

Minutes
Initiation Work Group, HSCRC
Friday, December 1, 2006
9:00 – 11:00 am
Room 100, 4160 Patterson Avenue
Baltimore, MD 21215
Corrected January 12, 2007

IWG Members Present: Dr. Trudy Hall, Chair; Ms. Joan Gelrud, St. Mary's Hospital; Ms. Barbara Epke, LifeBridge Health; Ms. Pamela Barclay, Maryland Health Care Commission; Dr. Charles Reuland, Johns Hopkins Medicine; Dr. Beverly Collins, CareFirst BlueCrossBlueShield, Dr. Vahe Kazandjian, Dr. Nikolas Matthes, Mr. Frank Pipesh, Center for Performance Sciences; Dr. Grant Ritter, Brandeis University; Ms. Renee Webster, OHCQ; Mr. Robert Murray, Mr. Steve Ports, Ms. Marva West Tan and Ms. Diann Miller, HSCRC.

On Conference Call: Dr. Donald Steinwachs, John Hopkins School of Public Health; Ms. Karol Wicker, Center for Performance Sciences; Ms. Bridget Kreziak, Patient Safety Fellow; Mr. Gerald Macks, Medstar Health; Ms. Joanne Koterwas, St. Mary's Hospital; Dr. Denise Remus, Premier, Inc.

Interested Parties Present: Ms. Jan Bahner, Medstar Health; Ms. Ing-Jye Cheng and Mr. Samuel Ogunbo, MHA, Mr. Don Hillier, former HSCRC Chairman; Dr. Lo Tong Jen, Johns Hopkins School of Public Health; Ms. Sylvia Daniels, University of Maryland Medical Center; Ms. Jan Bahner, Medstar Health; Ms. Carol Christmyer and Mr. Rod Taylor, Maryland Health Care Commission; Mr. Craig Weller, Delmarva Foundation; Mr. Jim Miller, DHMH – OPC; Dr. Laura Morlock, Johns Hopkins University, Ms. Charlotte Thompson, Health Services Cost Review Commission; Mr. David Krajewski, LifeBridge Health.

Guests: Ms. Diana Jackson and Mr. Greg Tornatore, Premier, Inc.; Mr. Mark Wynn, and Ms. Kathy Pirotte, Centers for Medicare and Medicaid Services (CMS).

1. Welcome and Approval of Minutes –Mr. Murray welcomed the Work Group and attendees on the audio conference. The minutes of the October 27, 2006 meeting were approved with two corrections: Ms. Joan Gelrud is Vice President, Performance Measurement, St. Mary's Hospital, and the minutes were from October 29, 2006. Mr. Murray then asked Ms. Tan, Associate Director, Quality Initiative, HSCRC, to introduce the guest speakers. Ms. Tan welcomed the guest speakers from Premier, Inc. and from Medicare. She noted that Premier/CMS have had a Pay-For-Performance demonstration project underway for the past few years. HSCRC would like to take an in-depth look at that demonstration, particularly some of the methodological issues that Premier/CMS faced which are similar to those being discussed by the IWG. Ms. Tan introduced Ms. Diana Jackson, Senior Project Manager of Operations, Premier, Inc. and with her, Mr. Greg Tornatore and Dr. Denise Remus by telephone. Also from CMS, guests include Mr. Mark Wynn, Director, Division of Payment, Policy Demonstrations, and Ms. Kathy Pirotte.

2. The CMS/Premier Hospital Quality Incentive Demonstration Project – Diana Jackson, Ms. Jackson presented an overview of the project, then she discussed the methodology for weighting and scoring of each of the measures, the methodology evolution and reward calculations and some of the lessons learned during the first two years. (Please refer to Ms. Jackson’s attached slide presentation.)

Dr. Reuland asked if there was a lot of debate about weighting each intervention equally. Mr. Wynn noted that they came to the conclusion to use equal weights rather quickly because the alternative was to spend a lot of time figuring out the relative weights of the various measures. Premier/CMS thought it was more important to get the measures identified, focus on improving those measures and include them in a composite measure that would be seen as doable and fair rather than worrying about relative weights.

Regarding the composite score calculation, Dr. Kazandjian asked if the survival rate is basically mortality minus actual. Ms. Jackson responded that if you have a mortality rate of 4% it is one minus the 4% to get your index.

