

Introduction: Diabetes mellitus is a common affliction, with 9.3% of Coloradoans carrying the diagnosis in 2018.² These cases cost an estimated \$3.8 billion annually in Colorado (American Diabetes Association, 2018). Socioeconomic status influences many modalities of treatment for Type II Diabetes Mellitus, from diet modification to increased exercise, to pharmacologic management. The latter is a significant barrier in the States as “three in ten (29%) of all adults report not taking their medicines as prescribed at some point in the past year because of the cost” (Kaiser Family Foundation, 2019). We describe the ongoing process of creating a care coordination model for a rural family medicine diabetes clinic, including the establishment of a pharmaceutical sample closet. The sample closet is an important part of this clinic’s care for patients with diabetes, many of whom are low income. Cost is an important aspect of medical care, especially to patients. Samples are important and common: a retrospective analysis of a safety net clinic in Kansas City, MO showing that “the presence of samples in the clinic reduced patient out-of-pocket expenditures per visit by approximately \$19”¹⁷.

Methods and Results: The Family Practice of Holyoke began to establish a Type II Diabetes Mellitus clinic based on a model created at the Haxtun Hospital District Family Medicine Clinic. The clinic needed to address difficulties with care coordination and affordability, as patients at both sites were often seen by specialists in more than 5 different health systems across two states, and had fixed incomes. Care coordination was managed by a handbook which centralized patient information in a way that is accessible to patient and provider. Both hospital systems were unable to afford EPIC, so Care Everywhere was unavailable for coordination. Patients were referred to and from many different health systems, making digital standardization of patient records near impossible. As previously mentioned, the patients in our clinic also tended to have poor technology literacy, and a limited willingness to use digital formats including virtual visits and electronic charts. This resulted in the creation of the handbook. A sample closet was re-vamped in Holyoke, with expired stock removed, the closet organized, and new samples ordered. This was done to help glucose lowering medications become more affordable to patients, as sometimes a “covered drug” was still \$800/month out of pocket. To date, over 25 pharmaceutical sample orders have been successfully placed, with several recurring orders established.

Discussion: This work was a quality and process improvement project for the diabetes clinic in Haxtun. Phillips county is medically underserved, and T2DM is widespread, while providers are limited. There is a large variety of conflicting evidence about the effects of drug samples in primary care offices, with literature demonstrating results ranging from inappropriate administration of samples to decreased out of pocket cost for patients, to the possibility of increased adherence. The ethics of providing drug samples are still currently being debated, and further research into the benefits to patients is needed. This project also attempted to find a solution to care coordination. This is a national issue with no clear solution that desperately needs improvement.