IQVIA

Navigating Treatment Outcomes

Building patient cohorts faster and more efficiently with IQVIA Patient Finder

Impact on healthcare

Insight

Provide faster, more effective and continuous feedback to healthcare providers about their care delivery and its impact on the treatment of patients.

Assurance

Greater assurance about collecting an error-free and complete set of data in the cohort database by:

- A direct download from the Electronic Health Record (EHR) instead of manually retyping data

- Automatically unlocking all relevant data fields, which often does not happen during manual searches

Healthcare costs

As well as gaining rapid, accurate insights into clinical outcomes and complications, the cost-effectiveness of treatments can be determined for the cohort.

The challenge

COHORTS

For an observational multi-center cohort study on metastatic hormone-sensitive and castration-resistant prostate cancer, a database was created capturing patient characteristics, disease features, clinical outcomes and healthcare utilization insights through chart review. To date 19 centers have been included with the objective of creating a national "Real World Data" registry, with the number of participating hospitals increasing annually.

19 HOSPITALS

Data for this multi-center study were previously collected manually, a time-consuming and costly task. In addition, the data captured only reflected a snapshot in time. To update insights, manually re-gathering data per hospital would be required, which limited the speed and scope of the study.

A suitable alternative to this time-consuming, error-prone and irregular process of manual data collection was sought.

The solution

Use of IQVIA Patient Finder Solution enabled automation of the data collection process. Data could be collected simultaneously from multiple hospitals through a process that adhered to all data privacy considerations.

IQVIA Patient Finder Solution technology can search through both structured and unstructured EHR data. Natural Language Processing algorithms (NLP) embedded in Patient Finder Solution extract the medical concepts and measurements from the clinical notes and pseudonymize the data. After this, the data from various sources is harmonized and loaded into the database.

The search set-up (query) was refined and improved several times during the project, based on characteristics and symptoms of the patients already identified.
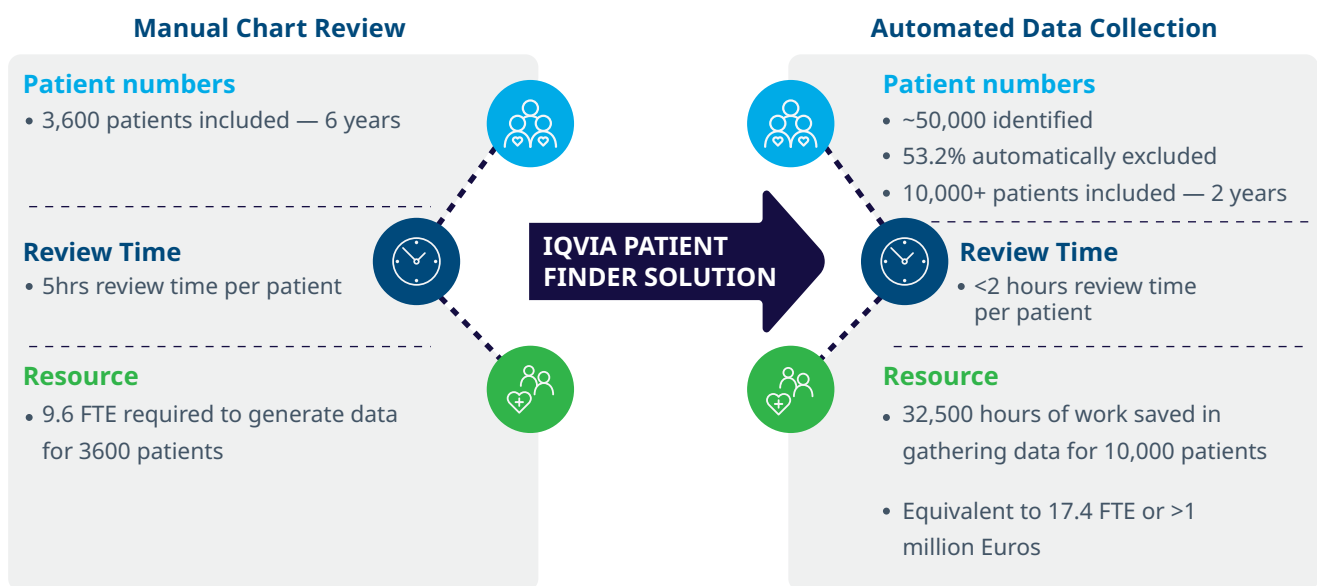
The outcome

TIME SAVING

Not only is this way of searching faster than manual searching, it is less error-prone, more data can be found and the data provided is of a higher quality.

THE NUMBERS

- A registry of **10,000+ patients** generated in **less than 2 years**

- **Reduction** of patients that needed to be screened for inclusion **by 53.2%**

- Completeness and accuracy of automated data extraction **92.3%** or higher

- Identification, validation and completion of extracted data in **105 minutes** per patient with Patient Finder Solution, **versus 300 minutes** during the manual process (**65% time saved**)

- **32,500 hours** of work saved, corresponding to **17.4 FTE** and **1,023,333 euros** saved

Manual Chart Review

Patient numbers
- 3,600 patients included — 6 years

Review Time
- 5hrs review time per patient

Resource
- 9.6 FTE required to generate data for 3600 patients

IQVIA PATIENT FINDER SOLUTION

Automated Data Collection

Patient numbers
- ~50,000 identified
- 53.2% automatically excluded
- 10,000+ patients included — 2 years

Review Time
- <2 hours review time per patient

Resource
- 32,500 hours of work saved in gathering data for 10,000 patients
- Equivalent to 17.4 FTE or >1 million Euros

" By using IQVIA Patient Finder Solution's software, we can find patients and collect their data much faster than is possible with manual data collection. This allows us to give the information back to healthcare professionals and society faster, to improve patient healthcare."
— *Principal Investigator*

"Before IQVIA Patient Finder Solution, it took five hours per patient to manually transfer all the data into this database. By automating data collection, huge time savings were made, it now takes less than two hours per patient."
— *Principal Investigator*

Bosch, D. et al. (2023): Reliability and efficiency of the CAPRI-3 metastatic prostate cancer registry driven by artificial intelligence. Cancers 2023, 15(15), 3808.