

# THE IMPACT OF PATIENT PREFERENCE STUDIES IN THE GERMAN HEALTHCARE SYSTEM

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## BACKGROUND

- Patients commonly have to deal with healthcare-related decisions based on their personal preferences (e.g., regarding various treatment options, services, and products).
- Knowing about patients' health-related preferences could make healthcare provision more effective and closer to the individuals' needs.<sup>1</sup>
- There are several approaches for the elicitation of patients' preferences that could help inform on relevance of patient-related outcomes, which are of paramount importance in the regulatory Pharmaceuticals Market Reorganization Act (AMNOG) process in Germany.
- The German Institute for Quality and Efficiency in Health Care (IQWiG) has recommended the use of patient preference studies to inform economic evaluations and has already performed preference studies on the impact of adverse events of pharmaceuticals to determine patient preferences for the AMNOG process.<sup>2-4</sup>

## OBJECTIVE

- The aim of this study was to assess the current impact of patient preference studies in the context of the German healthcare system.

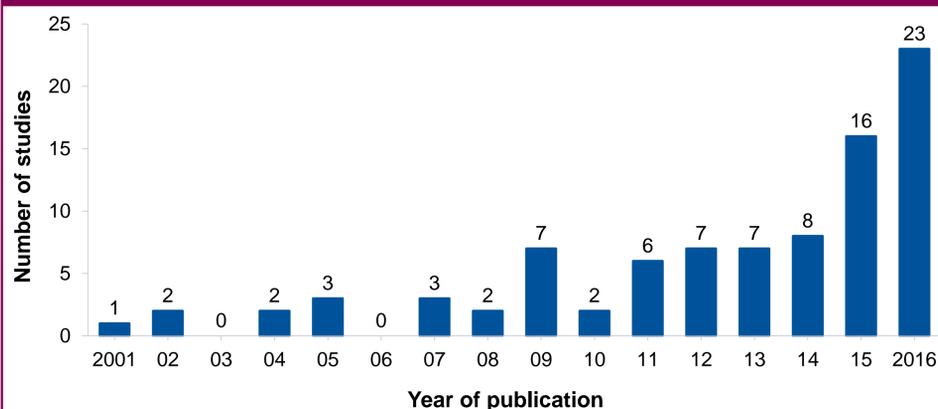
## METHODS

- A systematic literature search was performed in PubMed and Scopus.
- Search terms identifying patient preference studies were "preference\*" OR "patient preference\*" AND "Germany" AND "conjoint analysis" OR "discrete choice experiment" OR "DCE" OR "analytic hierarchy process" OR "AHP" OR "contingent valuation".
- The search included all studies that were conducted in the German healthcare context and published until March 2017.
- Titles, abstracts, and full texts of the identified studies were screened for relevance by two independent researchers.
- Selected publications were classified by the year of publication, the applied approach for preference measurement, indication defined by ICD-10-GM code groups, study outcomes, and elicitation method.

## RESULTS

- The systematic search yielded 511 hits (122 through PubMed and 389 through Scopus).
- 83 duplicates were removed and, after subsequent screening of study titles, abstracts, and full text, 94 studies were included for further analysis.

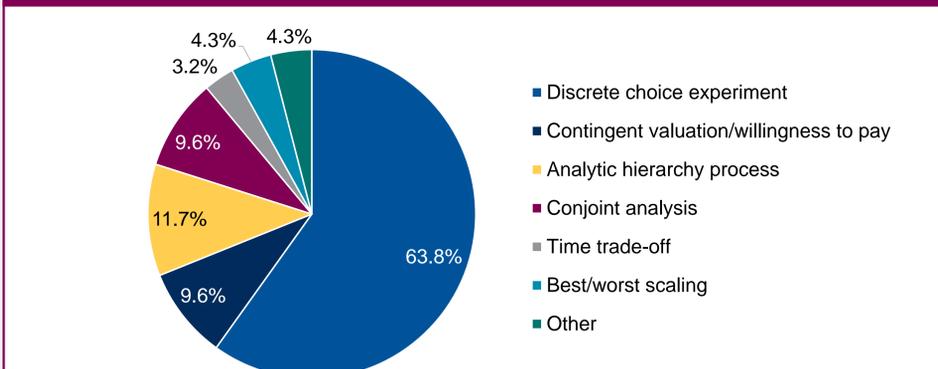
Figure 1. Number of Publications



Note: Between January and March 2017, 5 patient preference studies were published.

- Since 2001 (year of the first identified publication), there is a slight increase in the number of publications on patients' preferences in the German healthcare system (Figure 1).
- The number of studies significantly increased since 2011, with a peak in 2016 (n=23; 24.5%).

