Simulations estimated 1- and 3-year HBa1c progression for 1000 hypothetical T2DM patients (proportions 7: SE 5.3) years post-diagnosis) to obtain the proportion meeting criteria for <7%, <8%; and <9% thresholds by bootstrapping the UK Prospective Diabetes Study (UKPDS) equation. UKPDS68 accounts for time, HBa1c in the prior year, drug treatment effect, and baseline A1c. Parameter values for duration of disease, baseline HBa1c, and treatment effect were selected from distributions around the mean, and mean values of the latter two were systematically varied to approximate different populations and effects. RESULTS: By 1 year, all NCOA requirements are met when treating patients with all average baseline HBa1c ≥ 8%. At 3 years, all requirements are met in patients with baseline HBa1c ≥ 7.2%, though 8% and 9% threshold requirements are feasible with higher baseline HBa1c. Using a more realistic thiazolidinedione durability assumption (annual mean change in baseline HBa1c increased instead of UKPDS68, all thresholds are met at 1 year ≥ 8% baseline HBa1c, and at 3 years ≥ 7.4% baseline HBa1c. The 7% and 8% requirements are met with ≥ 8% baseline HBa1c at 1 year, 3 years, and 5 years and are more likely to be met with baseline HBa1c ≥ 8.2%. CONCLUSIONS: The simulations show that clinical thresholds can be met at 1 and 3 years, indicating that alo-pio can be considered for treating an appropriate population from an ACO perspective.

### PD145

**RELEVANCE OF CLINICAL TRIALS TO INFORM HTA: DISPARITY BETWEEN HTA EVIDENCE REQUIREMENTS AND PUBLISHED RCTS IN TYPE 2 DIABETES MELLITUS**

**Objectives:** To assess factors affecting physicians’ decision on why they did not initiate dual therapy to unmet Type 2 Diabetes Mellitus (T2DM) patients with A1C 7.6-9% per AACE/AEC recommendation. **Methods:** Primary care physicians (PCPs) and specialists in the US were asked to provide medical chart reviews for 4 patients who were diagnosed with A1C 7.6-9% and initiated with metformin mono-therapy. Physicians rated 22 reasons on a 5-point Likert scale (1-lowest, 5-most relevant) on how relevant each reason was for them in treating a specific patient. Top 5 reasons (≥50% of physicians rating the reason as 4 or 5) were identified. **Results:** 1,235 PCPs and 290 specialists participated in the study and provided reviews for 5,995 patients (5,009 young and 986 elderly). Four relevant reasons were related to physicians’ attitudes and beliefs toward monotherapy and dual therapy: R1- “Metformin monotherapy is sufficient to improve glycemic control” [mean:sd: 3.66±1.1]. R2 - “Monotherapy is easier to handle than dual therapy” (3.53±1.2). R3 - “I believe that monotherapy and changes in lifestyle (e.g. physical activity and dietary change) are enough for hyperglycemia control” (3.47±1.1). and R4 - “I recommend monotherapy before considering dual therapy” (3.75±1.1). One relevant reason was related to physicians’ perception of patients’ glycemic level. R5- “Patient has mild hypoglycemia” [mean:sd: 2.07±1.08]. The four reasons were ranked by the specialist’s [estimate(95% CI): R1: 0.18±[0.05,0.30]; R2: 0.37±[0.20,0.50]; R3: 0.33±[0.20,0.46]; R4: 0.36±[0.23,0.49]. All p<0.01. Lowering age was also more relevant in the four reasons [estimate(95% CI): R1: 0.04±[0.0,0.07]; R2: 0.36±[0.2,0.5]; R3: 0.06±[0.0,0.04]. All p<0.01. **Conclusions:** Guidelines non-concordance is related to physicians’ attitudes and beliefs toward the therapies and perception of A1C increase as “mild”. The findings have implications for improving T2DM treatment quality.

### PD146

**PATIENT AWARENESS OF HBa1C IN TYPE 2 DIABETES: TRENDS AND IMPLICATIONS FOR HEALTH OUTCOMES**

**Objectives:** Maintaining glycemic control for patients with type 2 diabetes (T2DM) is associated with a reduced risk of future complications. Proper patient awareness of HBa1c is important to facilitate adherence and improve outcomes. This study profile how HBa1c awareness has changed over time and the consequences of poor awareness. **Methods:** Data from the 2006-2013 US National Health and Wellness Survey (NHWS) were used in the analysis (Ns = 62,834 to 75,000 in each year). The NHWS is an annual, patient-reported, cross-sectional survey fielded to maintain demographic characteristics of the US adult population. Patient awareness of their HBa1c levels (i.e., a reported value vs. a “don’t know” response) was examined each year. Differences between those who were aware versus unawares were made with respect to health status (using the SF-36v2), work productivity loss (using the WPAI-GH), and health care resource use in a series of regression models controlling for demographics and health characteristics. **Results:** Awareness of HBa1c levels improved from 26.6% (in 2006) to 56.4% (in 2013). In 2013, patients who are aware of their HBa1c have a 42% greater likelihood of being more likely to be on any therapy compared to patients who are unaware (71.4% vs. 61.1%), treating with oral/insulin/insulin-insulin injectable (87.8% vs. 76.1%), and more likely to have had diabetic complications compared with those who are unaware of their HBa1c (8.4% vs. 9.4%). When adjusting for socio-economic status, race, age, hypertension, and lifestyle factors, lack of awareness was associated with poorer health utilities (0.70 vs. 0.68), more overall work impairment (17.9% vs. 20.8%), and more hospitalizations in the past six months (0.26 vs. 0.22), among other outcomes (all p<0.05). **Conclusions:** Awareness of HBa1c has increased over time, though appears disproportionately higher among patients of high socio-economic status and higher risk (i.e., those with complications and using insulin). Awareness was also independently associated with overall health outcomes, suggesting improved patient education may have significant societal benefits.