Dr. Ritter requested information on expected mortality rate by condition. Dr. Remus responded that Premier looked at mortality in the AMI population using the Joint Commission definition, which includes comorbidity, age, and gender. In the CABG mortality measure, Premier used the APR-DRG risk adjustment. So mortality rate was calculated at the patient level as far as patient risk and then the hospital expected rate was aggregated from that. Dr. Ritter then asked about the benefit of using survival versus actual mortality. Ms. Remus said Premier needed to create a composite quality score and wanted a positive score that could be merged into an overall quality score, hence the use of a survival rate. Hospitals get the data at the patient level that shows the observed rates, the risk factors, and the overall score.

Ms. Jackson then spoke about the rewards and the financial aspects. The incentive payments are made annually in a lump sum and an internal decision was made that all of the participants would receive their money electronically. And Premier worked with CMS who has a contract with Trailblazer to disperse the funds. The hospitals were notified when the funds were deposited. This is a similar process that hospitals are used to with other reimbursement payments.

Ms. Jackson then talked about some of the lessons learned. Regarding design, the performance gap has been narrowing in the data. Hospitals performances are currently closer to one another than at the beginning of the project, so there are challenges in identifying and recognizing improvement by deciles. Premier has had many hospitals that have made significant improvements but they are still not in the first or second decile (i.e. eligible for a reward under Premier’s design). So one of the challenges is that the current Premier/CMS methodology does not differentiate between the quality levels accurately. One of the recommendations that Premier has made is that incentives be based on attainment of a pre-determined threshold and significant improvement be rewarded as well.

Another lesson learned is around measures and measure definitions. Several measures had to be suppressed because of the national guideline controversies such as prophylactic antibiotic selection for surgical patients, the 24-48 hour antibiotic discontinuation and codes regarding the use of the internal mammary artery (IMA) in CABG measure. The flu vaccination measure had to be suppressed at one point because hospitals did not have flu vaccine. When measures were suppressed, this also impacted the composite score methodology so that, for example, instead of each measure counting 1/9th, each might be 1/8th of the total composite.

In conclusion, Ms. Jackson emphasized the tremendous effort that participating hospitals are making to improve quality although some of these still have not received payment for these improvements because they are not in the first or second decile. Premier found that the motivation for the hospitals was not just financial but also improving quality to serve their communities and from senior leadership making quality the top priority. Hospitals know that linking payment to quality is inevitable. And they need to be prepared for the future so they felt this demonstration has been a great way to be prepared and to respond to the demand for transparency. Hospitals also feel that the public recognition could increase market demand. Ms. Jackson then turned the presentation over to Mr. Mark Wynn.

Dr. Kazandjian asked how the distinction was made that in fact there was a big improvement, not only in the data, but in the quality of care. Dr. Denise Remus replied that Premier did perform onsite visits and case studies so they did identify hospital strategies to comply with the measures. Very few of the strategies had to do with documentation per se, there are some, such as implementation of a standing order. This strategy does drive practice, but it also can help improve documentation. Other strategies might include reminder notices and other components that help improve practice. Premier does think that early on the hospitals did shift their focus to make sure that they were capturing and reflecting the correct information both whether the intervention was done and/or whether the intervention was contra-indicated so that the patient was moved through the algorithm correctly. Dr. Remus indicated that it is just as important to the quality of care to improve your documentation and communication because the medical record is used to communicate care. So if things are not described in the record, you have no way for the other clinicians to understand what is going on with that patient and what the clinical decision-making was. And it is critical around these evidence-based measures that that documentation is present so the other clinicians providing care are building on that information. She did not think one would see a 30% improvement because of improved documentation. She noted if one is trying to achieve high quality for public policy reasons then encouraging better documentation is also an important strategy to avoid medication errors and other safety issues.

Dr. Reuland thanked Ms. Remus for her comments but also offered some constructive criticisms. He noted the example that a patient may not be discharged on a specific medication due to renal function problems but the physician did not specifically

document why the medication was not given. This example would not meet the criteria but a physician reading the discharge summary would understand why the patient did not get the medication. This is purely a documentation issue. He conceded that there is opportunity for clinical improvement but also some element of this is purely about data documentation. Ms. Remus agreed that there is an element of improved documentation, She stated that his example pointed out how precise the definitions for the quality measures need to be. If anyone reading that medical record would understand the reason for not giving the medication, then that exclusion ought to be part of the algorithm for abstracting that measure. Dr. Reuland noted that he would appreciate Ms Remus' support in changing that definition as his organization's compliance would climb by 20 percentage points in that particular measure.

