2016 TECHNICAL REVIEW PANEL
ON THE MEDICARE TRUSTEES REPORT

Minutes of the Meeting Day October 31, 2016

The Technical Review Panel met at 9:15 a.m. on October 31st in Room 738G of the Hubert Humphrey Building in Washington, DC. In attendance were the following panel members and presenters:

- Ellen Meara (Professor, The Dartmouth Institute for Health Policy and Clinical Practice), co-chair
- Michael Thompson (President & CEO Elect, National Business Coalition on Health), co-chair
- Kate Bundorf (Associate Professor, Stanford School of Medicine)
- Melinda Buntin (Professor and Chair, Department of Health Policy at Vanderbilt University School of Medicine)
- Austin Frakt (Health Economist at Boston University and Department of Veteran Affairs)
- Mark Pauly (Professor, Wharton School of the University of Pennsylvania)
- Geoffrey Sandler (Senior Actuary, Health Policy at Aetna)
- Greger Vigen (Independent Health Actuary)
- Dale Yamamoto (Founder and President, Red Quill)
- Don Oellerich (Deputy Chief Economist, Assistant Secretary for Planning and Evaluation at the Department of Health and Human Services)
- Paul Spitalnic (Center for Medicare & Medicaid Services (CMS), Office of the Actuary (OACT))
- John Shatto (CMS, OACT)
- Clare McFarland (CMS, OACT)
- Stephen Heffler (CMS, OACT)

Welcome, Review/Approve Meeting Minutes and Plan—Ellen Meara

The panelists began the meeting by reviewing several logistical items and noting that the meetings are working sessions designed to fill gaps in knowledge as well as to propose and answer questions. Consideration of topics and suggestions discussed does not reflect endorsement by the panel. By the end of the meeting, the panel should identify whether there are ideas and recommendations that it wants to table or add going forward.

A panelist noted that there is a distinction between a recommendation that should be studied over time versus a recommendation for an immediate change in the projection

methodology. Paul Spitalnic added that the panel should have a broad view of what constitutes a recommendation and draw conclusions based on evidence.

Don Oellerich stated that the panel is governed by the Federal Advisory Committee Act (FACA). All documents will be made public and all papers submitted will be posted on the panel's website and made 508 compliant. There are full transcripts of each meeting.

The panel reviewed and approved of the meeting minutes from the prior meeting on September 30, 2016 noting that panel member assignments for pursuing different topics were not discussed during the meeting but were instead determined after its conclusion.

Q&A Regarding Past Technical Panel Recommendations—Paul Spitalnic and Clare McFarland

The panel, led by Paul Spitalnic and Clare McFarland, reviewed recommendations from the last technical panel, which was held in 2010–11. A panelist asked if recommendations that have been most helpful could be highlighted during the discussion and also requested discussion of why other recommendations may have been less helpful or not adopted.

Clare McFarland began the discussion by noting that most of the prior panel's recommendations were adopted and proceeded to comment on some of background on other recommendations that were not adopted. For example, the fraud prevention recommendation was not actionable at the time and could not credibly be included in the models though it is an area of continued monitoring. The recommendation related to hospice site of care was not adopted after some analysis showing that the vast majority of hospice claims were paid at the same rate. Also, the Medicare Advantage (MA) recommendations led to additional analysis and the results of these analyses have been incorporated. Clare McFarland also indicated that the physician recommendations were made when the Sustainable Growth Rate (SGR) was in place so these were not implemented.

A panelist asked which recommendations were most helpful. Paul Spitalnic said that the most helpful recommendations concerned the characterization of uncertainty and the use of the illustrative alternative. He confirmed that recommendations regarding presentation of material are valuable.

