we don't know already. Be nice, respect, give somebody a break, you know its really obvious. But as soon as you get past the obvious into an honest to God dilemma then we start with some possibilities and it's difficult. And it leaves you hanging exactly when you need some help. It is assumed by many that is those who teach in bioethics and you learn terms as ethicobiological - can you pronounce it correctly? I can say oh my God and

MG – There are some difficult ones.

HM – Yea, yea, no kidding. But there are some- especially assumptions that we have to inquire did people read THE BOOK? And then there are other options, for example, the full box method which is much more clinically based. As Al Johnson and Bill Jensen in wing slinging which is more a methodology than anything else. The question I'm raising is – is there some sort of content for growth that people need to learn and why? How useful is it? Do we need to make sure that everybody knows the principals? Barnaby says yes but on the other hand. I have a number of Physician colleagues that have gone to Georgetown, learned the Georgetown mantra and they are just finding out – and these are people I respect. And I have to say; OK if they follow Kapel I have to take another look. And this is within bioethics. Are there standards? Should there be accreditation? You know, to call yourself a bioethicists? So in parallel is there some common content that has to be acquired and if so what is that and why not the other?

HH – Michael

MG – I went to Georgetown because I inherited an ethics committee and it's been fifteen years and whenever I start my seminars with I have say something to break the ground that even a physician can understand.

HM – I don't think you're denigrating anybody.

MG – Because as a primer in solving problems it's good. Because the way physicians think they are very good at problem solving. We work through algorythisms, I mean it's a framework and as long as you understand you take it and it's limitations. It's a useful primer because you take it as not the answer but as part of the approach. So I find it very useful if ever we never resolve anything but make sure we consider the issues. So to me the whole ethics thing is an integrated process to make certain you have thought or consider the issues that are involved. So if you call them principals as a way of thinking or what. Now all North American medical students view that as a basis or take off for what ever curriculum you have. So I don't think we can ignore it.

HM – I wouldn't say to ignore it.

BB - It is what you do with it is what matters.

HM – Frankly in some ways it's a lot more effective.

BB – I think Michael Gordon what you want to do or the first thing you want to do is it's a nice framework. But if you're talking about graduate bioethics education –weather you have more boxes, more principals and know the sequence of those or know the principals which go on the report. Nobody should graduate from a graduate program in a bioethics program and not know this stuff backwards and forwards.

MG – Your talking about models (?)

BB - I think you want them to understand a little bit about traditional ethics, that there are codes of professional ethics. There is the WMA code, there is the AMA code, the CMA code, there are specialty society codes; they ought to know how to use these things. To work through an ethics problem and which way you work it through is most important. We have Robert Ayer who is a college student and Robert Rhodes who is more liberal than I am and I'm somewhere in the middle and Benoct. We have very different approaches as to how you do your thesis. I actually advise in case after case in a marvelous room where we sit down and before we work a case up we test it out on the faculty as Jim Greer and a half a dozen people work it up. If they don't all come out with the same conclusion, not exactly the same but somewhere about the same – we won't teach it or include it in out curriculum. So we want to make sure is that an undergraduate student knows to recognize an ethical problem and there are various ways to approach it and where to go for information. I don't think this is part of the standards to require this or that as the right approach because bioethicists will honestly disagree about this. But I think there are lots of things you can do about standards.

HH - Any questions? Comments?

Voice – Do you know its right before lunch?

HH – Would you like to have lunch now? OK we'll be back at 1:30.

_____ LUNCH _____

SC - My name is Surinder Cheema, and I'm going to be making a presentation about Oceania University of Medicine and a little bit about the way in which we approach distance learning. First of all, I want to thank the organizers and Bernie, in particular, for inviting us to make this presentation. Also, I want to say at the outset, that we also have Chris Dudley here, who is on the marketing, communications and the admission side of things for the University, so he's been involved and around, more or less, from day one. So, he has got information that he may chime in from time to time if there's a point that he wants to make. Okay, there are some things we have learned over the last two or three years about distance learning is that distance learning in the traditional mode will not work. In other words, the more we do this, the more the students are trying *it* out -- they want to be connected, to listen to people, they want to talk to people, and so on.

HH - So, we agree.

SC - We agree, we agree, yes. And a virtual medical school is a myth, I don't care which medical school says otherwise] – and that's our experience. While we can use asynchronous methodologies to communicate with students, we are finding that we are now holding a way for a more synchronous method of communication where the students are in real time, they may be in a different place but they are in classrooms where we can see them, we can talk to them, we can ask them questions and we interact with them. Also, I think it's important to make a note that distance learning is probably more suited to basic sciences, you know. In our model, the clinical sciences

are as in traditional medical school--we don't use distance learning at all in that area. [And especially in 2002, according to Christian Bernard- he says that it is becoming a truth that's universally acknowledged that education of medical students will be enhanced by using these technologies. So, I don't think we need to sort of harp on that.

I want to begin by talking about four different ways, because I think it's also important to realize why do you want to use distance learning in the first place. You know, if you've got all the students in one location, all you want in one building and just living within ten miles, why do you want to use distance learning? So, I want to make a case that I think ours a very unique situation where this distance learning is the only way we can offer [it] our medical course. If we don't do distance learning, we do not exist. So, I will also be making that case. So, if I'll tell you a little bit about the school, how we do it and some of the lessons that we've learned and where we think we will go from here.

For the history I should go back to 2002, when Mr. Tuilepa the current Prime Minister, he talked to a group of people about the shortage of doctors, in the South Pacific region in general and also there were some English students who were to be educated as doctors in Fiji. Fiji now has four Samoan students and every time there is a coup the students are sent back. They were very keen to look for a medical school that could operate out of Samoa. Among other things, Samoa is very isolated and in order to provide a quality curriculum, we had to leverage distance learning. And also it was a question of equity, you know, we wanted to provide the same basic professional competency training, regardless of whether students are distance educated or not. We can't compare a student in Samoa who was getting a second-rate education and a student say who is from a broad band rich country like America getting all the benefits. So, we had to find a way to provide the same level of learning. And the Prime Minister, particularly, was keen on this idea of leveraging distance learning, because, you know, he knows that distance learning is used in a number of different areas, including continuing medical education, telemedicine. Someone mentioned nursing, for example, has been taken on telemedicine and distance learning in a whole-hearted way.

But there's been a problem with the best and brightest leaving Samoa, along with a number of countries, where the people are not returning getting their training. And there are a number of places where people are leaving. [It's] Politically from the standpoint of the people who[started Oceania University of Medicine, they wanted to be in a place which was stable. And Samoa is the most stable, Christian democracy in the South Pacific, whereas most South Pacific islands have all sorts of problems. So for us, that was an attraction to go establish the school there. Back in 2002, there was a meeting with various medical educators from Australia and the United States, and they decided to push for a medical school, you know.] the Chairman of American evangelical Education decided to go for a medical school that is lodged in Samoa. The OUM Act of 2002 was passed, and that's how the University became established.

The government gave some buildings on hospital grounds. The main hospital there with 300 beds, which is the training hospital for the University. We spent nearly three years, especially in Australia, we put the curriculum team of medical educators and we leveraged all of our connections in Monash University, where I was a medical educator for over ten years It's taken time to refine it through various feedback and policy assessments and all that sort of stuff to come up with a curriculum that is suitable for delivery by distance learning. And I want you to know, and I'll say this a few times, years three and four are traditional. There is no difference. The students go to teaching hospitals, and they are supervised. They spend most of their time in hospitals and they will learn clinical skills and professional skills, and so forth.

So, we try to leverage the latest innovations of distance learning and I think the Internet speed and so on is allowing us to do more and more with it, with the distance learning technology. And we have come a long way since 2002 because - some of you know Frank Stitt was involved with the initial setting up, and he was promoting pretty much a virtual medical school. We found that that just doesn't work. Some of you have heard of IVIMEDS and it's no wonder IVIMEDS has not taken off, because medical education requires judicious use of distance learning. Well, all I can tell you, as I can't speak for other schools and how they use it, but we certainly are stretching the envelope to some extent because of the location of Samoa. We need an international staff because we don't have staff there that are competent. Whereas, the teachers we now have [*are actually distributed* around the world and are teaching our students around the world.

Perhaps a starting point is to appoint a really outstanding Dean of Medicine, and this is Professor Satu Viali. He is a Samoan, native Samoan, who studied medicine in New Zealand, and he did his physician training in Australia. So, he brings in a high standard, a Western standard, of education. So, he could have given this talk, but I'm, you know -- I'll do my best. So, he is the inaugural Dean, and he looks after the campus over there. And one of the things the Prime Minister more particularly was pushing is to -- not just to set up a medical school, but to make that as a hub for medical education. Although we are a privately-owned medical school, but I think we do our share in terms of our capacity to give something back, and we have actually 25 scholarships worth $2.7 million that are actually offered to Samoans and other Pacific Island nations. Some of those, I think I will also mention them later on. And I think the focus is catering to the students who are geographically isolated throughout the world, and the ideal focus of our distance learning program is again on Years 1 and 2.

The students start a survey course called, Introduction to Medicine. This is a face-to-face intensive program. So, all students who start at OUM have to come together. We bring them all to the same level. We assume they don't know much about internet technologies and so on, so they all kind of learn how to deal with our system. The introductory course is offered in Samoa, but we also have a lot of experienced allied health professionals in America and take it in Harcum College and the ones that qualify are entitled to enter the program. I just want to go through the program as such. It's a very traditional program. The content is very traditional.

CD - I'm sorry. This is in your handout, also, by the way. You can see it, as well. It's on page --

MC - Three.

CD - Three. Okay, thank you.

SC - I want to just pick out some of the highlights of the program that has been put together. This is a four-year course it is a graduate entry program. The students have to have their bachelors degrees. There are preclinical and clinical components. There are medical system-based preclinical modules. There are 10 of them, and each of them takes 8 weeks, so that's 80 weeks. And then there's core rotations -- six core rotations of 48 weeks, plus another 24 weeks of electives and selectives.

So, Introduction of Medicine is face-to-face. These 9 modules are offered by distance education. And in each module, the students have a case presented each week with the problems and so on, and the instructor takes them through that. They've got formative questions and then at the end of it, they've got a summative exam. So, at the end of each of these modules, the students have an exam. And we actually contract out to

Pearson, which does the NCLEX exams. So Pearson Vue has 4,000 centers around the world. They show an identity card, a photo ID and so on, and they are allowed to proceed to take the exam.

Also, the system allows us to give some feedback to the student. As they walk out after the exam, they get answers and the questions that they got wrong and further reading and so forth. So, as the students progress through the pre-medical modules and they finish that, they then have to take a hurdle exam. It's a university-based final pre-clinical exam, or in the case of the American students, and some Australian students, they are allowed to take the USMLE Part 1 exam. Once they pass this, they move into the clinical rotations.

RH – Where do they start that – the clinical rotations?

SC - Once they complete that, and sit the USMLE exam they can start the rotation. But if they fail, they must sit out and are not allowed to proceed until they pass the USMLE Step 1.

RH - That's a higher standard than a lot of US medical schools have.

HH - May I ask you what -- I'm a gastroenterologist. The gastrointestinal system, four weeks - is this strictly what you're saying embryology, anatomy, biochemistry, chemistry -- where do they learn clinical gastroenterology?

SC - These are pre-clinical cases, a pre-clinical curriculum. So, during the case -- and if you've got time, I can show you some examples. We've got clinical vignettes sort of interspersed within the sort of basic sciences learning physiology, anatomy.

MC - Eight weeks you said, right?

SC - Eight weeks.

MC - Each one is for eight weeks.

CD - Clinical instruction would be in the clinical rotation, so would internal medicine rotation.

HH - Yeah, but you may not necessarily do gastroenterology in your internal medicine rotation.

CD - True.

SC - So, once they finish their core rotations, then, again, we ask them to sit for a final clinical exam or the USMLE Part 2. And then, they finish all the rotations in order to graduate.

I just want to make a couple of other quick points these are themes that] run through the exams and the different subjects. The course is very tough, and a lot of students, in fact, who have a misconception of distance learning have not enrolled with us. Because we tell them that, look, it's going to take 40 weeks of, you know, study and you've got to actually be present in synchronous learning and asynchronous learning and also have engaged in meeting with instructors and instructors e-mail them on a weekly basis to check how they are doing in the classroom and they take it up on the side. We are often told by the instructors, such and such a student hasn't posted something for a week and

then an administrator will then contact a student and find out what is going on. And that is very important. The student progression is paramount. Because in this sort of system, you could easily lose a student if you lost track of what they are doing. If they fall behind one or two weeks, that's it. We have to take the step to tell them to sit out the whole eight-week term and come back the following term

CD - Participation is part of the grade, the final grade.

SC - Yes, participation contributes to 10% of the marks. In other words, instructors give them as a score of 10% on participation, 90% is the exam.

