The usefulness of clinical pathways in managing quality and cost in oncology networks
Peter G. Ellis MD*, Bert H. O'Neil MD*, Martin F. Earle MD*, Stephanie McCutcheon PharmD BCOP‡, Hans Bensonⅰ, Melinda Krebsⅱ, Kathy Lokayⅲ

Background

UPMC CancerCenter (UPMC) and Indiana University Health (IUH) utilize Via Pathways (VP) for their clinical pathway (CP) initiative. VP are developed and maintained by disease committees that evaluate therapies on merit of efficacy, then toxicity, and finally cost (if efficacy and toxicity are comparable) to provide a recommendation for specific patient presentations.

Recent review of data from key studies regarding the use of panitumumab (PAN) or cetuximab (CET) in the setting of metastatic colorectal cancer by the colorectal committee led to the determination that both treatments were equally effective with no significant difference in toxicity1,2. A subsequent cost comparison utilizing CMS average sales prices demonstrated an approximate 14% monthly cost advantage for PAN.

A substitution of PAN for CET across all metastatic lines of therapy in the pathway was initiated as of August 2014. This analysis was undertaken to understand the impact of this change.

Via Pathways Disease Committees

VP disease committees are comprised of academic and community-based medical oncologists in the Via Network of customers. Meetings are held by webinar and teleconference on a quarterly basis for each disease. In addition to evaluating therapies on efficacy, toxicity and cost, members are tasked with adhering to VP’s guiding philosophies when developing and maintaining the content of the evidence-based pathways.

Implementation:
The decision by the committee to substitute PAN for CET was made at the meeting held on 7/16/14. Recently published data from the ASPECTCT1 and PRIME2 studies were reviewed at this time, along with consideration of previous data evaluating these agents. This change was implemented into the pathway on 8/27/14. Data Capture: Providers navigate disease pathways and capture treatment decisions for each patient using the Via Portal. The Portal is a web-based software application used by clinicians in daily practice. The Portal interfaces with the EMR to populate the patient schedule for each clinician, resulting in high VP capture rates. Data Analysis: We reviewed data captured in the Portal to compare new treatment starts of CET and PAN before and after the substitution was implemented in the metastatic colorectal pathway.

Results

Results are shown in the figure. A total of 172 patients had new treatment starts for CET (n=104) or PAN (n=68) in the 6 months pre- and post-implementation of this change.

Conclusions and Future Work

The results in this simple example of substituting equivalent drugs based on cost exemplify the power of clinical pathways to rapidly change prescribing habits across cancer networks nationwide. CP serve as an invaluable tool to allow oncology practices to quickly respond to the changing treatment norms of oncology care. Current work is being done to display the cost of therapies in the VP navigation, thereby providing the oncologist with financial information that could aid in discussions with patients.