A panelist raised the question of how recommendation III-1, which concerns the Gross Domestic Product (GDP) plus X model and factors model, plays into the report. Paul Spitalnic responded that prior to the last technical panel, the basis for the long-range projections was the GDP plus X approach. The factors model was not adopted in the first report following the last panel. In the subsequent reports the factors model became the source of the long range projections. The last panel was not comfortable recommending a complete shift to the factors model because it was so new, but after additional consideration and analysis the trustees were comfortable adopting the factors model for the long-range projections with the GDP plus model being a check on that. Another

panelist then asked whether or not the panel members should note their consideration of different topics and confirmation that assumptions are reasonable and Paul Spitalnic confirmed that this will be useful.

End of Life Setting of Care—Geoff Sandler and Ellen Meara

Ellen Meara presented the question of whether or not there has been a cultural change with regard to end of life care. She asked the panel whether it should consider monitoring changes in use of hospice or home health care and consider whether the use of these services results in offsets in more expensive settings of care. If changes and offsets are identified, how should these trends be reflected in short-range or long-range projections?

Hospice spending, which is projected separately from other Part A services, has been growing at a higher rate than for other settings. Also, more Medicare patients are dying at home. If these trends are accurate, Part A projections may overstate volume of use and spending in inpatient settings. A potential recommendation could be that OACT consider monitoring offsets as a result of changes in end of life care or, if trends are observed, then a potential recommendation could more explicitly address how to incorporate offsets into the models. Ellen Meara noted that evidence of offsets in the literature is mixed and that if there is an offset as a result of trends in end of life care then it may not be picked up in data examined to date.

Geoff Sandler described Aetna's experience working with end of life patients in both the commercial market and with MA. Aetna launched a program called Compassionate Care, which uses case managers to coordinate care for terminally ill patients enrolled in both MA and commercial plans. According to 2010 data Aetna collected, the program resulted in increased use in hospice care from under 30% to nearly 90%; decreased acute care days (82% reduction in MA); a reduction in intensive care days (86% reduction in MA); and lower rates of emergency room use (78% reduction in MA). There is potential for a spillover effect from a program such as this one from MA to traditional Medicare. Geoff Sandler clarified that if a MA member goes into hospice then he or she is not covered under MA but rather by traditional Medicare. In this case, the MA plan no longer receives revenue but also does not bear the cost when that beneficiary moves into hospice.

Geoff Sandler brought to the panel's attention the Medicare care choices model, which allows Medicare beneficiaries to opt into hospice and still receive curative care, not just palliative care, and may increase use of hospice care. These activities, in addition to greater usage of advanced directives, could also be explored through the Innovation Center.

Ellen Meara mentioned an observational study published by Ziad Obermeyer. Although the study was not randomized, it did show that hospice beneficiaries spent approximately $8,700 less than non-hospice beneficiaries. She also made reference to a paper published by Teno in 2013 in the Journal of the American Medical Association (JAMA), which showed that while hospice use was increasing, intensive care use was

also as were hospice transitions in the last three days of life (up to 28% of hospice users). Another study published by Gozalo, which incorporated a difference-in-difference analysis, posted a rise in hospice care and a reduction in inpatient utilization. Despite the reduction in the latter, net spending increased $6,000 to $7,000 more per patient. The Medicare Payment Advisory Commission (MedPAC) reviewed hospice studies and concluded that hospice increases Medicare spending overall.

A panelist noted that for-profit hospices have much longer length of stay than nonprofit ones due to the per diem payments. Another panelist noted that there is the potential for just adding hospice on top of acute care without a real tradeoff when it is used within a short period before death and there is less time to see offsets in service use. A panel member posed the question of whether the trends with inpatient and hospice care lead to differences in what is currently projected for both short and long-term projections.

A panelist added that as of January 1, 2016, CMS introduced new fee schedule codes for advanced care planning. A potential recommendation could be to monitor the use of these codes, which have implications for end of life care. A panel member noted that we are at an inflection point considering the Aetna experience and the use of these codes. There is greater discussion of where people want to die and more attention being paid to how end of life care is changing. Given this inflection point, the panel may want to consider a recommendation stronger than monitoring. Another panel member noted the passage of state legislation encouraging the use of advance directives. There is uncertainty, however, in terms of how these trends may affect projections. A panelist also noted that the long-term projections already incorporate lower excess cost growth and posed the question of whether lower rates of increase in intensity are already incorporated.