Also, I want to just make a quick point that with distance learning, one area that we can give students with a face-to-face contact by the University is by appointing community-based physician mentors. So, while there is a physician who is paid for two hours a week and the students go to the mentor and they are studying, for example, musculoskeletal system, they can actually meet with a mentor, not only learn professional skills, but the mentors give feedback on the student's [as a] professionalism and all the other sort of attributes that a good doctor or budding doctor should have.

As I said, the clinical rotations are, you know, set up in a way that is very similar to the traditional medical school. In fact, we have allied with a number of established medical schools in Australia, New Zealand and the United States with already established teaching hospitals and our students get a chance to do their clerkships or rotations through them.

Now, the other advantage of using distance learning is that we actually can track a lot. We've got a core faculty and curriculum writers who actually can monitor the performance of instructor. We can actually go and see what the instructors are doing. Unlike a traditional medical school, where a lecturer or teacher can stress whatever they want, and some give good experience, some give a bad experience. In this case, we can actually monitor what's been posted and watch the interaction that is taking place. As I said, we can monitor students' participation, and the plan today is to show you a demonstration of the asynchronous Module and also we have live classroom, which is through Elluminate. So, in this case, you're going to look at student attendance and participation in the classroom and I'll give you a demonstration of that.

All our instructors are Ph.D. or M.D. qualified so that we make sure we get the best teachers possible. We have sacked some teachers because they do not adapt. So, what we have now done is we have introduced a Train the Trainer Program. So, before our instructors can go on line, they are given training to make sure that they run the classes to be minimally invasive to encourage students to discuss and talk.

BB - What kind of training do you give your faculty?

SC - Basically, the faculty training is not just the physical use of the technology, but the sort of things that we talked about earlier: Make it interesting, put stuff in the clinical context -- talk to students. Not content only, but also content-plus.

CD - Tell stories.

SC - Tell stories and narratives and so on. You know, some of the clinical contexts-- and I think the same point has been made by others here-- it is better when -- interesting that the people with a clinical background - often make it more fun just because they have a clinical background. So, these are the same issues that we face, as well.

The other advantage we have as a small medical school is that our curriculum is examined by faculty for gaps, redundancy and overall quality. And we have external audits by independent medical educators and board certified physicians. And also, in Melbourne we have Monash University and we actually hire fifth-year medical students from Monash who look through our curriculum and give us feedback. Because our numbers are so very small [. So,} the Monash students allow us to make sure that the curriculum material is appropriate and right on track.

CD - Kind of act as a focus group before it goes live.

SC - Okay. As I said, the Melbourne office is recruitment and development office. We recruit instructors and provide some training and administrative support. Monash is nearby, we can leverage the Monash Medical School-- I am an alum and worked there for 10 year--so, I can pick up the phone and get people to help. And that's really important for a young, small medical school to have that resource, because we don't have that $50 million budget so that we can go out and hire faculty, so that's how we overcome that.

So, the sort of things that we have learned from all this is that this institution using distance learning is not a correspondence school. In fact, even asynchronous has got limitations, so we've got to move beyond that. Hands-on is also essential. Using the synchronous mode through Elluminate, for example, students actually requested to us, can they use the room as well. So, when the classroom session is over, they say, could you as the instructor leave, and we just want to have a chat among ourselves. We'd like to form our own study groups and so on. So, interactivity is important. It has been used judiciously, as I said before, and, you know, the point that I would make very strongly is that the sort of demography that we have, we do not have young school leavers (high school graduates in the British Commonwealth system may go directly to medical school for the MBBS degree). We have people who are mature learners, most of them are allied health professionals, and their style of learning is more suited to this sort of delivery.

BF - Do you give advanced credit for what they had in the allied health sciences?

SC - In?

BF - You mentioned most of your students are --

SC - They don't receive any credit whatsoever.

B**F** - For nursing?

SC - No, no credit whatsoever. They have to do entire course.

BF - Okay.

SC - It's ideal for isolated students.

CD - In the case of Samoa.

SC -That's a very good example. A Samoan student is getting the same curriculum as a student, say, in Philadelphia or in Sydney. Also, I think we got the sort of model that Samoa could not afford a traditional school. It's a very small country of less than

200,000 people in the South Pacific and nothing else. So, a support network is essential for this school. For Samoa, Australia and America, we always put students first and we track students. We have a system of tracking. In fact, our pass mark is 60%. If a student gets two 60% marks, we talk to them, counsel them. We get a counselor to talk to them. We want to make sure they get at least a 70 average. So, that's how we track our students to make sure so that they can have a good chance of passing the licensure exams.

SC - So, now that we have bedded down the basic medical sciences, now I'd like to focus on vertical integration of clinical skills. As I said, a lot of students that visit a physician mentor get some skills and so on. And we also need to prepare a student before they go into rotations. So, now we are having hands-on clinical workshops that the students attend physically. This could be a 7-day intensive workshop. We are planning one for Philadelphia. We are running several in Melbourne where clinicians and the students come together, again, in the face-to-face modality.

BF - And the taking of the exams, USMLE, you've had Step 1?

SC - Um-hum.

BF - What was your pass rate?

CD - Comparable to what you've find in a Caribbean medical school. You know, it's not statistically --

BF - Caribbean medical schools go from 97% to zero.

CD - Yeah, well, we haven't had enough to be statistically significant.

BF - Okay.

SC - And the point I'd make from that is that another thing that we realized is that for problem-based learning or case-based learning type pedagogy, actually disadvantages students who are taking the USMLE exam. So, what we've done, is we've gone back to a lot of the exams since then, and we've improved the type of questions to be more the USMLE style. So, that's again something that we've had to bring on board.

CD - Much closer to 97 than zero so far.

SC - With distance learning we have this interaction among a more diverse group of students and their instructors. There are students from Samoa, America, New Zealand, and we have instructors and curriculum experts from Australia, Samoa, Germany and the United Kingdom.

Voice - And Great Britain.

SC - So, that is very interesting. You can have a classroom of people from various backgrounds. And some of them -- you could get someone experienced in emergency medicine -- people learn a lot about a certain area and some of them know more so than the instructor because they're bringing all this knowledge. And there's a sense of enhancing the learning experience and also the average age of our class about 40, again, because we are tapping a very special market out there. We even have one guy who, you know, just wants to become a missionary. He's in his fifties, and he said this suits his learning style. After that, he wants to go and do some work, helping people.

Okay. So, modus operandi of OUM is that we minimize the dislocation of students from their communities. We believe that the students should stay in the community where they are. We deliver this education to where they are.

So, our preference is the student stay within their home base, become familiar with the life of a physician within their locales and the people and the local healthcare system. I think that's a goal of all medical education. In the traditional mode in Samoa, a Samoan student will go to New Zealand to medical school, study medicine, find a local girl, marry, settle and never come back. Now, I will give you an example of one of our first graduates in Samoa, who is now working as intern, working in the system, and he's living in Samoa where he's working. That's Tapa. So, Tapa graduated the end of last year. So, now he's an intern. He was given a scholarship, so he's serving four years with the government hospital in Samoa. And also, just to take this idea of a local education at a local base. We've got a Nurse Practitioner from South Carolina who works in the state prison system. Her professed future is that she wants to work in the prison system as a physician. We've got a nurse in Australia. She works on the Outback, and that's what she wants to do. In fact, this nurse is interesting. With the exam system, for example, she lives so far from the closest Pearson Vue exam testing center, that we actually fly her after each eight weeks to a testing center. So, again, it's more of a student friendly sort of approach. So in our case with distance learning, we have far flung community of students faculty and administrators working together. Without this concept, this type of medical school could not exist. [Without] We can't just fit all of that into a brick and mortar medical school. That's not what we want to do.

Approximately 70% of our students are American. We do not discriminate. Anyone can apply to do the course with us, as long as they are qualified. In order to relieve the stress of family or financial obligations, they can do the first two years in the community where they are living. Which means, they don't have to leave their family? The financial burden is a lot less. And we are the only medical school that offers a realistic opportunity to work in their allied health professional career in Years 1 and 2. I also think the other point that I want to make is that international students, such as those in American and Australia and New Zealand, provide us with the resources to offer scholarships of two or three thousand per student to underprivileged students. As an example, there is Ricardo from Australia, Shelia from the United States, and Tapa and – Kapuana and Emanuel. So, these are some more students who are benefiting and will become doctors in their country because of the funds from the international students.

The program is quite tough -- 40 hours per week in Years 1 and 2, and there are more hours in the clinical years. It will only take four years if they go straight through, if they take one module after the other. But those who want a flexible schedule-- flexibility if you like -- it may take up to five or six years. This is -- they have to do a minimum of 3 modules per year to remain in good standing.

SC (REFERRING TO THE SCREEN): Don't worry about the details, but, basically, this is from Trisha Greenhalt, what she put together, the sort of things that computer-based learning offers. And on the one hand, you might just have the low tech stuff: e-mail contact between tutor and student, you might have assignments and papers. So, what I've done, I've taken out all the properties and the Intranet and put it on line, because, you know, the Intranet is something like a bricks and mortar school. You know, you have a bunch of computers in one of the rooms, and they're talking to one another. But in our case, we can get things submitted. So these green ticks you see here tell you what we do. So, we have white board and e-mail discussion groups and so on. On-line

books, library, power points, and so on. And what we're going toward, using Elluminate is a synchronous, real-time classroom.

The one thing that I don't agree with is a fully Internet-based, totally web-based degree course. A fully integrated, interactive basic sciences course using the web is possible. So, I would say our course is roughly 45% distance learning and the other 55% is traditional learning. And from my personal viewpoint, I think, you know, as we introduce Elluminate more and more, you know, perhaps the contact -- it's not a physical contact -- but it's a real-time contact that students find valuable at the other end.

Okay. So, where do we go from here? Well, we certainly -- the reason why we're here is because we want to talk to accreditors and we want to share our experience and help in establishing standards that we believe will guide us as well as the accrediting panel to come to the ultimate quality that meets the standards of medical education. So, we will come to a number of possibilities. I think Chris mentioned someone had heard negative media because there is a misapprehension that we are correspondence school, so we submitted our curriculum to the Australian Medical Council and they discussed it with every state in Australia to look at it, and they said what we are doing is fine. So, they officially gave us clearance for our students to take the AMC exam. And also, we have now been granted applicant status by the PASCU, who will hopefully we will be working with them in the next two years toward accreditation.

CD – Philippines Accreditation Association of Schools Colleges and Universities.

SC - Again, at the end of the day what we'd like to do is to provide a quality medical education with a high licensing exam pass rate, you know, equal to or better than any other medical school. That's our target. At the end of the day, we have to remain true to our mission, our strategy, and our method of blended instruction. That will determine our success as well as that of our students. And becoming a traditional medical school is not an option for us. This is the last slide. As you can see it's a bit of a noisy map here. But our primary mission is to produce doctors for Samoa and in the Pacific islands and geographically isolated international students as they pursue that mission This is Samoa, a small island with a small population. This is a great website. The CIA provides a great website to get this type of information. [

HM - I apologize if you said this and I missed it. Do your first or second year students dissect a cadaver?

SC - No.

HM - What are the other -- and I'm not an M.D. -- what are the other hands-on things that first and second year students traditionally do that they're not going to be doing in this setting?

SC - The first year student, the 8 weeks are hands-on. The first 8 weeks are hands-on, so they are physically there with their instructors.

HM - What thing? That's a period of time. What thing -- activities -- are that are hands on?

SC - They participate in tutorials...

HM - Again, I'm thinking about what is done in a medical school, hands on. Dissecting a cadaver is hands on.

SC Yeah.

HM Okay. What other things are done in traditional medical schools that are not able to be done -- and the other question, is how important are they? So, what if they're not done.

SC - I think -- taking the questions for anatomy, for example. For a staff in Samoa, we are not allowed to dissect cadavers because of religious reasons. Okay? So, we can't dissect cadaver*s* in Samoa. We don't dissect them anywhere. And, also, in Australia and I believe in America, many of the schools are going away from cadaveric dissection. Some of my best friends are physicians, told me they hated their anatomy because they never learned anything. So, it's an issue that is debatable.

BB - Yeah.

SC - The laboratory classes -- we have specialized on-line laboratory classes that provide simulated diagrams and so on, and students have to analyze the data and so forth. So, in the first year -- the first 8 weeks, they do histology. We give them a box of slides. They learn how to use the microscope and so forth. In the first 8 weeks, they also get some basic introduction to clinical skills -- you know, how to take a history and so on, early on. So, the first 8 weeks are concentrated. And throughout the next 9 modules, what they do is they go into the community, they sit with their mentor and that's the sort of thing that traditional medical students get, I presume. They have a mentor in the community who coaches them. It's a bit of an apprentice model that a mentor in the community will take them through what it's like to serve in a real medical practice. Does that answer your question?

HM - Thank you. I mean, I just wanted to ask what sort of things are, quote-quote, missing and is it important that they are, quote-quote, missing. And I can't give answers to those.