Figure 2. Methods of Preference Measurement

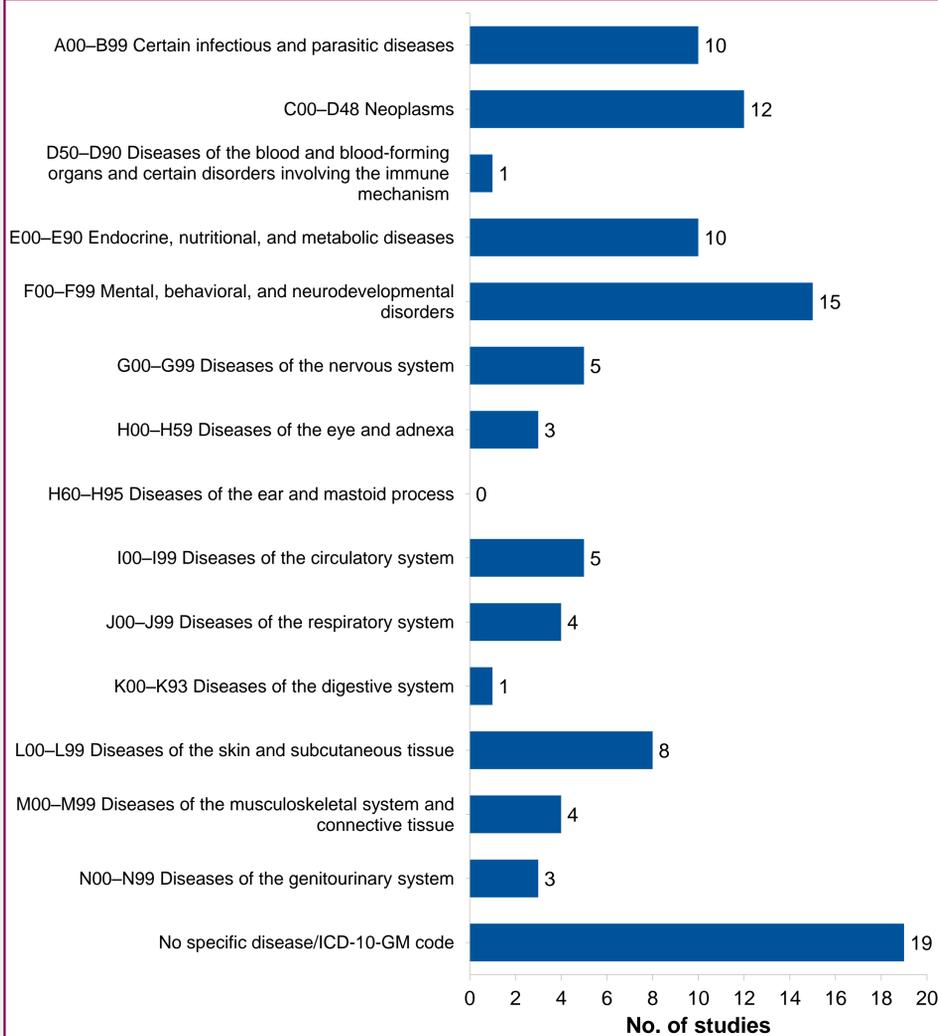


Note: As some of the studies used more than one method of preference measurement, percentages do sum up to more than 100%.

- Most of the studies used discrete choice experiments (DCEs) for the measurement of preferences, followed by the analytic hierarchy processes (AHPs), contingent valuations (CVs), and conjoint analyses (CAs) (Figure 2).

- The studies most commonly used computer-based surveys, but interviewer-assisted and self-complete questionnaires were also applied.

Figure 3. Disease Areas of the Preference Studies by ICD-10-GM Code Groups



Note: Counts do not sum up to 94 as some studies included more than one indication.  
Key: ICD-10-GM – International Classification of Diseases, 10<sup>th</sup> Revision, German Modification.

- 80% (n=75) of the identified preference studies were conducted for specific disease areas. The other studies focused, for example, on pharmaceuticals, devices and aids or integrated care.
- International Classification of Diseases, 10<sup>th</sup> Revision, German Modification (ICD-10-GM) code groups F00-F99 Mental disorders (n=15), C00-D48 Neoplasms (n=12), E00-E90 Endocrine disorders (n=10), and A00-B99 Infectious diseases (n=10) were the most frequently analyzed indication groups (Figure 3).
- Diabetes mellitus (ICD-10-GM code group E10-E14) was the most commonly investigated single disease (n=9) within the group of endocrine disorders.
- Most of the identified preference studies (50%) focused on disease-specific drug treatment options or on overall medical treatment (19%).

## CONCLUSIONS

- Considering the increasing number of patient preference studies in Germany over recent years, patient preference studies have become an important research area.
- Out of the identified methods of preference elicitation, DCE is by far the most commonly applied method.
- Especially when investigating disease-specific drug treatments, preference studies seem to be an adequate method to consider patients' perspectives.
- In Germany, patient preference studies were already adapted over a wide range of diseases and varying research questions.
- The inclusion of such evidence may in many cases constitute a feasible option of identifying patient-relevant outcomes that offer a separate component of value during the regulatory AMNOG process.

## REFERENCES

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