The panel concluded the discussion on this topic with thoughts on next steps regarding a recommendation. Given the absence of strong evidence regarding a cost offset, the panelists favored continued monitoring as opposed to recommendation for a specific change. A panel member suggested the possibility of a recommendation studying advance care planning codes. Paul Spitalnic noted that it is not obvious what OACT would do differently even if we knew the type and level of substitution as a result of changes in end-of-life care.

Spending by Age—Ellen Meara and Geoff Sandler

Ellen Meara and Geoff Sandler led the group through a discussion on age and sex trends in spending. Ellen began by noting that the age at which Medicare spending peaks is rising over time and spending at the end of life is a big share of spending. The question for the panel is whether there should be adjustments to the projections to take into account the relationship between age and rising life expectancy and Medicare spending. Is a constant distribution of spending by age and sex reasonable for long-range projections? Or should there be an adjustment for life expectancy? Ellen Meara noted that if expensive end of life care is occurring at older ages then we might overstate spending. However, if spending is growing faster at older ages and this is not accounted for as cohorts age into the older groups then we might understate spending.

Potential recommendations that the panel could consider include analysis of growth in spending across age and sex groups over longer time horizons and the potential for differential growth rates and time until death. Alternatively, the panel could consider a recommendation for a specific adjustment.

Currently, the trustees report assumes that spending within a service category grows at a constant rate by age and sex and that the plus or minus two percent variation is used to account for uncertainty. A previous panel recommend that there be a distinction between spending for each age and sex group for decedents and survivors. Ellen Meara also raised an observation of Peter Zweifel, a Swiss economist, who said that time to death is what predicts spending as opposed to age. A panel member noted that it may be that spending has fallen at younger ages in addition to increasing at older ages. Another panel member noted work by David Cutler looking at the compression of years with disability.

A panel member asked if the panel is saying that people are dying later and spending is all driven by end-of-life care? Another panelist noted noting that the CBO report on this topic has shown that once skilled nursing facilities are taken out of the calculations then there is not as much of a shift in peak spending by age. A panel member pointed out that skilled nursing facility spending is very sensitive to payment policy. A panelist asked if there may be any shift between care provided in inpatient settings and care provided in skilled nursing facilities. Another panelist responded that they are not aware of any literature that would support this though they are aware of literature indicating that skilled nursing facilities are shifting patients back to hospitals though this may be attenuated with policies focusing on readmissions.

Ellen Meara presented data from several sources that looked at ways to account for changing life expectancy. A study that Ellen Meara conducted with David Cutler and Chapin White looked at relative spending for different age groups over time and found a rapid rise in relative spending at different periods of time. The CBO has also found that the oldest age groups (95 and older) led in annual growth in Medicare spending and percent growth in Medicare spending from 2000 to 2012. Ellen Meara noted that the existing literature on this topic is descriptive in nature and tends to focus on shorter time horizons so there is an assumption that adjusting for life expectancy may not matter over a 10–15 year time horizon. Ellen Meara also noted that the panel will hear more from OACT on preliminary simulations adding time to death though an outstanding question is that even when you adjust for life expectancy there are big differences in relative spending across age groups.

A panel member asked for clarification on how the distribution of spending by age and sex is incorporated into the projections in the short run and the long run. Paul Spitalnic responded that there is no change in the forecast of the spending by age distribution. The current spending by age distribution is applied to all years in the future. Another panel member asked about the magnitude of the impact of this issue. Paul Spitalnic said that it would be possible to model what the age distribution would look like. A panelist posed several questions to the group including, if this effect exists then what is the magnitude? Or alternatively, can we model that the effect exists and then look

to see if it has a large magnitude? Stephen Heffler noted that aging and gender alone account for about 2 tenths of spending based on analysis of data over the period 1990–2000 that will be discussed in December. He also noted that the accumulation can be big over a longer period of time. Ellen Meara concluded by advising that the panel should continue to consider the issue of life expectancy and relative spending by age and the panel will hear more on the life expectancy issue at the December meeting.