SC - I think this is what our position is and it would be interesting to see what the accreditors' position is. The accreditors might all put their hand up unanimously and say you've got to have 110 hours of cadaveric dissection. If that's the position, we certainly are not going to be able to meet that.

BB - They won't say that. Because you're right, fewer and fewer medical schools are doing it.

HH - Tell me again about this mentorship in first and second year. Like a student from Philadelphia, where do you find his mentor?

SC - The student -- before they start their ITM course, once they are matriculated, they are asked to look for a mentor within their community. And the mentor -- usually the student looks for the mentor and the proposed mentor then has to submit their credentials to the University and we do a check. Do you know what the check is called, the physician check to make sure the --

CD - Background check? Yeah, an extensive background check, making sure their license is okay, and they haven't had any problems with the state medical board. We've had to give a few the boot, because of that.

SC - Then, the Dean writes a letter to the mentor and welcomes him on board, and then the mentor is paid for two hours per week to mentor the student.

CD - A lot of times, the student will spend a lot longer than two hours a week with them.

HH - If there are no further questions, you have a second part to your presentation. Please go--

BF - I have just one question. What are you standards for choosing the mentor aside from the background check? Any particular specialty or background?

CD - Generally, a primary care specialty. Yeah, because most of the students coming here are going to be primary care.

SC - General practitioner. For example, Generally, they stick to the same mentor for their entire 10 preclinical modules. The first two years will generally stick to one mentor. Occasionally, we have a student who might change location or something. So, the consistency is always there. And we train the mentor. We give him a whole bunch of guidelines on what we're looking for. They help us, you know, work out the professional attributes, if you like, and those sort of soft things that are very critical. So, if a student, for example, has got an attitude problem and so on, we are told. Then, the student counselor or someone will talk to them and say, okay, you'd better change your behavior if you want to proceed.

MC - I just have a quick comment. We have this similar system. We do have mentors also in the med school in the first two years. Well, not all schools have it, because we -- at Penn State College of Medicine, we have that system, and first two year students do have clinicians mostly. 90% of them are clinicians who act as mentors for the students, but 10% of them do chose even a basic scientist as their mentors.

BF - In the U.S., there are schools that if a student has a particular problem, they would be assigned a mentor who would be assisting them to bring them up to speed. I am aware of a number of schools that do that.

MC - Yeah, we have that, too. But, in general, we have mentors.

BF - It's often students in more advanced years.

CD - Ours are physicians, but they, also, many of them are leaders in local medical societies. We have a number of our students actually work at academic medical centers, and so their mentor may actually be a faculty member at another academic medical center.

MC - Or sometimes a senior medical student could also -- it's not really a mentor, but it's more like a --

BF - More like a tutor.

MC - Tutor, yea..

CD - In our case, they do have to be board certified and they have to have been practicing a while and, you know, have a fair amount of experience and so forth.

HH - Depends on the job description, what is a mentor. We tried it, and the students prefer to have -- junior students prefer to have their peers. You know, if they have a problem or something. They preferred to discuss it with their peers than discuss it with a professor. They're always a bit leery about the reaction of a teacher towards their problem. So, they prefer to discuss it with their peers, which they feel are much more understanding. We tried mentorship and assigned students to different physicians, and it never worked. They preferred kind of ad hoc. If I have a problem, I'll discuss it with a peer and then if we need your help, there's always the vice-Dean for Student Affairs. I did that job for 11 years. I must say, they didn't disturb me often. Please go ahead.

SC - Okay. These are the two demonstrations I think cover the concept of how we operate. I mean, I can show you a very fancy content, but I think this is how we move it across. First, I'm going to show you an asynchronous methodology, and then I'm going to show you a synchronous methodology. The asynchronous had limitations. That's why we're moving away from it.

So, what a student basically does is they learn through the website – this is how the students access the information. All the students, no matter where they are in the world, this is where they come to. In the middle, there are the announcements, so the students can see where the latest announcement is. There's a bunch of other things. We have resources for them to practice exam questions from Exam Master. It's got a whole bunch of USMLE questions. We also have other resources. I won't go through that because of the time. We also have a virtual library, with a librarian in Australia who helps students. The librarian can help them join the local medical library. If they want any material, they can contact the library.

The interesting thing is, these are the terms. We have five terms a year for flexibility. Students can enroll into the program anytime, five intakes per year. This is term 704 currently. So, what we have here is these are the modules that run. You saw them in the early program. Each has a teacher -- cardiovascular, endocrine, gastrointestinal, haemic-immune., Justin Moore, for example, is at Oxford. We got Sandra Dieni who is in Germany. You can now see you've got a faculty that is distributed around the world. We go and find them, but we get the best value, you know, for good quality. So, if you take any of them -- so, if you take the musculoskeletal system. So, this asynchronous learning, what they have is the definition of what the content is and they got a bunch of things here. I won't go through everything because of the time limitation. So, they have a syllabus. They have some instructional participation, which gets them 10% of the marks. These are the requirements. We've got a bunch of animations that we can show them, and they can access this anytime and give assist with your learning. We have notes and also there are some dissection videos that they can look at, and also tutorial notes. So, there's a whole bunch of things that the students can access.

-- And then what happens, is that they've got a case that they work around for this presentation. So, I'll just quickly show you one, just to kind of give you the flavor to see how each one is constructed. Okay. So, this is an example of a case. So, they have one case a week that they go through in each module. Here's a map of the case. These are the objectives they have to meet. Also, we tell them exactly all the basic sciences they will incur. That was a question before. So, these are the basic sciences here, then the clinical, signs and symptoms for a doctor. So, some of these things are discussed with the mentor, as well, just to kind of put it in a clinical content. You know, the presentation. There's a bunch of tasks that the students have to do.

BB - The tasks are?

SC - Asynchronous. So, the instructor will give each one a task, like, say John, you take this task. You respond to it, and he posts a comment so everyone can see it. The instructor, the classmates, everybody sees it, the comment side.

CD - After research --

SC - Yeah, they do, they research and then they post it. I'll show you examples of that, as well. So, there's a bunch of anatomy and all that in there. This is pretty intense, all the readings.

MC - Do you use any Tweedy to do anatomy and stuff?

SC - Yeah, that's part of the animations and so on. We recommend that they buy some of the anatomy texts. We use Moore and Daley, is what we've been doing. Some histology is included. And depending on -- like, for example, in respiratory, they'll have a lot of x-rays. That's just one week's worth of work, which is pretty heavy. In fact, students are complaining.

With the synchronous, what we do is take some of this out to make the presentation and can summarize it.

HH - It's interesting. I'm looking at this, because I'm an internist, a gastroenterologist, and it reminds me a number of years ago when we were establishing the objectives for different courses, and I was one of the evaluators that the faculty had asked to look at the different objectives were adding up. Different people responsible for the different units and were writing it out. And I remember looking at the objectives from rheumatology and I found them awful. I found them too detailed, and I called the lady who wrote the objectives, and I says, I'm going to ask you a question. Give me an honest answer. I said, if somebody knew all your objectives, would they pass the Royal College examinations in rheumatology? And she says, yes. I says, okay. You get back to work and rewrite these damn objectives. You know, were not producing specialists, we're looking at you know. And that's the problem sometimes when we ask a super specialist to -- they'll look at it and its normal, it's natural for them. But let's have somebody else who's not a rheumatologist or a gastroenterologist look at the objectives and make them realistic. Just looking at that, I can see why your students are complaining.

SC - So, we're addressing those things and trying to cut back. So, this is an example of Week 1. In discussion, this is where you were talking about --

BB – You've got students from the US, Australia, Samoa—several time zones. How do you have a synchronous conversation across a half a dozen countries?

SC - That is a problem.

BB - That is the major problem. You're talking about the United States and the Island of Samoa. The distances cover three to four time zones or even six different time zones. How do you have a conversation across six different time zones.

HH – We're going to have to limit the questions but I'm going to ask you to keep going because we're going to give fair time to everybody to make their presentations. Please go on

SC - All the sessions are recorded. So, if when student misses participating its on line.

HH – I'm going to ask you -

BB - Oh, I'm sorry.

SC - Basically, the instructors put out a post and then students are responding to a post. This is an example of a post. We've got the usual problems of plagiarizing and all, every issue that a traditional medical school faces. We've had to discipline students not to plagiarize. If they don't get a score of 6 out of 10 for participation, they fail this part of it. They will repeat it. I think the next demonstration is where I think we are at. This one here. This is a synchronous learning mode where we have 3 students in the class. We've got a teacher, plus we've got one of the curriculum experts sitting in on this to see how it goes. This was a special lecture that went for nearly 2 hours with a break in between. I'm not going to take you through 2 hours, but I'll just give you a few snippets.

[*Plays audio portion of the lecture.*]

SC - He's just going through some of the lecture material. Because I'm fast-forwarding it does that.

MC - This isn't real time by the teacher, is it? So, you're using audio, visuals. There were people there you are conferencing and had the responses going on simultaneously?

SC - Yes.

MC - Okay, I got it.

[*Plays more of the lecture, question and answer.*]

HH - because of the interest of time.

MC - So, I think I just want to comment very quickly that a lot of business schools use this kind of modules for teaching long distance, so that is a very, very common factor in the business schools where teachers are on and then you can post your question, and then, they say, oh, Marla, sent me this question, or Bernie sent me this question, so I'm going answer it for the whole group. And so, everybody's on their computers and its live teaching, but it's distance learning.

[*Plays more of the lecture.*]

BB - I think lectures are essential to the program. There are several states that are requiring classroom time and I think this would classify as so in that respect it is very good. The information is very, very good. I enjoyed it. I hope to see the topics. Topics maybe on a page to look at and click on to learn more on that aspect.

SC - There's interaction going on, including getting feedback, asking students; how did the class go, and so on. That was an example of a didactic lecture with interaction with the students. But what would become routine is the weekly sessions-- the tasks that are being asked, so it will become more of a tutorial. So, the instructor would sit back and he'll monitor the tasks, the students will be interacting and, you know, the instructor becomes the facilitator, which is typical pedagogy. So, that's how we do it, and I'll be happy to take any questions.

HH - Are there any questions?

EK - How many students do you have per class?

SC - Maximum is 12, but because of our total population of 100, generally, it works out anywhere from 3 to 8 students at the moment.

EK - Per module?

SC - Per module.

MG - I'm trying to get something straight, with 2 years, pre-clinical he can come from anywhere?

SC - Yeah.

MG - And you go into your clinical and even from Philadelphia, you do your clinical in Philadelphia --

SC - In Philadelphia, yeah.

MG -- so, there's an arrangement made between this medical school and different places of the world. And they can do their clinical, and most people in those places get paid in clinical supervisor ___

HH - What he mentioned is that the student finds their tutor?

MG - I'm talking about clinical rotation. Clinical rotation -- through orthopedics and you live in Toronto for some reason.

HH - Well, I mean, the first two years, the students find --

MG - What about the second two years? Clinical years and you approach University of Toronto and say will you take this person who's doing this clinical rotation in a teaching hospital in Toronto in orthopedics. If they say, yes, then you proceed. If its no?

CD - You've got to find one, hopefully, close by.

MG - Some place by.

SC - We've got rotations in Malaysia, in Samoa, and in Australia that are willing to take students. But the whole point is that if the student is going to be living and practicing in Toronto, we'd encourage the student to do rotations close to their community.

MG - But, no, the place has to take them.

SC - Exactly.

MG - I guess it would depend on the faculty willingness could it be a non-teaching hospital?

CD - Its better if it's a ACGME accredited residency program and everything, at least for the course.

MG - You have some in the United States?

CD - Yeah, we've got one in Chicago right now at Jackson Park?

MG - Right. And any other? Australia? United States? Britain?

CD - No, we don't have any students in Britain.

MG - Canada?

CD - No students in Canada. We've got students in Australia.

MG - Australia is part of _____

SC - University of Sydney took some along with University of Queensland. In fact, we are moving towards a formal agreement now with the teaching hospitals associated with the University of Queensland and the Queensland Health Department [with a formal arrangements with Queensland].

MG - Yeah, but in some ways, that's what the Caribbean schools do, right? Arrange with places in the United States who will take their trainees for clinical --

SC - That's why we're trying to move towards accreditation, for quality, sort out any problems and so on. So, that we're seen as a reasonably good medical school and then have more formal arrangements before we start expanding. We're deliberately not growing too fast because we don't want to have a mutiny on our hands with students not being able to do rotations.

CD - And those clinical preceptors are given the learning objectives with each module, and so they will go over with them at that time.

HH: Well, thank you very much. I'll move on to Sayed (Dr. Rahman).

SR: That was an interesting lecture. And so I'm going to proceed with distance learning. I divided it up on this, my presentation in to this five summaries. First, is introduction to medical education to India. Then from the different bodies and top medical schools in India. Then, the foremost case of distance learning in India. Then, the condition of distance learning medical education in India.