Dr. Collins asked what was the coding issue in the CABG measure and the use of the internal mammary artery. Ms. Jackson noted some ICD-9 codes were not included in the definition of the population so the measure was suppressed. Ms. Remus did work with some of the organizations nationally to get that measure definition updated so that it is a valid measure that can be used today.

Ms. Barbara Epke asked with there will be any different choice going forward about the use of the opportunity model and any distinction between clinical and process type measures. Ms. Jackson noted that the use of the opportunity model initially was based on a recommendation from CMS. Mr. Wynn noted that CMS, in looking for an opportunity to extend the current Premier demonstration, is evaluating the basics, what has the field learned in the past few years, and where do we do from here? There is a very recent CMS-sponsored RAND report on Hospital Pay for Performance which found a wide set of models used including appropriate care, opportunity and simple percentage attainment models. CMS used the opportunity model because their clinical staff thought that it did a good job weighting the opportunities for care. Mr. Wynn felt that it is more important to get the measures identified and the way that they are rolled up at the end of the year for the entire hospital may be a little bit less important than the fact that the quality indicators are being measured, monitored, and improved.

Ms. Epke noted that the IWG has been first vetting the indicators, although there are multiple national organizations doing this function, and secondly making a distinction between process and clinical indicators, especially when payment is concerned. For example, she noted the smoking cessation measure, which is something the hospitals can not control or effect change during the hospitalization, but will impact post-discharge health. She felt it is difficult to compare this measure with cardiac intervention within 90 minutes. Mr. Wynn responded that it is important that there are both process and outcome measures and that they are rolled up into an appropriate composite. He noted that most of the smoking cessation measures do not measure whether the patients have stopped smoking but whether they were counseled to stop smoking. He felt that this might be an appropriate measure.

Ms. Epke then asked Mr. Wynn to explain about the 80% chart validation and how CMS conducted that satisfactorily. Ms. Jackson noted that they used the same CMS

process that was already in place. Seven charts were required each quarter from the participants. Then the validation score is received each quarter by the hospitals, which have the opportunity to appeal if they receive below an 80% score. At the end of each year, Premier used the same calculation that is used for annual payment update (APU), that is, each of the quarterly scores are reviewed as well as averages for the year to see if they are above the 80% competence level. The quarterly score can be appealed but not the annual score. Some hospitals do not submit charts, perhaps due to a process breakdown, but then they have no basis for an appeal.

Dr. Hall asked how the number of seven charts was identified as it seems like a small sample size. Mr. Wynn agreed that it is a small sample size but the seven chart requirement is an expansion from the original five chart sample. He noted that the sentinel effect on taking coding seriously seems to be effective. Neither CMS or the hospitals can afford to do a statistically significant number of charts so it is a trade-off between costs and the sentinel effect. The validation rates have been quite good, 0.9 or 0.92 most recently, on average. So there are very few hospitals that fail the 80% test unless they didn't submit the charts. Dr. Remus added that if you considered the number of separate data elements obtained across seven medical records, this is a considerably larger sample. Dr. Hall then indicated that Mr. Wynn would give his presentation.

Mr. Wynn noted that he had heard of HSCRC for many years, was pleased to be present, and also happy to talk about the Premier demonstration because it is a very important topic and the demonstration has gone extremely well. CMS has a very active demonstration program, including of course the Maryland demonstration for hospital payments for over 20 years. (Please refer to the attached slide show presented by Mr. Wynn for rest of content).

In the first year, the CMS/ Premier demonstration paid almost \$9,000,000 to 123 hospitals around the country, ranging from large and small facilities. One of the things that CMS found was that there were a couple of hospitals that had disproportionately large payments so the reward strategy is being reevaluated. Hackensack Hospital in New Jersey got almost 10% of the total because it is a very high quality hospital, a very large hospital, had a large number of discharges and so received a good deal of money. CMS is looking for an opportunity to re-distribute the money a little more evenly. Mr. Wynn noted that there has been a good deal of criticism of what is sometimes called a "tournament approach," where only the top 10% of hospitals get any payment at all and other hospitals, even if they are just marginally below the 21st percentile from the top, don't get anything. CMS is looking at opportunities about how some other models might work. One of the most important of those models, which may present a viable methodology for the national program, is that CMS would establish baselines, perhaps based on the median of the prior two years. So if the composite measure for treatment of AMI patients baseline is 82%, anybody who gets 82 or more points in the measure would get some sort of an award. Another approach is paying for the highest 20% attainment. If CMS does that again, there may not necessarily be such a large gap between the first and second deciles: 2%

