DICA
DUTCH INSTITUTE FOR CLINICAL AUDITING

Can cancer registries and hospital administrative data be used to evaluate added value of expensive drugs in daily clinical practice?

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Background

Healthcare professionals have limited insight in real-world clinical outcomes of patients treated with expensive drugs. To overcome this challenge, the DICA medicines project was set up to eventually measure outcomes of patients treated with expensive medicines and to develop dashboards to obtain insights in the use of expensive drugs.

Objective

Measure outcomes of patients treated with expensive medicines and to develop dashboards to obtain insights in the use of expensive drugs without additional registration burden.

Methods

Different existing sources of data were linked to provide insights

Quality registries   **Expensive medication**   **Health related declaration data**

Six dynamic dashboards

Figure 1. Data sources used in the DICA medicines program

Results

Hospital pharmacists and medical specialists gained insight into their hospitals expensive drugs use and treatment patterns in patient groups, compared to other hospitals. By relating outcomes to a benchmark of all participating hospitals, we were able to report results based on a relatively large population.

Impressions of the dashboards are shown in the figures below. Dashboards include the time-to-next treatment **(Figure 2)**, a Sankey diagram of the therapy flow **(Figure 3)**, boxplots of the cycles per patient **(Figure 4)** and the costs over time **(Figure 5)**.

Costs over time

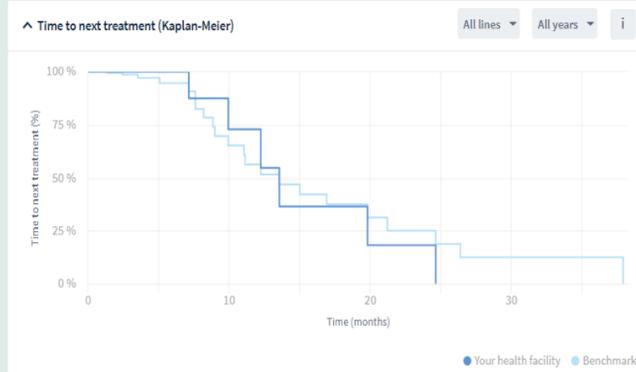**Figure 5.** Barchart of the costs over time

Time to next treatment

Figure 2. Kaplan-Meier estimates of the time to next treatment
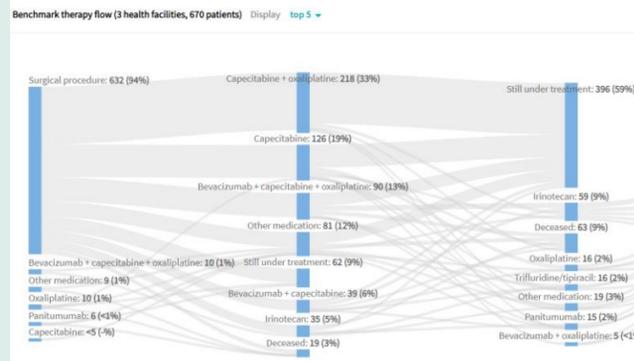
Therapy flow

Figure 3. Sankey diagram showing the therapy flow of patients
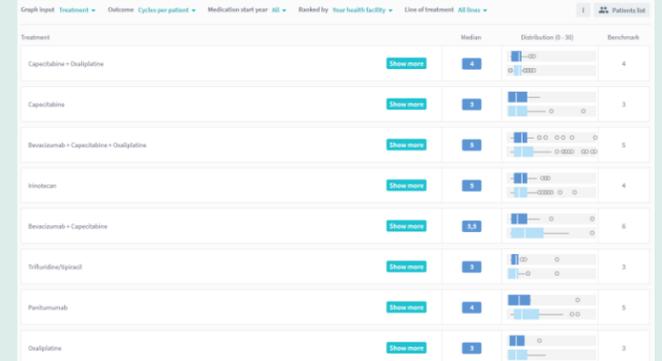
Cycles per patient

Figure 4. Boxplots with the number of cycles per patient

Conclusion

❖ Providing hospitals with real world benchmark information on the use and clinical outcomes of expensive drugs may lead to **improvement in cost effectiveness and quality of care**.

❖ The DICA medicines project is an example of good practice as it uses **available data sources without any additional registration burden**.

❖ The project could serve as a **blueprint for other clinical healthcare settings** to link available sources of data.

More information?

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