First of all, the introduction of medical education, the undergraduate system, this system is quite different from what I heard of in the US or in the European country. We follow the British system and how they're played in one and a half years in pre clinical teaching and two in clinical teaching. And then there is the MD degree after completion of one year of intensive internship. The basic material of the schools curses is the lecture tool and test examination includes the sciences and biology.

And at the time of independence there were only 19 medical schools and few doctors. Now, this number has been increased to 1 in 49, and these medical colleges, they are run by the state governments or municipal corporations. And they are all related to meeting in different cities.

MG - And they're all allopathic?

SR - All are allopathic, right. Except in alternative medicine, that's a different -- like we have heomotherapy in another department, but in India are all allopathic. Then, the fourth year of education are the medical examination or MD of the highest schools and they are offered in accredited hospitals and the examination is linked to the MD or DMD degrees.

Then, we have accrediting bodies in India. There are two accrediting bodies in India. One is the Medical Council of India. The Medical Council of India was established in 1934 under the Indian Medical Council Act, 1933. It was the intention of establishing perform standards of higher qualifications in medicine and a definition of medical qualification in India. All 49 medical schools they have all the standard medical college and the same curriculum. This Act was repealed and was modified in '64, '93, and 2001. Now, with the new objective standards of medical education and _____ _____ they are for recognition of medical qualifications of medical institutions of India or foreign countries.

There are two administrations or organizations of medical qualifications. Then there is the matter of the Mutual Commission of Medical qualifications.

Another accrediting body is the Diplomat of National Quality (DMD). The diplomat examinations were established in 1975 to define the system of improvement of the quality of medical education. In addition to the 49 medical institutions there are qualifications in each of the in 54 disciplines in their Board specialties. They are approved by the Board of Diplomate National Board. Then the setting up of a national body to conduct all graduate medical examination was intended to provide a common standard and to be sure the applicant met the standard qualifications. To meet the qualifications there was created before they graduate and before the Doctorate degree other institutions by the government of India-------, the same thing in 2006.

HH - I'm sorry. There is a terminal examination? Actually two questions; Is there terminal examinations for the specialists or super specialists?

SR - Yes.

HH - Now, often would this body go and visit the universities and the hospitals to accredit them? To look at their programs in detail?

SR - There are two systems. The schools are supposed to work with the…

HH - Let me make it clear. I'm a program -- I've been a program director of gastroenterology at my university. Every six year, or whatever, the Royal College sends me a questionnaire which I have to fill out, and then they come and visit my school. They look at my facilities, they question my residents and they took at my answers. And then, they decided whether or not I'm apt and I can continue to form gastroenterologists, or they can say, you can't form gastroenterologists anymore, you've lost your qualifications. Or else, they say you have major problems, you have a year to correct them. If not, you're going to lose the program. Do you have something like that?

SR - Yes

HH - Okay, fine. Proceed.

SR - There's a list of medical schools like the top most;(Naming them)

MG - What makes them top? Who determines that they're the top? Do they produce the smartest doctors? The richest doctors? Or examinations?

SR - In quality ways and other ways-

MC - MCI and Medical Council of India.

MG – The questions is you know**,** US News - .The assumption is being bottom, your still call the bottom person in your medical class, doctor. How low is bottom from top? What's the spread? What's the differential? Should it matter if you are the top? You're the top in everything.

SR – It's determined by seventy to eighty students performance. Top in performance.

HH – There's a whole bunch of things here.

MC – I mean - how much money they have?

SR OK now related to distance learning. In the whole Indian system what comprises this is _____ University and University in Bangalore city then in United State University and distance education institutions. Of these apart from the agreement on Bangalore city only five states and 19 areas have opened a program in this area of distance related education on knowledge base. Distance education is considered a novelty in terms of prospective programs in terms of quality and simplicity. The programs for distance education started first with extreme caution by including the top University. And other disiciplines have been included with much success.

BB – I expect philosophy and that's all and I wonder if its unsofisticated.

SR – Different types of degrees, advanced diplomas, Bachelor's, Master's, and Ph.D. awards. Now ------ 500 medical students, many work, they consist of individuals some take non medical courses also. They have persons who want to upgrade their knowledge, and get their degrees-----considering it was published in India. When we come to the quality of this implication it is the weakest link in the chain. Only one University is doing programs like Mani University, a distance based program. A knowledge based subject education. They can sit the Board interviews and have the potential to pass it. Occasional medical scientist in District Amour with the help of 200 centers all around India including Kerela. They take one center at a time. So we can see the value of distance medical education in India.

No medical course that is MD is available in India through distance learning. This is important. There are some medical courses through distance learning. In my opinion medical schools are not aware of undergraduate medical education by distance learning. There are some lectures as a part of telemedicine.

Now apart from Gandhi University there are some school that are starting a course through distance learning. India Medical Institution is starting some courses

MC - Where is Othello? It is in Delhi?

SR - It is in Delhi. Oritnai university is providing medical and medic courses. There are two schools that are providing correlated courses. One is the School of Health Sciences and the School of Continuing Education. All of these courses are distance learning 75%.

Another important consideration for a medical college is they are giving a PG for a family physician. There are disadvantages, of 50% distance learning. The IMA we are providing many courses for study;. courses in lactation, in dogm medicine in geriatrics In continuing education there are courses by distance education. There are also certification courses by distance education, torture medicine and pediatrics.

BB - Explain torture medicine.

SR - Related to forensic sciences, forensic medication.

BB - You don't know, so, okay, just continue.

HH - You're talking about the ethics of torture such as, torturing prisoners.

BB - That's what I was wondering about.

MG - The physicians that I know because of some experiences in Canada, who deal with subjects of torture from countries who might have experienced it.

HH - Post-traumatic and so on.

MG - Post-traumatic, but physical, some procedures done on people as part of a torture program.

BB - That's what I was _____

HH - There's a whole bunch of documents in the World Medical Association on prisoners, torture medicine and the ethics of it.

BB – Yea, I know, I do teach that.

MG - This is dealing with the specific medical conditions and fractures.

BB - Okay.

SR - Courses on environmental health, occupational health, child health, psychiatry, sexual medicine, medical negligence and clinical diagnosis, family planning related to sex education. in India, we are _____ _____ lack of a standard In a nutshell,

So I would say that medical education through distance learning in India is yet to take off on a large scale. Still in the initial status. There is high costs involved. Lack of a standard. It is a developing technology without proven performance. Initial I would say medical education No valid registration is being offered. No MD is being offered by distance learning Some post graduate education is being offered. On a skill based certification has the Board certification in surgery.

MG - They're using skill in that way I would say that most use say a certificate in geriatrics skills are part of it. If you can say it is a skill that you will use in examination? There are components of it but its pretty narrow because that's a physical skill such as a surgeon's skill, or a gastroenterologist skill.

HH - Yeah, I mean, doing a colonoscopy, it is a certain amount of skill.

MG - Of a certain kind of skill ____

HH – Like taking out a gall bladder. When you were talking about having a post graduate certificate offered by a private institution -- it was mentioned it can be offered by a private group?

SR – Offered by a certain entity.

HH - By a private institution? But no private group can offer a certificate or a post-graduate certificate or diploma.

SR – By a private body?

MC - But you said it's not recognized by the government.

SR - But yet they can offer certificates.

HH - They offer certificate, but they are not recognized, so they are useless

SR - I didn't say it is useless, sir.

MC - Or do those graduates go back to practice somewhere in the rural area.

SR – They can practice anywhere They are not recognized by the Council of India or pharmacology.

HH - The point I'm getting at, is there any oversight on the quality of these courses? I mean, they're not being recognized, so there's no oversight on the quality of these courses.

SR - But the body is very impressive in quality.

MC - You say IMA has courses -- I mean, gives certificates -- which are not recognized by the government, but the IMA, itself, is a very recognized body.

MG – This is what I would say too is there are credentials and currency. Someone may not have a credential in body, but may have a high currency through the quality of the course. So, if -- for example, before geriatrics was certified in Canada, there were people who trained in geriatrics and practiced what we would call geriatricians, with no special certification. I was one of them. When we got certification and those of us who took the exam, got certification. Half my colleagues didn't take the exam and still practice as geriatricians. The currency changed.

HH - But the hospital that was given you privileges recognized your training and they let you do --

MG - What they did is, they hired us by the credentials we had, which was internal medicine, knowing full well that the focus of our efforts was on older people.

HH - Absolutely.

MG - So, it depends on what you do -- so, these are all doctors, and if I said I'm going to take the course in maternal child health, and at the end of the course I will know more about it, the fact that it doesn't have a credentials doesn't mean it doesn't have a

currency. Someone may say that course of the IMA is a really good course and I would like you to do this for us.

HH - That's fine.

MG - So, most of us have gone through this developmental process before there's a credentialing process or body to process our currency.

HH - I will let you conclude, sir. Have you concluded?

SR - Thank you very much; there is another part.

HH - Any comments?

SR – This is a case I would take to pharmacology. I would like to say the school that provides the education and post graduate education you know, and come by is unique and post graduation is laid down. And those in combination are the doctor's belief. It is a rapidly changing society. In graduate medical education there was a debate which was on the level on who can afford graduate medical education. At the time it wasn't there but now India has the clinical college. This is important to research and especially in pharmacology. There is a code to competing there. We are far behind the Chinese. It must be dealt with immediately. On the state of medical science I must say the Medical College in Dipna a medical college in the southern region.

In pharmacology there are five goals and objectives. And all parts are identified and they are exposed to distance education.

SC - Could you just comment on why the take up of distance communication has been so slow in India, even 10, 20%?

SR - It is because of - they are not allowing it.

SC - On what basis have they made that decision?

SR - Maybe because of, it might be they are afraid of the curriculum or some part of the education

SC - Is it resistance to change?

SR - Medical education for distance learning has various interpretations. We don't want to start medical education for the distance

MC - So, considering India is the IT guru of the world, I am thinking that is it just the fear of losing the image of the people's jobs if they start too much distance learning that they will not need any physical teachers in the medical schools. Is that the fear? I mean, why are people objecting so much?

SR - I can't comment exactly, but in fact maybe because of teachers, could be what you're saying is true. Because all teachers, they are department employees.

MC - No, because I think that's right. I just wanted to make one remark that in India, we don't shrink jobs or people around lose jobs. Once you have a job whether you are in industry or whether you are the _____, it is your life-long job. They don't get rid of you or something. That is why I thought that maybe it is the fear ___

BB - I went to India for -- I was there for a month, and I was two weeks in Mumbai and I was brought there specifically to teach with a colleague American education lessons, including what we were doing in distance education. I went to about 12 colleges, mainly bioethics and we showed people, and the response was things were -- some people were excited by the prospect. But the basic idea was, things were interesting techniques. They would work with -- we did more than just distance education. We did lots of interactive education models. These were very interesting techniques, very nicely suited to Americans.

MG - But in some ways, it probably reflects what you started off with in terms of the belief of the importance of - we're talking about the undergraduate degree. There are very few places other than what you've described that are often used for an undergraduate degree, a basic medical degree, in which distance medical education plays a major component, which is different from using IT and stuff. So, I'm not that surprised, because the Brits don't do it. We don't do it as part of our undergraduate infrastructure. And India really is modeled on the British system and we all other than the United States the Commonwealth have used the same kind of system. So, I'm not that surprised. The question, though, is why not use the technologies that exist of which India is a leader to supplement even at undergraduates. And I'm willing to bet that it is there in certain areas, but not as the basis of getting you a degree.

BB – My experience was no.

MG – That they don't use computer technology?

BB - It is a very traditional didactic system.

HH - It reminds me of the reaction we had at my school. We changed from a traditional, lecture-based curriculum to a problem-based learning. There was an uproar, mainly from the basic science faculty, but also from clinical faculty. They thought they were going to lose their jobs. I mean, there was more -- it wasn't altruistic that they configured. A lot of them were worried they were going to lose their jobs. Here is Mr. or Mrs. that x number of lectures a year and they were being paid for this, and then, suddenly, no more lectures. They didn't realize that we'd need them as tutors in the problem-based curriculum. But there was a revolution. The dean just about had to hide in his office for a couple of weeks.

MG - Everybody had to watch their backs, their jobs, they resist. Nobody could understand the evaluations. I remember, because we didn't get them to U of T, and it sounded like kindergarten, they'd go in circle. They interact well. But what's the grade? Oh, we don't give out grades. They didn't know what to do with it. And then they were pretty good.

HH - Elizabeth, it's yours.

MC - Can I make just one remark?

HH - Yes, please do .

MC - Because we had sent out e-mails to multiple universities in India, asking for their response on distance learning. Technically, we got only two responses back, but I was discussing with Mark _____ -- okay -- and I discussed with him and he said those schools sent back the responses saying they have anywhere between -- one school has

10 to 20% of distance learning in that school since 2006. Another school claimed, in New Delhi, that they had it since 2000 and they are about eight years experienced now in distance learning, being 22 to 30% of that. So, I was checking with him and this is pediatrics, OBGYN and medicine of the common-most subjects that they teach. But after talking to him, I'm coming to the conclusion that they could be towards those diplomas and not really towards the medical school.