and 1% is a substantial amount of money especially when it is rolled up to the entire hospital DRG amounts. The third approach that CMS is considering is to pay for improvement. For example, in the methodology for the nursing home P4P demonstration, the facility must both exceed the median from two years ago and also improve the highest in terms of percentage points. Some combination of these approaches is also possible, however, CMS probably would not pay for both a very high improver that also gets in the top 20%. The organization would get the reward for the higher of the two categories, either attainment or improvement. Mr. Wynn concluded with the lessons learned. (Refer to slide show attachment for content.)

Mr. Samuel Ogunbo noted that both small and large hospitals would benefit from improvement and commented on strategies to get the most improvement for the investment. Mr. Wynn agreed that if one wished to focus on how CMS could do the most to improve the healthcare of our Medicare beneficiaries, the focus should be on those in the worst decile and trying to improve them. There is a balancing act involved as CMS does not want to offer P4P rewards to a facility that is providing bad care but also does not want to only reach out to the highest attaining hospitals.

A work group member asked where CMS was in development of efficiency measures. Mr. Wynn responded that these were still in development with assistance from RAND. Mr. Wynn noted that the most sophisticated groupers, for example, APR-DRGs, have a present on admission possibility. For another example, one of the more important patient safety indicators is decubitus ulcer. Intricate coding and measurement issues need to be resolved for a perception of fairness and to accurately measure quality improvement.

Mr. Murray asked for some of the examples of what RAND is assisting CMS with in regard to episodes of care. Mr. Wynn noted that he is not directly involved in this project but that CMS is looking at the severity adjusted DRGs, both the APR DRGs and a number of other systems based on the old Yale grouper. (Dr. Ritter later made one correction to Mr. Wynn's presentation. Brandeis University, not RAND, is working with CMS on some of the newer measures. RAND is working with AHRQ on their composite scoring methodology.)

Dr. Hall thanked Ms. Jackson and Mr. Wynn for their presentations and noted that hopefully the IWG and HSCRC may be able to take some points from this project.

3. Further Discussion Regarding the Construction of Performance Composite Measures - Dr. Kazandjian noted that the Premier/CMS presentations were very useful because this group experienced many of the same issues and assumptions that the IWG and HSCRC have been considering. In making assumptions for the HSCRC project, he noted that the IWG needs to keep in mind our specific environment, payment, and reimbursement system and we need to consider how each assumption fits into our reality. Dr. Kazandjian also wanted to clarify that we so far have not proposed that there will be only one composite measure that is going to be the basis

for payment. We are still exploring and evaluating the different options and approaches.

A work group member noted that she appreciated that Dr. Kazandjian is addressing the complexity which she felt is definitely the way to go. Her concern is we haven't completely finished looking at the indicators. Dr. Kazandjian responded by reviewing the plan for the Alpha and Beta pilots. Originally the plan was to use data from 5 hospitals for the Alpha pilot, but due to data sharing issues, data from 18 hospitals became available which permitted an additional analysis opportunity. The Alpha phase included the choice of the initial indicators, the design of the methodology, exploring different composite scoring approaches as well as touching upon the stratification issues like peer grouping, realizing that the small number of hospitals would not allow us to actually test those. The initial selection of indicators is not the final set. We will need to revisit the measures on a continuous basis for two reasons. The first is that the initial group may be an incomplete list of indicators and secondly, that those indicators may lose their sensitivity over time. If everybody eventually ends up scoring 100% or 99% on a measure, that measure will have to be changed. The Beta phase is to extend the analysis to all Maryland hospitals using retrospective data. Dr. Kazandjian feels that at that point, the issue will be addressed.

Ms. Barclay asked if the Beta phase will test one approach or more than one. Dr. Kazandjian noted that more than one would be tested. The reason for it is at least two-fold. Firstly, that we would have learned more about what to look for and secondly, we would have more data to analyze. Ms. Barclay asked for clarification on the timeline for the pilots. Dr. Kazandjian responded that we are following the time frame that was proposed. April is the end of the Alpha pilot and we have already gone through the indicator selection, discussions about methodology, two sets of initial analyses, more analysis for presentation today, and hopefully by the end of the Alpha phase we are going to have the discussion about methods of composite scoring.