Access and Costs—Mark Pauly and Dale Yamamoto

Mark Pauly opened the discussion by noting that the question for the panel on this topic is how to interpret long-range projections and their impact on access to care for beneficiaries. The concern is that rates may be too low to maintain the current level of access. Mark Pauly described two assumptions surrounding this issue. The first assumption, is that if the payment rate increases to physicians fail to keep up with the cost of physician practice or the private sector then Medicare beneficiary access to care may decline. The second assumption is that the current level of access to care for Medicare beneficiaries should be preserved, if not expanded. Currently, approximately 90% of physicians accept Medicare patients and some portion—up to 35%—of Medicare beneficiaries have some difficulty finding a physician. This is consistent with the private sector.

Mark Pauly described the nature of the problems with access including issues related to general economic conditions, practice costs, changes in quality, provider profit margins, supply of labor, and provider productivity. Another issue is demand inducement for physicians. That is, lower physician payments may lead to more access because these providers need to generate more volume to compensate for lower income and profit margins. A panel member questioned whether the panel should consider other topics such as income by specialty, overall salary levels, supplements to income, and salary arrangements. Understanding physician behavioral response to changes in pricing is an important topic for the panel.

Mark Pauly mentioned several other trends that could impact the access discussion. In the private sector there is a full scale movement toward narrow networks, which may lead to less access to physicians and more out-of-pocket payments from patients. Another trend is consolidation from small physician practices to larger ones and more hospital acquisition of physician practices. If these larger groups are more productive through economies of scale and lower per capita operating costs then they could improve access. However, if they increase costs for patients in the process of consolidating, the reverse may prove true.

Mark Pauly described a classic cost-shifting model where providers have indicated that if Medicare cuts payments then they will need to charge more to the private sector. If payments were reduced then profit-maximizing providers might be incentivized to shift care from less lucrative public patients to more lucrative private patients and to do this, they might actually decrease prices and increase volume.

Mark Pauly suggested the idea of an index of access – perhaps measuring the fraction of physicians in the hospital referral region (HRR) that are included in a given health plan. Mark Pauly also noted that if aging of the population continues then there will be fewer private patients, which may alleviate issues of access for Medicare beneficiaries. Mark Pauly also discussed the economic theory behind the behavior of firms with market power faced with cost increases.

A panel member posed the question of if the supply of physicians is growing fast enough to meet the expected demand. Another panel member noted that there is literature documenting the probable undersupply of primary care doctors.

Ellen Meara brought the discussion back to what the panel can do. Paul Spitalnic noted the potential link between access, spending, and beneficiary mortality rates. A panelist suggested there is new evidence that private prices move with Medicare. The panel also discussed whether services will expand to fit the capacity and discussed the difference between traditional Medicare and MA in regards to price impacts. Mark Pauly concluded by noting that in MA plans there is the expectation of narrower and more constrained networks as opposed to traditional Medicare where there is greater access to care.

Illustrative Projection—Kate Bundorf and Austin Frakt

Kate Bundorf presented on the illustrative alternative where projections are adjusted based upon changes to physician payments and non-physician providers, productivity investments, and other policies. She posed several questions to the panel including whether the alternative scenario should be included as part of the report. The alternative scenario started out in the supplemental section of the report but is now in the main body of the report. If the alternative is included, what are the policies and assumptions that should be reflected in the scenario and what language should be used to describe the scenario?

The illustrative alternative was first used during a period of continued repeal of the SGR and may have been more realistic than current law because there was a lot of confidence around current law being overturned. The illustrative alternative has since shifted to reflect the Patient Protection and Affordable Care Act (PPACA).