The problem is the definition and even that should be exactly what do we mean by distance learning? It could be sitting at the computer next door. I mean, you're at a distance.

HH - Please.

EK - Well, I just have a few slides and comments. In many ways, it's sort of a summary of things that have been said already.

HH - That's wonderful.

EK - So, it's not going to be long. But about accreditation and how to measure quality and what to use for measuring quality in distance education and e-learning programs. This is just a time table that two people who have a lot of experience with distance learning put together. They are from the University of Dundee. Maybe not when you were there. It is definitely for a medical school. But basically for people where the time and space are different. I want to remind everyone that distance learning is actually a misnomer. Because we're talking about distance teaching. Learning, all learning, is local and it happens within the person that is learning, and when we talk about distance education, we mustn't forget the importance that the teacher, the role that the teacher plays, and the faculty development that has to go into it in order to have a complete program. Just another way at looking at things when looking at the instructional process.

There is the faculty that provides the content, knowledge, skills and attitudes to the trainee, and it's the trainee that tries to get this content whatever it may be. But there is also the relationship between the faculty and the trainee that gets much, much more complex when we're talking about distance education than when you have a program when people are face to face. So, again, we need to think about how can the faculty get feedback about the students, are they learning anything, what the learner is learning, how the learner accepts or doesn't accept the content, and how does the trainee connect with the faculty? So, I think that's very important to keep in mind, and a good program needs to pay good attention to that.

-- Some key concerns and I think we addressed many of them. But one thing that hasn't been discussed in terms of the needs of the learner is the age of the learners. In some programs, it's an older age, but we need to think about generations. In medical education, we're talking a lot about generations and how the younger generation does learn quite differently from our generation. So, that's something to keep in mind. And the issue of motivation, if it's a course that's really required that the whole graduation depends on, the motivation will be different than if it's something extra.

BB - Let me see the differences between the XYZ generations.

EK - Well, they are much more used to working with computers. They don't need to print out everything as I do. They can -- they are much more accomplished with multi-tasking. They are more comfortable with different types of medias.

BB - They can type 100 words a minute.

EK - Exactly.

BB - And my impression is in many ways they can last longer in front of a computer screen even in a lecture.

EK - Right

MC: So, I have a comment on multi-tasking and it appears more efficient but overall my understanding, and I have read some reviews on that is their retention over long-term is really poor. Momentarily, whenever they are in it, they are handling it all, but the older generation can retain certain knowledge for long-term. The multi-taskers don't.

EK - So, maybe that's an important thing for teachers to keep in mind that they are going to have to re-test the material over and over again to see what they learn.

BB She's right. Whatever it is the more we have to go back to not only the middle exam, but the cumulative exam.

EK - Correct.

BB - And force them to study. In doing distance education, we now have to form corroborative study groups because they're very interactive. They begin to work with each other and then they get better.

MG - In regards to the integrative component, which depending on how -- there's a certain age you're educating, that was part of the bringing them together. This is certainly what I see when I bring my kids together - I have two sets of kids, the youngest being 18, and everything is in modules. So, they don't bring together. They often don't see the relationship between what happened in Course X and Course Y, that they are connected. This is history; history is history; literature so it is connected to literature

BB – Don't give them any screens. There are all sorts of subtle relationships that you will not pick up.

EK - So, other things are leveraged of subject knowledge or the baselines or pre-test in the beginning is very important and there are resources in the various for someone who is in New York. They have access to a lot of libraries and maybe a lot of other resources than someone one who lives in outlying areas.

BB - Do you use on-line journals, medical journals, and that sort of thing?

EK - Yes, yes, and on-line textbooks.

SC - So, for example, a public library. So, we have a library with all the textbooks. Equities in publishing.

BB - We do the same thing. They are given access to someone who otherwise they may not get it.

HH - Either one of two things.

SC – I think the journals or we select a research article and refer to that particular articles and it's available.

EK - So, but what we want educators to think about are not only professional requirements or does a course deliver that?
Another important element of distance learning is the design of the program, objectives. Is a self-assessment involved? Are there multiple methods? Is it interactive? We've mentioned that a couple of times. Are the pathways that someone can go through the program logical but not necessarily linear but not necessarily linear? Is there learning objects that can be exchanged, that can be reused. Ronald, pardon, again from Dundee. Does an have a technology that is a very important element for one to think about.

Also very important, is to be selfless. That is just one of the several principles of adult learning -- in providing an education to acknowledge that the learners that we have are medical students or regular or practicing physicians are adult learners. So, we need to think about what programs we can develop that can fit that model. And looking again at our relationship between the role teachers to support the learners as well as the teacher with the feedback factors that exist between the two. So, on-line, off-line support this helps support, in person meetings, and tutors, quizzes, and all sorts of things. Now, I don't know that anyone here was at the AMEE just a few weeks ago, Association for Medical Education in Europe.

They had a discussion about whether e-learning is controlling students rather than freeing them, and there were two different views expressed and some people who said no. I said e-learning provides opportunities for freeing them. It's on your own time, at your own pace, in your own place. But there was a counterattack by people who said, well, there is even more control The teacher does have quite a bit of control. For example, they can grant access to their on-line material, but also they can keep track of every move. In some of the presentations we talked about how you can check what questions they look at, how much time they spend on the computer. So, this would be an interesting question. Of course, those who say, no, stated it is indeed a very learner-center approach, but those who say, yes, they acknowledge the role of the teacher and maybe not as learner-centered as we think of it at first. Here are just some of the areas it is important to include a personalized learning plan. Is that being established at the beginning of the course? Promoting collaborating and group learning, the opportunity for self-assessment and monitoring of progress, which is so important for the individual learner, as well as for the teacher, and variation in learning activities. Not doing everything exactly the same, providing only the same type of learning stimulus. Real time operations and include access to real time operations. This is something happening, not just asynchronous but also synchronous.

-- And just to study a few trends, interchangeable learning objects. This is definitely one trend that I see in distance learning education -- distance education.

To create a very small education unit that can then be combined by individual learners or by, course developers in more than two big units. So, you look at your student and say, well, this person knows a lot about this topic already, but they don't know anything about that, and then you can go straight to the area where they need additional instruction. So, talking about making the objects -- really, it's like a puzzle you can think of it. The puzzle parts are small enough so that you can manipulate them in many different ways. So, if we develop such types of curricula, that's what we should think about, not just one course curriculum/plan.

HH - Tailoring needs.

EK - Tailoring needs.

HH - Tailoring the needs.

HH - Exactly. The best learning is the use of multiple methodologies to not just on-line teaching but also a combination of other teaching is definitely a trend I can see. Then, point of care learning has become very popular in terms of continuing medical education. That provides the venue for caring for the need

MG - Turn to observation. The trainees amaze me. You ask them a question. They say give me a second. They may not understand anything, but they've certainly got the answer.

EK - But I think in CLE -- you can even get CLE credits for that. I think definitely that part of medical education has moved into this direction. But I think also for undergraduate and graduate education, the issue is knowing when there is a teachable moment and taking advantage of that and providing some training.

The last point is really something that I picked up from research presentations and through conferences related to on-line research -- research about on-line training -- and that is that people don't want to look any more at studies that compare live versus on-line anymore. Because they feel that the answer to that has been found. Yes, it's equitable. You know, it can be just as successful. The issue is more now what works, what doesn't work? What particular elements of on-line learning, distance learning work and make people learn and what is not so effective, under what circumstances. I think that's what the research about distance education is going to at the moment. And so, with that, I just wanted to thank you for all your attention.

BF - One thing I'd ask for is, those who have presented slides, I'd like to circulate that. We were small in number and the advisory council has, I think, 38 or 39 people, or more even. And I'd like those who weren't here to see those. We'll have a transcript. They can read the transcript, and we'll have judgments -- we'll ask each of the section heads to circulate their people, get some judgments and make them to the board as to whether we should have guidelines or should not, or standards or should not, LCME or what have you. So, we can conclude it, unless people think we should meet again.

MG - The meeting, though, is nice. I think it's a reflection of _____, as long as you don't lose -- whatever methodology is used -- the methodologies have evolved through importance of the center point of all of the enterprise, which is the person, the patient, the thoughts of the person, the narrative, the story, because I think all of us have certainly gone through the system and have been part of, hopefully, a reasonable system -- can almost remember the situation of patients which were seminal to who we are, and they were all experiences, real live experiences. And that's my major concern. Not that the technology can't deliver all kinds of stuff and I've certainly grown in an academic system. But I believe that the narrative component of who we are and understanding the realm of duties and obligations to these people can't be lost and shouldn't be lost as part of whatever delivery systems we use. The delivery systems can change and modify, but we can't lose the core and that's my concern.

HH - I think we're going to have to come out with something. I don't know what we're come out with. I think it's going to be – what LCME had done sounds good to me – but something that blends LCME with other things. I think the point was made very clear

here, LCME and the Canadians have -- have two very wealthy countries to work with them, and it's not the same in Samoa and it's not the same in a whole bunch of countries. So, we're going to have to look at the situation of e-learning in the context of which education is delivered, and I think that's going to be our main challenge. It would be very easy to sit down and write LCME criteria upon distance learning, but I think our challenge is somewhat different considering what we have to deal with, the different countries we have to deal with. So, maybe it's not going to be what was present from Samoa. Maybe it's going to be a rapprochement, as they say in French, where we come a little closer together, but we're going to have to do something. I mean, we've put a lot of energy. We've had excellent talks. I think it's time to get clear, but I feel very strongly we're going to have something, and it's not LCME.

BF - I agree. We can have great deference to LCME, but ultimately it comes, as far as a regulator is concerned, to the licensure boards. They're the ones who raise this issue. They're the ones who say we need parameters. We need some guidance. Because some of the things that are being done are not acceptable to them. It makes no sense to them. That's why we did this whole thing.

HH - And the virtual medical school -- really, to me, when I looked at it, and I spent a lot of time when I was preparing my talk -- I spent a lot of time on the computer looking at the virtual medical schools. You know, virtual, virtual. I said, it makes absolutely no sense, and I'm glad you said that they are kind of -- and that was Hardese, one of -- that was one of his babies -- one of the babies.

BF - And the practical problem, these people are graduating. And now, if they pass the exam, what are we going to do? We, as a licensure board. And I think they're looking for some definition, some clarity. That's what we need.

HH - I think some of us have to cross the street. I wish it was just crossing the street and getting into my bed. It's been a pleasure chairing this meeting.

Group - Thank you.

HH – Thanks to all the participants**,** we've had some very excellent talks. We've had good frank discussions, and I think we'll meet somewhere, you know, and write something. I'm sure we'll do something.   But we have to do something. We just can't ignore it. Because, if not, it's going to jump us in the face next year or the year after.

BF –Oh, yeah, the sooner we do -- and if you get out to your sections – that's the way to go. Some sections may have a greater interest than others. The regulators are directly involved.

_____ Meeting Ended at 4:15 _____

Ended at 4:15 _____
Bob Baker's power point presentation -
Distance Learning
presentation 9-07 copy.ppt **Click to open**
A quick intro to his on-line program is found at
http://www.bioethics.union.edu
Course descriptions are found at
http://www.bioethics.union.edu/academics-course.html
The international program is described at
http://www.researchethicseurope.net/alumni.asp

Reza Ghadimi, PA-C, is a member of the New Mexico Board and Advisory Council Section Two, Chair, and Physician Assistant Sub-committee was unable to attend. Here is his report;

Ladies and gentleman:

I was asked to investigate the level of distance learning and /or E-learning done by the Physician Assistant Schools in the United States. As many of you involved in polling such institutions are aware, this task did not result in many responses. I believe this was in part the result of the following issue. The PA education is very comprehensive, extensive and intense. Basically the PAs learn the same academic curriculum that medical students learn but in about half the time. The difference is that while the medical students are instructed in the art of medicine through research and reasoning, PAs are instructed to put those lessons into practice right from the start. Thus contributing to a medical care team. Simply put, allowing the PA to deliver the immediate care while the MD probes further into the cause of the patient's problem. The intensity of this type of education demands a hands on instruction by the PA education system. Although much of the research done by PA students is still on computers and internet, the actual instruction is done face to face. So when I surveyed the schools about distance learning the overwhelming response was that it is not possible to teach the students from a distance.

There are a few exceptions in the higher education curriculums. For example the University of Nebraska has a distance learning component in their Masters degree program.

Eastern Virginia PA Program

"EVMS COMPUTER LAB

Computer facilities which are located in the Brickell Library in Lewis Hall contain 61 IBM compatible network systems and two laser printers divided between a computer lab and a computer

54

classroom. These computers are dedicated solely to instructional programs. There are a large number of education programs, test bank, clinical problem-solving programs and interactive computer programs for the students to use, as well as an attendant on duty to provide assistance." Page 47

http://www.evms.edu/hlthprof/mpa/docs/mpa-handbook.pdf

Overall 140 surveys were e-mailed to the various PA programs around the country. Less than 10% actually filled the questionnaire and returned it. The response was universally NO to the use of distance learning.