Dr. Ritter noted that he wanted to spend some time talking about the Appropriateness of Care Model, an alternative to the Opportunity Model. (See Dr. Ritter's presentation.) Both of these models are transparent models, in that it is very easy to figure out how the scoring is calculated. He noted that he had some sense from the Work Group that these models are overly simple, because everything is weighted one. Either every opportunity is weighted one or every patient is weighted one and the complexities or the differences between clinically significant processes are minimized. In the pure Appropriateness of Care Model, there is no partial credit; hence, the "all or none" terminology. One of the advantages of this model is that it spreads out the score more than the Opportunity Model does. Dr. Ritter noted that one thing he liked about the Appropriateness of Care model is that if you want to develop one composite score for the hospital, (which we have not decided) you could weight every patient the same. There is a compelling argument that all patients that come into the hospital should receive evidence-based care. So in that sense, if you do choose the Appropriateness of Care model, the weight scheme for creating a single composite measure for all patients weighted the same does have some feeling of fairness to it. Dr. Ritter discussed some

results from one particular hospital as to how the scores on the Appropriateness of Care model compare with the same data under the Opportunity Model. He noted that we will see some similarities and some differences. The major difference being that the scores do expand out a lot more in the Appropriateness of Care model.

The other thing that Dr. Ritter wanted to introduce was the idea of peer groups. He noted that in a private conversation with Dr. Remus, he learned that Premier came to the conclusion that peer grouping was not really necessary perhaps because Premier deals with non-profit hospitals of a certain type. However an article last year in *Health Affairs* that looked at Hospital Compare data for rural versus urban hospitals found major differences. The researchers looked at differences by ownership and teaching status and found that the public hospitals probably did not perform as well as the non-profit hospitals, and the best performing hospitals are the investor owned hospitals. In some sense, it is difficult to talk about these performance measures across all hospitals. And it may be that implementation of peer groups would help give a sense of fairness to this payment initiative. Interestingly, the article did not conclude that peer groups are required.

Teaching hospital status and the ownership status are exactly the same variables that were found to be significantly important in the HSCRC Reasonableness of Charges (ROC) peer grouping methodology. Given that experience, Dr. Ritter condensed the five ROC Peer groupings into three groups and then looked at the quality measures, and how they differed within the peer groups as opposed to how the distribution looked over all 18 of them. Dr. Ritter separated the 18 hospitals into three groups: seven were in the small rural peer group, six were in the suburban, non-teaching and five were in the largest urban teaching hospital peer group. Then Dr. Ritter took one particular hospital that was in the rural group and looked at how it performed, not only overall, but within its peer group. This analysis is displayed the last ten pages of Dr. Ritter's handout.

In comparing his example to the Premier example, Dr. Ritter notes that the Premier template for a hospital report card is on page 13 of the Premier handout. The Premier report card also shows how the calculations were derived. The Premier calculation is more complex than Dr. Ritter's example because it employs both process measures and outcome measures combined into an overall acute quality (CQS) measure. Dr. Ritter's example aims to show a hospital where it did well and where it didn't do well for each measure over time; (including the total score), the distribution of how the hospital performed within its peer group, and overall. There are some strong correlations between how this particular hospital did with regard to the two different models

Dr. Ritter noted that the small rural hospitals did not do as well as the other hospitals on the AMI measures. But with the pneumonia set, the small rural hospitals, as a peer group, are better and higher than the overall score. A work group member noted that one of the struggles with rural and urban hospitals is emergency department's throughput and delay. She noted there are compounding variables that are difficult to

analyze if you lump them together unless we are going to solve larger problems like through-put. Dr. Ritter also noted that in some analysis at CMS, the point was made that small and rural hospitals score lower on the AMI measures because they do not have catheterization labs. Dr. Kazandjian emphasized that right now we are at the “what” stage of looking at the profiles. The “why” question comes later. Research regarding “the why” to understand the determinates of explanatory variables will be critical to identify the key adjusters for the appropriateness scores.