The last panel spent a lot of time thinking about the illustrative alternative and recommended that they express Medicare expenditures as a percent of GDP under current law, an alternative scenario with SGR-only, and an alternative scenario with SGR plus some modifications to the ACA (MACRA had not been enacted). The last panel did not reach consensus regarding provider response to payment reductions so agreed that it would be prudent to consider the potential financial consequences should the provisions of current law be repealed or otherwise not implemented. Kate Bundorf laid out several options for the panel in regards to the alternative scenario. First, do nothing; that is, maintain the scenario as is. Second, eliminate the alternative and make a recommendation accordingly. Third, change the scenario and some of the parameters. Fourth, incorporate the alternative scenario into some general uncertainty analysis. She asked the panel to

consider the advantages and disadvantages of each option. A panel member noted the possibility of including a scenario that shows more about the implications of current law. The current challenge is that SGR was viewed as likely to be overturned, but it is less clear what aspects of current law may be overturned. Paul Spitalnic noted that the cuts in current law add up to more that cuts under the SGR and that perpetually paying providers lower than their costs may be a different type of uncertainty than knowing what the inflation rate will be in the future.

There are several factors to consider in regards to alternative projections. How will providers respond to payment changes and reforms? Is there sufficient evidence in regards to how rate reductions affect beneficiary access? How will MACRA ultimately be implemented and what are the implications of the law on the projections? How should marginal practice costs be considered in regards to these scenarios? Do alternative scenarios properly consider changes in provider productivity?

The panel discussed the timing of payment changes in MACRA in relation to alternative payment models. A panel member noted that supply issues are not problematic in the short run and there are a lot of applicants to medicals school. Another panel member noted that the problem looks to be very much in the future so the urgency around this issue is not clear. A panelist suggested that perhaps this problem can be addressed when it becomes a problem. Another panelist noted the value in noting in the report when issues are likely to arise as problems so that adjustments can be made sooner rather than later. Kate Bundorf suggested further consideration of productivity adjustments and provider/supply-side responses to payment changes including greater understanding of the potential of MIPS and alternative payment models as the panel considers presentation of the illustrative alternative going forward.

Spillover Effects of Medicare Advantage (MA) to Traditional Medicare—Austin Frakt and Greger Vigen

Austin Frakt presented on spillover effects of MA on traditional Medicare. He noted that there is a difference between basic spillover, which refers to MA's impact on traditional Medicare, and claims spillover, which refers to changes in Medicare spending through claims reimbursement. Greger Vigen stated that a lot of current literature only covers basic spillover and not claims spillover.

Austin Frakt asked the panel how spillovers fit into the Board of Trustees' models. What is the magnitude of basic/claims spillover and to what extent are claims spillovers from projected changes in growth in MA penetration already incorporated into these models? How can the methodology be changed to enhance the accounting of claim spillovers? A concern would be if growth in MA deviates from the recent trend that informs projections. The long-term model accounts for shifts on the portion of health care spending that is out of pocket which might address some of the spillover issue. Can the model be augmented to consider the proportion of people in managed care in general, and not just MA? Perhaps the factors model can take into account spillover effects more explicitly? Spillovers are likely to continue going forward and possibly at a different rate

than in the past. It would be useful to more fully understand what physicians do differently in MA and how their actions translate into claims data.

Greger Vigen noted that MA programs can cause spillover through carrier, provider, or hospital action depending upon who has financial responsibility. He indicated that there is a lack of literature on smarter spending in relation to MA spillover. He said it would be useful to differentiate actions that might spillover to those that do not to get better estimates of magnitude. He also brought to the panel's attention a large California medical group that produced spillover across payers by managing their expenses, developing working relationships between physicians and hospitals, and making sure they reduced unnecessary hospital expenses. The panel discussed differences in plan success and how that effects spillovers. Plans may be doing things differently and the ones that are successful will gain market share. Will these be the practices that spillover? A panel member pointed out that if physician groups start to specialize in managed care then there may be less opportunity for spillover.