However, many changes are coming. I serve on the Board of directors of New Mexico Telehealth Alliance. The alliance is working diligently in bringing expertise and medical care to rural and under served areas of our state. We are also working with neighboring states in providing exchange of information and acquiring exchange of expertise. New software is being written that will allow us this exchange of information securely. As New Mexico is a leader in Telehealth networking and communication, we are also working with other countries in creating a similar network for their patient population.

Last year, New Mexico passed a ruling allowing Telehealth physicians to be licensed in New Mexico. Thus allowing them to bill for their services when they are being consulted on New Mexico patients by New Mexico providers. So today a specialist here in Chicago can be consulted by a New Mexico provider on a difficult case and if the Chicago specialist is licensed in New Mexico, he or she can get paid for his or her consultation. This will further open avenues of communication and utilization of the Telehealth system in distance learning.

As part of my vision in bringing this service to our medical community, I am working with the PA educational institutions in instructing the proper use of this service to their students. Although PA institutions may not be using distance learning as part of their instruction, they will be using it as part of their practice.

'The computer based teaching, learning and practicing is at it's very infancy in medicine. I envision its extensive use in the future. I hope to bring you a much different report next

year. Not only in the use of Telehealth nationally, but internationally as well. Thank you.

Dr. Sayed Ziur Rahman's Power point presentation

Backgrounder 1 – See http://www.iaomc.org/dlm2007.pdf

Preparation for Advisory Council Meeting September 15th, 2007 Backgrounder II

Bioethics

Bernie: This was in The Scientist **4:** (2007), April, p30*. This is a complex topic, that I would have said didn't stand a chance of being done at a distance. He makes the point that it is a definite improvement over the textbook method. This involves, apparently, a lot of on-line, face-to-face interactions with "experts." Dick Gumport

*Volume 21 | Issue 4 | Page 30

By Glenn McGee

COLUMN
Socrates 2.0
Can bioethics be taught on the Internet?

The birth of an online Masters program in bioethics.

Last summer, I had a religious experience at the Googleplex in Mountain View, Calif. I was on the Google campus by invitation to attend Science Foo Camp, a small gathering of people in science, medicine, and computing. Google, Nature, and the O'Reilly Group sponsored the event. At the meeting, we gathered around tables, pit fires, and indoor tents, as we reached across disciplines using technology.

For my session, I proposed the following: Socrates would not teach ethics on the Internet. It was a heady claim to make at the forum where Web 2.0 was invented. At least two people in my session clearly believed they were actually channeling Socrates.

Going into the session, I was really sure of myself. I've taught ethics. Whether my students are future doctors, attorneys, scientists, or physicians, they seem to glean the most when they are forced to consider presuppositions about life and profession. For more than a decade I have held that professors inspire this encounter when they roam the room, lock eyes, and compel contemplation.

Online education, in other words, wouldn't cut it. Sure, there was a place for certain things. You could teach research ethics regulations on a cell-phone browser. Online lecture notes and PDFs of readings? Fine. Chat on the Net has been so effective it even results in marriage. On Secondlife.com, people certainly explore moral boundaries. But learning about the moral life on iTunes? Sorry, not buying that one.

There's no good reason I should have such reticence. I started one of, if not the first, bioethics Web site in 1994; built a unique journal around online debate in 2000; and created the first editors' blog for a biomedical journal in 2004. I waste a lot of time online. Yet when it came time to write a grant to teach research ethics to clinicians and government officials in Ghana, I didn't even consider distance learning. My jet airplane-dependent research ethics training program application fell flat because flying people to America from Ghana to take classes was too expensive. Duh. I began to doubt my convictions.

And so I found myself in Mountain View arguing a case to some leaders of Apple's iTunes University, who were eager to hear that I was wrong. I gave my defense of the Dead Poet's Society's theory of teaching to people who actually use iPods to teach college students. They didn't disappoint.

Right away, we began to test the question. We recorded actual ethics cases in progress, interviewed experts on the questions at hand, and built simulation models for learning the foundations of clinical ethics. We integrated live chats and threaded chat and group projects such as a bioethics wiki. We made it all portable, so that students from India or rural South Dakota could participate. Instead of looming professors, we opened additional dimensions of interactivity, and built a learning community that lasts longer than two hours twice a week. It was so much fun that I found myself working all day and all night, and within three months we'd submitted an online masters program to the State of New York. I forgot Socrates and wanted to meet Steve Jobs.

And so this fall the first class will begin at masters.bioethics.org, an entire program built around these technologies. The pilot certificate program we're offering now has taught us that students would like their professors to have a rewind (and stop) button, want intensive mandatory ongoing conversations, love having a library of relevant interviews with professionals from science and medicine about real cases, and sustain a level of dialogue that I've never seen matched around a physical table. We won't really know whether our program worked until the first class graduates in a year, or perhaps the

effects will manifest themselves later as the alumni continue to use our online resources.

So would Socrates teach ethics on the Internet? Maybe, maybe not. But the intensity of real ethical decision-making seems to work with iTunes U and other technologies far better than the Textbook 1.0 approach of ten years ago. And maybe that's the point: Socrates definitely wouldn't have used an anthology.

Glenn McGee is the director of the Alden March Bioethics Institute at Albany Medical College, where he holds the John A. Balint Endowed Chair in Medical Ethics.
gmcgee@the-scientist.com

Dr. Haavi Morreim a member of IAOMC's Ethics Committee and Advisory Council had recalled Dr. Arthur Derse had experience in teaching bioethics via distance learning. She contacted him and found he would be willing to discuss ethics as a distance learning course.

On April 11, 2007 Haavi Morreim, Professor, Department of Human Values and Ethics, College of Medicine, University of Tennessee, Memphis, Tennessee, arranged a conference call with Arthur R. Derse, MD, JD Director for Medical and Legal Affairs, and Associate Director Center for the Study of Bioethics Director, Medical Humanities Program Professor of Bioethics and Emergency Medicine Medical College of Wisconsin and Bernard Ferguson, JD, President of IAOMC.

Bernie reviewed the objective of IAOMC was to help define the role of distance learning in medical education today. As an accrediting Association it wished to determine if there should be guidelines or standards issued. Art Derse explained he had taught bioethics traditionally and by distance learning and they were equally effective. He is willing to discuss this further or respond to any questions. See;
http://www.cmeweb.com/gcourse_view.php?course_id=6423&PHPSESSID=cf70cefaa6b3988869d54cf5580f062c.

_____

In general there have been dramatic increases in the number of students taking on line courses. The April 27th, 2007 edition of the *Chronicle of Higher Education*, page A49 "Distance Education Goes Public" reported the number of students who enrolled only online in 2000 to be 194,580 and in 2006 to be 1,518,750.

Distance Learning in Indian Medical Schools

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-----Original Message-----
From: ibnsinaacademy [mailto:ibnsinaacademy@gmail.com]
Sent: Thursday, July 26, 2007 7:21 AM
To: bferguson
Subject: Re: Advisory Council meeting at Chicago Hilton O'Hare post-
phoned to September 15th

