to each patient using the Marketscan National Weights for 2011. Estimates of the ESI population were calculated by summing the ESI's for all patients with 3+ SABA fills, and the 2.5% had 4+ SABA fills within a period of 90 days. For Diabetes patients 50% had 2+ Hba1c tests, 25% had an eye exam, and 70.4% had an LDL test. CONCLUSIONS: We estimated a total population of 160,714,971 with EIS in 2011. Of those, 0.7% had COPD, 2.4% had Asthma, and 5% had Diabetes. A total of 5.9% of those, 0.7% had COPD patients had a level 2 or 3 exacerbation and 31.4% of newly diagnosed patients received oral steroid fills, 13.6% had Asthma patients were using the search engine and selecting in the language field the key words “French data on clinical practice and outcomes” could help researchers identify questionnaires available in French for use in Quebec. METHODS: The PROQOLID database was explored on November 10, 2013 using the search engine and selecting in the language field the key words “French language.” To hundred and twenty questionnaires representing 27.42% of the instruments available in PROQOLID [in comparison, 383 questionnaires (49.54%) were available in French for France]. Out of these 212 questionnaires, 123 were available in French. Twenty different medicine questionnaires were designed specifically to measure targets related to chronic diseases, such as elderly endocrine system diseases, neoplasms, nervous system diseases, respiratory tract diseases, or psychiatric disorders), representing 75 different indications, and 83.33% of the therapeutic areas included in PROQOLID (n=24). Twenty-three questionnaires were meant for adults, 14 for children, and seven for generic use (children, adults, and generic). A modified “precision rounding” approach was applied to subpopulation estimates to ensure that the sum each sub-category estimate would add to the total population. The abundance and availability of health care data has risen exponentially in recent years, coming from a variety of health systems. These data have the ability to provide rich insight into the outcomes of care, standards of care and specifically the descriptive patterns of treatments. However the barrier to this rich insight is twofold, technical and methodological. This methods piece will demonstrate how the application of high performance computing technology has been able to erode technical and methodological boundaries to these data and provide fresh insight to the chronic disease management within longitudinal patient records. METHODS: We applied ESE to data from eight cardiovascular studies (six cohort studies and two clinical trials) with a total of over 147,000 participants. ESE allows users to create customized pooled cohorts and subpopulations from these data sources. Users can assess the performance of predictive models for different subpopulations in real time. Several metrics were used for model evaluation: cumulative incidence, calibration plots, receiver operating curve and net reclassification index. ESE also allows users to generate and then assess models for risks of MI, stroke, heart failure, coronary death or composite cardiovascular outcome for a predefined subpopulation from selected datasets. We used ESE to evaluate the performance of five cardiovascular risk equations. The results suggested that compared to four other well-accepted cardiovascular risk equations, the 2013 Pooled Cohort Equations for 10-year risk of ASCVD could have superior performance for the individuals considered in these eight studies. CONCLUSIONS: ESE proves to be a useful tool for advancing the development and operation of predictive modeling in medicine.