Mr. Murray asked for a summary of the implications, and what are the next steps, either analytically or for discussion purposes, for these two models. Dr. Ritter asked for more feedback from the hospitals. Dr. Ritter noted that CMS is essentially on a very fast track and selected a methodology that is fairly simple, because trying to develop a method to appropriately weight measures might be very time consuming. Dr. Ritter asked Mr. Murray whether he saw this as a leveraging methodology where all payments to the hospital are subject to the composite score or a more conservative approach similar to Premier where they are only paying on the cases that are within the DRG category. Mr. Murray deferred that discussion because there are multiple issues related to payment structure and incentives which we haven’t tackled. Dr. Kazandjian noted we need to reconsider the time frame. The discussion about the translation of the composite into the payment modeling is part of the next phase, and we need to do more feedback and more analysis first. Dr. Kazandjian noted that at some point we are going to have to make a decision as to which path to take. He noted that Ms. Epke had pointed out that the question was: Do we go down the opportunity or the appropriateness model or do we go into the clinical relevance and importance and try to get specific weights and all that is associated with that.

Dr. Kazandjian pointed out that HSCRC was two years ahead of CMS in understanding the biggest bang for the buck from a strategy and policy point of view. We will not only look into the performance of a few but also look at how the whole system can be moved forward and that strategy does translate into methodological imperatives. We need to keep that goal in mind as we collectively consider which path to take.

Dr. Morlock noted that it seems like what receives the most weight is the indicators that have the most variance. In other words, if all or many hospitals perform well on a particular measure, that doesn’t effect the distribution in the way that the indicators that have a lot of variation do. Dr. Ritter agreed except for the fact that size matters too. For example, the smoking cessation measures don’t matter as much because only a quarter of the patients are even eligible for that measure. And, the discharge instructions for the heart failure patients, for example, seem to have, at least nationally, a huge variance. That measure is the one that is really going to affect the hospital score the most nationally because, you could get 30 points difference between the top and bottom hospital in that group. Dr. Ritter further noted that there is about a 10% difference in spread on the aspirin at arrival, aspirin at discharge measures: those two are just about useless now because everybody has close to 100% on that. But impact is also based on the number of patients that are actually affected by that

measure. The SIP measures have a greater weight than any of the other categories because they reflect data on eight different surgical procedures and the total number of patients affected is generally higher on the SIP measures than the AMI measures.

Dr. Reuland suggested that one way to look at this is, “where did we fail and why”? What does it take to fix that? And does that fix alter the course of patient care or does it just alter the documentation? He felt that those that alter the patient care are the ones that we ought to be thinking about rather than “teaching to the test.” Dr. Reuland would be interested in hearing from the hospitals if there is any agreement on which interventions constitute a material change and which ones look like teaching for the test. Dr. Ritter agreed that the first improvements will be in reporting and in data management. A work group member said that these measures have been in use in hospitals for a long time and she felt that the documentation issues would have been addressed years ago, so now looking at real institution of interventions would be the focus. The member felt that since hospitals are scoring so high on some long-standing individual measures, that scoring the bundle in each of those areas is much more meaningful. At this point you should be doing all of these things, and the appropriateness of care approach would be more of an incentive for hospitals to improve at this time.

Ms. Gelrud noted that, at the hospital level, it is a balancing act to develop good credible data that reflects the quality of care provided, but on the other side of the strategy, to help clinicians understand the reasons for changing practice to improve outcomes without focusing on “nickel and dime” things. She noted that she understood that the ultimate ranking of the hospitals appeared to be fairly similar with either the appropriateness or opportunity model even though the scores vary. She felt that it was not clear how the choice of indicators or the composite approach linked to the payment methodology so it was difficult for her to decide which was best.

Dr. Kazandjian responded that at this stage, we are not making any decisions We are still looking at the statistical findings. The tactical or strategic issues associated with how can a hospital be helped to focus on areas of improvement using one methodology or the other have not yet been fully explored. He noted that is important because each methodology would have different implications. He also noted that either methodology would produce a distribution and not all organizations will be winners. So the question is how do we build a methodology that has a merging ramp for everyone over time to improve care. Dr. Kazandjian noted these issues will be explored more in the Beta phase. Dr. Hall asked what the next steps were. Mr. Murray suggested that feedback from the group on the opportunity versus the appropriateness model plus related policy issues be solicited and everyone provide email feedback to Ms. Tan prior to the next meeting.

4. Next meeting date and adjournment: After some discussion, the next meeting was set for the 5th of January, 2007, 9:00 – 11:00 am at HSCRC.
Happy holidays to everyone.