Dear Dr. Bernie
```

I am sorry for replying your mail so late. It is because of my busy class schedule. Regarding distance learning/e-learning in Indian medical schools?

I would say, that only one university i.e. Indira Gandhi National Open University, is granted permission officially to conduct courses through distance learning (You already have details). However, few more medical colleges like Sri Ramachandra Medical College & Research Institute (Chennai), Christian Medical College (Vellore), Manipal Academy of Higher Educations (Manipal), also started few courses on 'medical education' but again this is at very initial stage (I may let you know the details of these courses). On the other end, there are many courses on 'health related subjects' which are being imparted through various corporate hospitals and institutes.

Unfortunately, the website of Medical Council of India (MCI), which is a regulatory body of medical education, is not updated and if asked any query, they do not either reply or ignore our queries (I personally sent many e-mails regarding distance learning).

Although I am not in the favour of distance learning for undergraduate medical education, but for postgraduate medical education, distance learning/e-learning in Indian medical schools, is sometimes must. Following is my proposal, which I have specifically written for your information.

CONVERGENCE OF DISTANCE LEARNING WITH REGULAR POST GRADUATE EDUCATION IN PHARMACOLOGY: AN INNOVATIVE SKILL BASED MODEL.

INTRODUCTION: Medical education is experiencing a back-to-basics movement, with increased emphasis on mastery of core competencies. Postgraduate education occupies a unique place in continuum of medical education. Although, the PG education is standing on the foundation laid down at the undergraduate level. This results in the culmination of a process in which a doctor is fully equipped to face the challenges posed by rapidly changing society. There is a wide variety of literature that addresses undergraduate medical education in all its diversity; there is still little literature available for postgraduate medical education. With the signing of GATT agreement, compliance of TRIPS and Amendment of 'Schedule Y', India has now become a lucrative destination for clinical trials. Similarly, with the launch of National Pharmacovigilance Programme (NPP) on 23rd November 2004, the intention of government is to increase investment in drug research.
Moreover, with the budding of Pharmacogenetic centers, increased emphasis on Therapeutic Drug Monitoring (TDM), there is great dearth of trained clinical pharmacologists. Even so, indebted new doctors are reliant to individual teachers; few leave medical schools confident that their own medical course has prepared them complete in their chosen field. The postgraduate curriculum lags far behind this challenge. The scenario in India is mixed with more challenges with few opportunities, which must be tapped immediately.

OBJECTIVE: To propose a unique model where students (while pursuing their regular MD course) can choose a skill and master it under the supervision of an expert faculty from the centre of excellence.

RATIONALE: India has 149 MCI recognized seats of MD Pharmacology. In Pharmacology, we have three centers of excellence AIIMS, KEM and JIPMER in northern, central and southern region respectively. The expertise of these centers can be disseminated to the students using the some

short-term skill based distance education courses. Practical skills can be enhanced by predetermined contact classes at these centers or through videoconferencing involving faculty of international repute. Help from 'National Informatics Centre' may also be seeked in such courses.

METHODOLOGY: The key steps in developing an effective distance education course for skill based learning in pharmacology are
   (i)   perform a need-based analysis and specify goals and objectives;
   (ii) determine technical resources and expertise;
   (iii) evaluate preexisting infrastructure and use it if it fully meets your needs;
   (iv) secure commitment from all participants and identify and address potential barriers to implementation;
   (v) develop content in close coordination with experts of distance education, encourage active learning (self-assessment, reflection, self-directed learning, problem-based learning, learner interaction, and feedback);
   (vi) facilitate and plan to enhance practical skills of the learners;
   (vii) evaluate learners and the course; (viii) pilot the project before full implementation.

DESIRED OUTCOME: Enhanced skills in sub-fields of pharmacology like Clinical Research, Pharmacovigilance, Therapeutic Drug Monitoring, Pharmacogenomics, etc.

CONCLUSION: This methodology of enhancing skills of postgraduates with effective use of distance learning in collaboration with centers of excellence in medical education could be a very cost effective way of capacity building in health care.

With kind regards,
S. Ziaur Rahman, MD
Department of Pharmacology
Jawaharlal Nehru Medical College
AMU, Aligarh 202002, India
+91-9358259740 (Mobile)

----- Original Message -----
From: "bferguson" <bfergusonjd@earthlink.net>
To: "'Dr. S. Ziaur Rahman'" <rahmansz@yahoo.com>
Sent: Thursday, July 05, 2007 11:00 PM
Subject: RE: Advisory Council meeting at Chicago Hilton O'Hare post-phoned
to September 15th

> Dear Dr. Rahman,
>
> Could I have an update and schedule on your study of distance
> learning/e-learning in Indian medical schools? Our second backgrounder
> will include you're your report. Attached is the questionnaire and
two responses from Indian Medical schools. Any help you can provide to
have Indian Medical Schools reply to our questionnaire would be
appreciated. This link may help,
http://www.mciindia.org/links/index.htm.
>

> All the best,
>
> Bernie Ferguson
>
>
> -----Original Message-----
> From: Dr. S. Ziaur Rahman [mailto:rahmansz@yahoo.com]
> Sent: Wednesday, July 04, 2007 2:06 PM
> To: bferguson
> Subject: Re: Advisory Council meeting at Chicago Hilton O'Hare post-phoned to September 15th
>
> Dear Prof. Bernie Ferguson
>
> Thank you very much for your kind e-mail with information about you, development in IAOMC and new > dates of the IAOMC Advisory Committee Meeting on 15th September at Chicago Hilton O'Hare. Of what
> questionnaires are you referring to be completed
> especially in reference to UK and India?
>
> Rest is fine. With kind regards,
> Syed Ziaur Rahman, MD
> Aligarh, India
>
> --- bferguson <bfergusonjd@earthlink.net> wrote:
>
 Greetings,

At the council's last meeting we set the date of the next meeting on several assumptions. First and foremost we believed if we put the date far enough into the future the research that needed to be done could be completed in that time. Second we assumed many, if not all schools, would co-operate. August 13th followed Lublin and Silesia's graduation and we accepted Mahendra's suggestion.

We soon discovered some disappointments with the chosen date. Henry Haddad [Chair of Section Three] and his wife have a long scheduled cruise to Alaska and couldn't be with us. Mike Goldin, [Chair of Section Two] has a business meeting which he felt he would be unable to put off.

Next we discovered our research assumptions were also incorrect. The UK schools provided two questionnaires completed. This is also true in India. Randy has been named as Provost for U. Michigan's Allopathic and Osteopathic schools and has been delayed in even getting out our questionnaire to the US schools. Dick Gumport is behind in his efforts because of health issues.
Elizabeth Katchur is overwhelmed with her backlog but will be prepared before the next meeting. Nev Patel has not reported on progress on Chinese
schools.   Stan Brysacz, DO is the Chair of the Arizona DO Medical Board and a member of our Advisory Council. I recently asked him if he would serve as an Advisory Council Sub Committee Chair of DO Medical Schools and send our questionnaire to DO schools.   He will check with the DO organizations to see if participation is in their interest.
Henry Haddad has had a problem identifying contact persons to be certain the Canadian school questionnaire goes to the correct person.
Reza Ghadimi. PA is a member of the New Mexico Board and our Council's Section Two. He has agreed to contact all PA and Nurse Practitioner schools to solicit their response to our questionnaire. He has agreed

61

to serve as Sub- Committee Chair of Physician Assistants and Nurse
Practitioners. Amin Muhammad Gadit is a member of our advisory council
and has recently agreed to contact the Pakistani Medical schools.
Haavi Morreim and Arthur Derse have agreed to come to our meeting to
discuss ethics as taught both by the traditional method and via
distance/e-learning. Both Chris Dudley and Surindar Cheema >> of
Oceania have agreed to present distance/e-learning and requested we
agree to their inviting medical educators using distance/e-learning at
Cornell and Univ. Miami. We agreed.

Thus the distance learning study is going more >> slowly than expected
and our Chicago meeting must be post-phoned to September 15th. I'm
hoping all those who planned for August 13th can make the change to
September 15th. The Hilton at O'Hare has confirmed the new date. Any
constructive comments will be appreciated.

Bernie

_____

The University of Edinburgh is conducting such a program see;
 http://www.law.ed.ac.uk/distancelearning/news.htm.

Distance learning for Faculty Training

Dear Mala,

One of the pieces currently at hand to implement this idea see;
http://www.faimer.org/resources/opportunities/index.html. You might
wish to research what exist, provide us with the benefit of what you
find and share this reference with ED.

Bernie

-----Original Message-----
From: Mala Chinoy [mailto:mchinoy@psu.edu]
Sent: Thursday, April 19, 2007 11:39 AM
To: bfergusonjd@earthlink.net
Cc: gumport@uiuc.edu
Subject: Re: FW: Distance learning

Dear Bernie,
Thank you for your mail. I am sending some thoughts to you and Dr.
Gumport.

(1) The international faculty training via DL is a good idea because
faculty do have access to some technology and if they are well
connected and well informed they can teach their students well.

(2) I would also recommend that the US medical schools that are
interested in such activities may also consider developing true
partnerships with the universities in the developing countries or
underdeveloped countries, such that these faculty can also come to US
for 2-3 months and have greater exchanges here at our medical schools,
know the counterparts, exchange their knowledge / practices with

students and faculty here; and then go back their countries and continue exchanges via DL.

(3) I would not hesitate to say that Ed O'Neil and I are familiar with Tanzania, if we wish to use the Kilimanjaro Christian Medical College at Tumaini University as our model medical school to develop such programs. Ed's his first exposure to global healthcare was in Tanzania / Eastern Africa and my recent visit was to Tanzania and Kenya.

(4) Our students, residents and faculty can rotate there / do short or long term sabbaticals and have the opportunities for further exchanges and mutual learning.

Tanzania is a politically stable country. Not expensive. People are genuine and involved in their communities. They are eager to do well and be better connected. Tumaini University has good connections in different countries of African continent and also with The Netherlands, wherer some of their liberal arts and science people train.

I have now developed deep contacts with the Provost, Vice Provost and multiple faculty in the medical school. So, I can facilitate the effort, if we as IAOMC decides to develop a model using this establishment and then take that model to other medical schools in different countries with some modifications.

Please, let me know your thoughts and I would like to hear from Dr. Gumport, too. I can then do a further exchange with Ed and seek his thoughts.

With best wishes and regards,
Mala.

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Mala R. Chinoy, Ph.D., M.B.A.
Professor of Surgery
Lung Development Research Program
Hershey Medical Center, H 113
The Penn State University
Hershey, PA 17033
mchinoy@psu.edu
Phone: 717-531-1018 / 4049 lab / 6023
FAX: 717-531-4185 / 0825

Review miscellaneous URL's;

For Computer based learning – AAMC - click

http://www.aamc.org/search/query.html?qt=computer+based+learning&image=Search&style=pubsearch

Global Medical Academy

Main Stream Distance Learning Is Expanding Rapidly in Allied Health Sciences

Innovative technology advances improve distance learning

Web cam exam proctors are latest cheating deterrent

Story Highlights
€ Online college courses create a dilemma for educators to prevent cheating € New technology places a camera inside students' homes to proctor exams € Device detects significant noises and motions and flags them € Troy University graduate students will start using the device this fall

(AP) -- The number of college students taking courses online is surging, creating a tough dilemma for educators who want to prevent cheating.
Do you trust students to take an exam on their own computer from home or work, even though it may be easy to sneak a peek at the textbook? Or do you force them to trek to a proctored test center, detracting from the convenience that drew them to online classes in the first place?
The dilemma is one reason many online programs do little testing at all. But some new technology that places a camera inside students' homes may be the way of the future -- as long as students don't find it too creepy.
This fall, Troy University in Alabama will begin rolling out the new camera technology for many of its approximately 11,000 online students, about a third of whom are at U.S. military installations around the world.
The device, made by Cambridge, Massachusetts-based Software Secure, is similar in many respects to other test-taking software. It locks down a computer while the test is being taken, preventing students from searching files or the Internet. The latest version also includes fingerprint authentication, to help ensure the person taking the test isn't a ringer.
But the new development is a small Web cam and microphone that is set up where a student takes the exam. The camera points into a reflective ball, which allows it to capture a full 360-degree image. (The first prototype was made with a Christmas ornament.) When the exam begins, the device records audio and video. Software detects significant noises and motions and flags them in the recording. An instructor can go back and watch only the portions flagged by the software to see if anything untoward is going on -- a student making a phone call, leaving the room -- and if there is a sudden surge in performance afterward.
The inventors admit it's far from a perfect defense against a determined cheater. But a human test proctor isn't necessarily better. And the camera at least "ensures that those people that are taking

classes at a distance are on a level playing field," said Douglas Winneg, Software Secure's president and CEO.

Troy graduate students will start using the device starting this fall, and undergraduates a year later. Software Secure says it has talked to other distance learning providers, too. A potential future market is the standardized testing industry, which has struggled to find enough secure testing sites to accommodate growing worldwide demand for tests like the SAT college entrance exam and the GMAT for graduate school.

An estimated 3.2 million students were taking online classes in the fall of 2005, according to the most recent figures from the Sloan Consortium, a group of online learning providers that studies trends in the field, and that figure is almost certainly substantially higher today.

But many distance learning providers do very little testing, including some of the largest, for profit ones such as the University of Phoenix, Capella University and Walden University. Officials at all three schools said they rely mostly on student writing assignments. They say that's the best method to assess their students, most of whom are working adults.

Still, they need to be thinking about assessment. The military, whose tuition assistance programs are a huge source of revenue for online universities, is asking questions about testing to make sure students are earning credible degrees, Winneg said. Distance learning programs also need to keep their accreditation agencies happy, as well as Congress, so that the programs can continue to receive federal financial aid dollars.

Past options

At Troy, like at many distance learning programs, past testing options have been less than ideal. One was to line up a proctor from a list of acceptable exam monitors such as clergy or commanding officers.

"We just assumed and hoped the proctor would follow the instructions," said David White, direct of the Southeast region for Troy. "In some cases they did, and probably in some cases they didn't."

The other was to arrange proctoring with a testing company and travel to one of their centers. But that was inconvenient for many students -- and, of course, impossible for soldiers in places such as Iraq and Afghanistan.

The device will cost Troy students $125, White said.

Richard Garrett, a senior research analyst at Eduventures who closely follows online learning, said he finds the technology promising, particularly for large companies trying to streamline a now-messy part of their operation.

"The great unknown is, 'Will it be seen as too invasive?"' he said.

Clearly, it won't be a good idea for everyone. Stephen Slavin, dean of corporate and professional education at Worcester Polytechnic Institute in Massachusetts, said his institution is always looking at new technologies, but recording students by camera "would be probably pushing the boundary of our comfort level."

White predicts some students will find it odd and even threatening, and may decide to drop out. "I think there will be some people who won't take any more courses with us because they feel like during the test they're being watched," he said.

But he insists that's OK because it will improve the credibility of a Troy degree.

For Sandra Kinney, a state employee from Stockbridge, Georgia, pursuing a master's in public administration and one of the students on Troy's trial run, having a camera in her home was no big deal. It was worth it not to have to drive to an exam center.

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"For me in Atlanta, it outweighs sitting in two or three hours of
traffic," she said.  Once, that traffic made her an hour late to an
exam.  "At that point I was like, 'There's got to be a better way."'
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Find this article at:
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http://www.cnn.com/2007/EDUCATION/06/19/online.testing.camera.ap/index.
html

Check out links listed at;
url: http://www.learnpeople.com/resource.htm

http://services.aamc.org/jsp/mededportal/goLinkPage.do;jsessionid=DC48EC324B341E
2FA0262C90EF408F80?link=home

9/15/07 "There is no reason why the framework of medical ethics cannot be taught by distance
learning but as each patient the physician sees involves ethical decisions the practical application
needs to be experienced in the 'field' at the patient's bedside"
 Best
 Jim Appleyard

Jane

The last thing an accreditor would want to do would be to constrain constructive innovation. Well
intentioned viewpoints may be right/wrong. Standards come in a variety of packages. Some
prohibit, others recommend, some are so broad they allow innovation. Medicine is extremely
subjective, and teaching medicine is also subjective. Experts may differ but licensure boards
don't have the leisure to speculate – they license or don't license. I believe they would want to
hear from people such as yourself. Prior to the Advisory Council's meeting in Chicago on
September 15 we provide all participants with a backgrounder and an agenda of people with
presentations. Here knowledgeable people explore the subject, present their views. It is the
basis for further in person discussion. Minutes of what everyone said is transcribed for all to see.
It is possible the Advisory Council will recommend standards or guidelines or to do nothing but
recommend the Licensing Boards review the backgrounders and reach their own conclusions.
Your offer to recommend a series of guidelines based on good and effective practice is
appreciated. Hopeful, you will clearly present the basis for your recommendations. Be assured it
will be incorporated into our backgrounder.

Bernie

From: Jane Hart, Centre for Learning & Performance Technologies
[mailto:jane.hart@C4LPT.co.uk]
Sent: Sunday, August 05, 2007 8:20 AM
To: 'bferguson'
Subject: RE: Evaluating the limits of distance learning/e-learning

Bernie

Thanks for your email.

It's an interesting question – whether to constrain organisations in their use of technologies by the
way of standards or whether to let them exploit them innovatively and risk others considering their
methods to be "inappropriate", which may well be a subjective viewpoint.

Rather than implementing standards I would recommend a series of guidelines based on good and effective practice.

I would be very interested to help you further identifying and codifying guidelines for developing distance learning for medical programmes. Do let me know if I can be of further help.

Jane

Jane Hart
Centre for Learning & Performance Technologies
www.c4lpt.co.uk

From: bferguson [mailto:bfergusonjd@earthlink.net]
Sent: 03 August 2007 12:10
To: jane.hart@c4lpt.co.uk
Subject: Evaluating the limits of distance learning/e-learning

Good morning Ms Hart,
The International Association of Medical Colleges (www.iaomc.com) a global not for profit medical school accrediting association works in collaboration with government medical licensing boards.   Distance learning/e-learning has been developing rapidly. Medical licensure Boards have expresses concern that some newer schools are attempting to teach medical students inappropriately. All agree that well designed, correctly implemented newer technologies are an excellent supplement. But the concern is – where are the current distance learning/e-learning limits in teaching skills, values, and developing human patient interaction? This question is currently under debate. Should an accreditor develop standards? If yes, what would you recommend? Any comment would be appreciated.
Bernie Ferguson, JD, President IAOMC
.

Subject: Re: Advisory Council meeting at Chicago Hilton O'Hare post-phoned to September 15th

Dear Dr. Bernie

I am sorry for replying your mail so late. It is because of my busy class schedule. Regarding distance learning/e-learning in Indian medical schools?
I would say, that only one university i.e. Indira Gandhi National Open University, is granted permission officially to conduct courses through distance learning (You already have details). However, few more medical colleges like Sri Ramachandra Medical College & Research Institute (Chennai), Christian Medical College (Vellore), Manipal Academy of Higher Educations (Manipal), also started few courses on 'medical education' but again this is at very initial stage (I may let you know the details of these courses). On the other end, there are many courses on 'health related subjects' which are being imparted through various corporate hospitals and institutes.

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Although I am not in the favour of distance learning for undergraduate medical education, but for postgraduate medical education, distance learning/e-learning in Indian medical schools, is sometimes must. Following is my proposal, which I have specifically written for your information.

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INTRODUCTION: Medical education is experiencing a back-to-basics movement, with increased emphasis on mastery of core competencies. Postgraduate education occupies a unique place in continuum of medical education. Although, the PG education is standing on the foundation laid down at the undergraduate level. This results in the culmination of a process in which a doctor is fully equipped to face the challenges posed by rapidly changing society. There is a wide variety of literature that addresses undergraduate medical education in all its diversity; there is still little literature available for postgraduate medical education. With the signing of GATT agreement, compliance of TRIPS and Amendment of 'Schedule Y', India has now become a lucrative destination for clinical trials. Similarly, with the launch of National Pharmacovigilance Programme (NPP) on 23rd November 2004, the intention of government is to increase investment in drug research. Moreover, with the budding of Pharmacogenetic centers, increased emphasis on Therapeutic Drug Monitoring (TDM), there is great dearth of trained clinical pharmacologists. Even so, indebted new doctors are reliant to individual teachers; few leave medical schools confident that their own medical course has prepared them complete in their chosen field. The postgraduate curriculum lags far behind this challenge. The scenario in India is mixed with more challenges with few opportunities, which must be tapped immediately.

OBJECTIVE: To propose a unique model where students (while pursuing their regular MD course) can choose a skill and master it under the supervision of an expert faculty from the centre of excellence.

RATIONALE: India has 149 MCI recognized seats of MD Pharmacology. In Pharmacology, we have three centers of excellence AIIMS, KEM and JIPMER in northern, central and southern region respectively. The expertise of these centers can be disseminated to the students using the some short-term skill based distance education courses. Practical skills can be enhanced by predetermined contact classes at these centers or through videoconferencing involving faculty of international repute. Help from 'National Informatics Centre' may also be sought in such courses.

METHODOLOGY: The key steps in developing an effective distance education course for skill based learning in pharmacology are (i) perform a need-based analysis and specify goals and objectives; (ii) determine technical resources and expertise; (iii) evaluate preexisting infrastructure and use it if it fully meets your needs; (iv) secure commitment from all participants and identify and address potential barriers to implementation; (v) develop content in close coordination with experts of distance education, encourage active learning (self-assessment, reflection, self-directed learning, problem-based learning, learner interaction, and feedback); (vi) facilitate and plan to enhance practical skills of the learners; (vii) evaluate learners and the course; (viii) pilot the project before full implementation.

DESIRED OUTCOME: Enhanced skills in sub-fields of pharmacology like Clinical Research, Pharmacovigilance, Therapeutic Drug Monitoring, Pharmacogenomics, etc.

CONCLUSION: This methodology of enhancing skills of postgraduates with effective use of distance learning in collaboration with centers of

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excellence in medical education could be a very cost effective way of
capacity building in health care.

With kind regards,
S. Ziaur Rahman, MD
Department of Pharmacology
Jawaharlal Nehru Medical College
AMU, Aligarh 202002, India
+91-9358259740 (Mobile)

----- Original Message -----
From: "bferguson" <bfergusonjd@earthlink.net>
To: "'Dr. S. Ziaur Rahman'" <rahmansz@yahoo.com>
Sent: Thursday, July 05, 2007 11:00 PM
Subject: RE: Advisory Council meeting at Chicago Hilton O'Hare post-
phoned
to September 15th
```

