2nd World Congress on <u>Conferences</u> Diabetes & Metabolism

Accelerating Scientific Discovery

TITLE

Health Informatics

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Health informatics plays an integral role in facilitating the ability of health care stakeholders to precisely monitor the estimated \$174 Billion spent annually on diabetes and increase the quality of care. With the goal of creating a new mechanism with which to manage health care investments-including diabetes which impact over 25 million individuals-we propose the creation of financial/economic instruments based on health outcomes metrics from real-world and de-identified patient-level data. Clinical, economic and humanistic patient outcomes metrics which are used by the health outcomes and economics communities can set the stage for the creation of a health commodities market in which financial derivative instruments based on the metrics may be traded. For example, outcomes metrics may be tailored to a particular illness (in this case type 2 diabetes) and by patient sub-population, such as geography, age, insurance coverage or ethnicity. The combination of measurements that comprise a particular metric is weighted according to the underlying use of the metric in the financial instrument, and is based upon a dynamic analysis of available data and independent clinical expert input. All outcomes metrics can be supported by near real-time availability of type 2 diabetes patient-level data, and measure health data frequently enough to allow for constant tracking and forecasting of health outcomes over time. By providing risk mitigation tools and an ability to focus investments into areas that are needed to improve the outcomes of specific patient populations, financial derivative instruments can improve health care investment decisions by stakeholders that include governments, life sciences companies and health insurers. Integral to the development of a health commodities market is an accurate and transparent metric upon which the financial instruments are based. In preparation for such a market, health care stakeholders must begin by using a common language to communicate about how they aim to precisely determine if health is improving. We posit that this common language should be based on the latest health outcomes metrics available.