A panelist brought the panel back to the question of how spillovers affect the long-term forecast. Paul Spitalnic said that there is stability in MA penetration until the end of year 10 at under 40%. Therefore, spillover may taper off if penetration rates remain level. Could spillover continue even at fixed market penetration? Another panel member noted that in diffusion models there is usually a period of diminishing returns. A panelist asked whether this is a level or trend change with spillover. Paul Spitalnic noted that spillovers are built into the short range model but there are not adjustments for them becoming greater or lesser in the immediate future.

Greger Vigen summarized that there is not enough literature to support a change in the immediate forecast but recommendations could consider monitoring. Austin Frakt noted that changes to MA payment rates could increase market penetration and affect the model. A panelist added that there are potential impacts from quality star ratings, the adoption of new technologies, as well as high deductible health plans. Also, the panel can consider information on spillovers in the economy-wide insurance data that goes into the factors model.

Impact of Alternative Payment Models (APMs)—Kate Bundorf & Greger Vigen

Kate Bundorf said that alternative payment models (APMs) are very broad and that their stage of implementation and implications for projections varies. The question for the panel is how APMs might affect the short run, transition, and long-run projections. How will these programs change the income-technology elasticity and volume/intensity assumptions incorporated into the model? The last panel recommended that the Board of Trustees assume that the Patient Protection and Affordable Care Act (PPACA) will have a small negative impact on volume/intensity by 0.1% per year. This projection is owed to such reforms as greater bundling of services as well as response to reduced payments and prices.

A number of questions still remain in regards to APMs. Do APMs affect trends or do they level shift? In addition, are they generalizable? That is, can their effect be

extended across locations and can these innovations be diffused more widely? Have they formed a critical mass and to what extent can they be dispersed? Most APMs are not yet incorporated fully into Medicare and the broader marketplace. Also, MACRA emphasizes resource issues and greater monitoring of utilization of services, which could impact the incentives providers in APMs face. Due to these uncertainties, Greger Vigen suggested the panel recommend further monitoring for indicators. He also raised the topic of sustainable variation and the distribution of performance by participants in APMs. Variability and sustainability of APM performance can change the overall impact that participants in these models have on projections over time.

Kate Bundorf suggested that there still is a lack of evidence on the exact impact of APMs. The literature and expert opinion that is available is a bit weighted toward APMs reducing costs to a greater extent than utilization. A panelist observed that health care cost pressure produces political pressures, which culminate in policy changes that constrain cost growth. Overall, the panel needs to take a closer look at the relevant literature, which can then be used to form more concrete recommendations for the Board of Trustees. Kate Bundorf suggested using grey literature in addition to peer-reviewed literature and expert opinion.

Wrap-Up and Process—Michael Thompson and Ellen Meara

Michael Thompson noted that the panel had discussed recommendations related to changes to assumptions, modifications in methodology, changes to how content is described, and topics for further study and analysis. He asked whether there is a more systematic way for reviewing methodologies. Also, is the panel on the right track and does it need to do something differently? A panelist said that there are many more topics it needs to study more. However, the discussion has opened up more creativity. Ellen Meara agreed, stating that the panel needs more hard evidence in order to alter the current assumptions.

Paul Spitalnic added that a fifth aspect the panel discussed was confirmations of prior assumptions and approaches. Certain topics that are not incorporated currently may be helpful but they need to be more specific and tailored to the level and trend assumptions that are used. A panel member suggested dropping topics that are not too relevant in favor of taking a deeper look at ones that are. Another panel member mentioned that the world has not changed enough to revisit many of the assumptions that arose from the last panel. One area has changed is the implementation of APMs/MIPS/MACRA—which, as Paul Spitalnic noted, may warrant evaluation, particularly related to the proportion of physicians affected. Another area that has changed is Medicare Part D. The panelists agreed to start drafting recommendations for continued consideration based on the discussion at the meeting.