July 23rd email from Henry – "yet to receive any reply" Will send a
reminder. Aug 5th Have two responses.

Physician Assistant

. Professional Competence A Position Paper prepared by the Education
Council of the American Academy of Physician Assistants(Adopted 1996)

…s whether the current recertification exam can truly reflect the outcome of the pursuit of
lifelong learning, i.e. c… … in a process of lifelong learning in order to maintain professional
competence. It is in the interest of the profession for the AAPA to provide incentives for PAs to
remain current. While recertifica… …ne's pursuit of lifelong learning in enhancing competence
are discussed. Finally, this paper presents issues regarding the measurement of professional
competence and a description of methods for its e… …elf-directed learning, and reflection
Norcini, 1984; Norman et al, 1985; Patel et al., 1989 . 5 The distinction between competence
and competency should be made, as the terms are often used interchang…

Hi Reza,
Researching distance learning/e-learning either as a supplemental part of a course, or the entire
course will be really useful to help licensure Boards know the parameters of effectiveness in
current times. If your coming to the Advisory Council's meeting you could make the report on
your findings. Or should you wish you could provide the information you discovered as a part of
the backgrounder to be sent to attendees. I checked the AP program at the Eastern University of
Virginia. I found their medical school's Bucknell Library they report 90 computer programs. They
have computer mediated exams and a large number of educational programs including in the
clinical sciences. This suggests there may be departments that use programs as a supplement
or possibly some professors that use it in their course. Medical education is very conservative,
thus may be the last school in a University to try something new.
Bernie

From: PA Pulse [mailto:papulse@rt66.com]
Sent: Wednesday, August 15, 2007 6:18 PM
To: bferguson
Subject: Distance learning

Hello Mr. Ferguson:

My third mailing resulted in only one additional respond. The overall response to our inquiries have been that the PA schools do not use distance learning as a tool. I talked to the PA organization and their response was the same that PA programs do not use distance learning in their curriculums.
I am on the Board of directors of the New Mexico Telehealth Alliance and our organization has been working on establishing telecommunication as a tool to bring rural health care up to par with the rest of the health communities through use of computer technology. As part of this effort, UNM has been instrumental. The reception on this issue has been great by the medical school and the PA school at UNM. We are also working with several other states and universities, i.e., Arizona, Utah, Texas, others to implement Telehealth concept. Our directors have also made trips to several other countries who are interested to use the system to tie in with the American schools. I feel that computer based telecommunication is at it's infancy and we will see an incredible expansion of it's use in the near future. For example one of the hurdles has been the lack of proper software for this endeavor. Our computer wizards are hard at work with other companies, writing the proper software for our work. In time, our efforts will result in acceptable use of this system. I feel that you are on the right track. I recommend that we continue our efforts and when the system is in place, we also will be at the forefront of helping them achieve their goals and thus benefit by it.

Reza Ghadimi PA-

Bernie: I also queried the DL gurus at the Journal of Biochemical Education and received the following from Marlene Kayne < http://mkayne.intrasun.tcnj.edu/>.

"Dear Dick,
    Thank you for your inquiry. It is a subject dear to my heart since I teach in a traditional classroom and also online. I thoroughly agree with you statement,   I believe that it probably differs from discipline to discipline and even from topic to topic within a discipline.
    Although I personally have not taught an online biochemistry course but I do teach a general chemistry course online. I have taught a traditional biochemistry course to pre-med students for almost 25 years. Thinking about the educational effectiveness of both forms of delivery, I have concluded that distance learning in this discipline can be done effectively. Because of the wonderful websites available to teach protein structure and function, metabolic pathways and genome analysis, **I don   t think any biochem course should be taught without a strong internet component**.
    In your message you asked for studies that discuss this issue. Immediately no formal studies come to mind but I will do some research and see what I can find.
        Regards, Marlene"

Richard I. Gumport
Professor Emeritus of Biochemistry, College of Liberal Arts & Sciences at Urbana-Champaign
Professor Emeritus of Biochemistry, College of Medicine at Urbana-Champaign
                        "There is something fascinating about
Dept. Biochem./ U. of Illinois   science. One gets such wholesale

600 S. Mathews Avenue   returns of conjecture out of such
Urbana, IL 61801-3602   trifling investments of fact."
                                                    -- Mark Twain
"The job of a citizen is to keep his mouth open."-- Gunter Grass

Tel 217 333 2852/ Fax 217 333 8868/ EM gumport@uiuc.edu
http://www.life.uiuc.edu/biochem/f_gumport.html
Randy,
Another e-mail from Dick that might be useful in your reporting on US schools. I leave he
judgment to you.
Bernie

Bernie: This is long overdue. I apologize, but hope that it might be useful to you at the
September meeting. As far as I can determine, DL is not used to teach undergraduate
medical students at any of the four sites of the University Of Illinois College Of Medicine
(Chicago, Rockford, Peoria, and Urbana). In my note to people I used the following
definition: "By DL/EL I mean courses taught by whatever technology where the
instructor and student are separated in time or space."

I'm pasting in note I received from Matt Hunsaker, who is Director of the Director, RMED,
National Center for Rural Health Professions. It indicates a direct use of DL in the past
and how computer technology is presently being used in other aspects of instruction at
Rockford.   The second paste is from Lori Troy, our Associate Dean for Educational
Planning for the entire COM of the U of I. It speaks for itself.

From my cursory investigation into the use of DL to teach medical students, it doesn't
seem to be widely used in places that can support traditional face-to-face methods in
spite of some of the advantages it might offer. These included, promoting self-learning,
time flexibility and distance flexibility. The drawbacks are well appreciated. I would have
liked to hear the proponents, many of whom seem to be in situations where it is the only
way they can provide instruction. There may be some of the "necessity is the mother of
adoption" in these cases. I remain skeptical for I continue to think that there is nothing
like being in the presence of a master at his or her profession.

As I indicated, I hope to remain involved with IAOMC in some capacity in spite of
missing this meeting. As I gaze at the French Alps I shall think of you sitting in O'Hare
assuming a sudden thunderstorm doesn't foul up this meeting too. After the meeting,
please let me know what happened and how I might contribute. Dick

#1
"Hello,
Yes we **have used** and use DL technology for educating our medical students. We are
also working to incorporate it into some of the CME offerings for our rural physicians.
Specifically the neurology program **was** in cooperation with the department of medicine.
It included guided online case modules that a student would review and study from both

a book and a web bibliography. They answered questions online and were graded. The program also incorporated local physicians from our RMED teaching staff to "work through" example cases and supplement it with individuals in their practice representative of the particular condition.

It was useful and helpful for students to meet the graduation requirement for Neurology. Interesting the students who completed the modules actually seemed to have higher scores on the final test than students doing a traditional rotation with a specialty neurology physician. I suspect the framework and outline with guided learning contributed to the success. **When the department of medicine no longer had an interest in supporting the case feedback via the online resources, I pulled the online cases down and modified them to fit in a learning notebook.** Students still used an online biblliography and I included a PubMed search activity as well. We supported the paper/online version for two years until the department of medicine felt the neurology requirement was no longer needed. **IT was dropped from the curriculum for last years graduating class.**
If you have any other questions or I can be of assistance, please let me know.

We have also used high speed bandwith to work with students on projects across the state at hospitals where we teach. We use a combination of both in-person site visits and videoconferencing calls to keep connected. I have found that email being asynchronous is fine for information exchange, but not very useful for a "medical socratic method" of working with learners to challenge them to think and not memorize. Bandwtih at both the transmitting and recieving end are of consideration. Some of the infrastructure is good, some is still lacking around the state.

Internationally, I have been asked several times whether we could share content with our WHO partners and schools that have sufficient bandwith to host lecture but not always the teachers available. At times we have gotten closer to the true idea of global outreach for medical education, but so far financing for such projects has not been available. I look forward to the day when the podcasts that we are currently recording with our M2 students can be on demand content for developing country learners via hosted web site.

We have discussed such a model on several occasions, but would need approvals and details resolved with academic property rights etc. It is an interesting possibility. I hope that is helpful. If you have an questions feel free to give me a shout. My cell number is below as well.

Matt Hunsaker
Director, RMED
National Center for Rural Health Professions
University of Illinois College of Medicine at Rockford
(815)395-5786 office
(618)534-6106 cell"

#2
Dear Dick, While there used to be an elective course offered in Medical Decision-Making (Arthur Elstein, Director), **I don't see it among the current elective offerings**. Arthur retired and that's probably why. Other courses use the web for chats and postings, but don't meet the definition for distance learning for *undergraduate medical students*.

Loreen Troy
Associate Dean for Educational Planning
University of Illinois College of Medicine
Department of Medical Education (M/C 591)
808 S Wood St
Chicago, Illinois   60612

312/996-7528 "
Richard I. Gumport

From: Richard I. Gumport [mailto:gumport@uiuc.edu]
Sent: Friday, August 24, 2007 11:50 AM
To: Bernard Ferguson
Subject: U of Illinois and Distance Learning

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Nuclear Engineering - DL Being Added

http://chronicle.com/wiredcampus/article/?id=2675&utm_source=at&utm_medium=en