

BACKGROUND

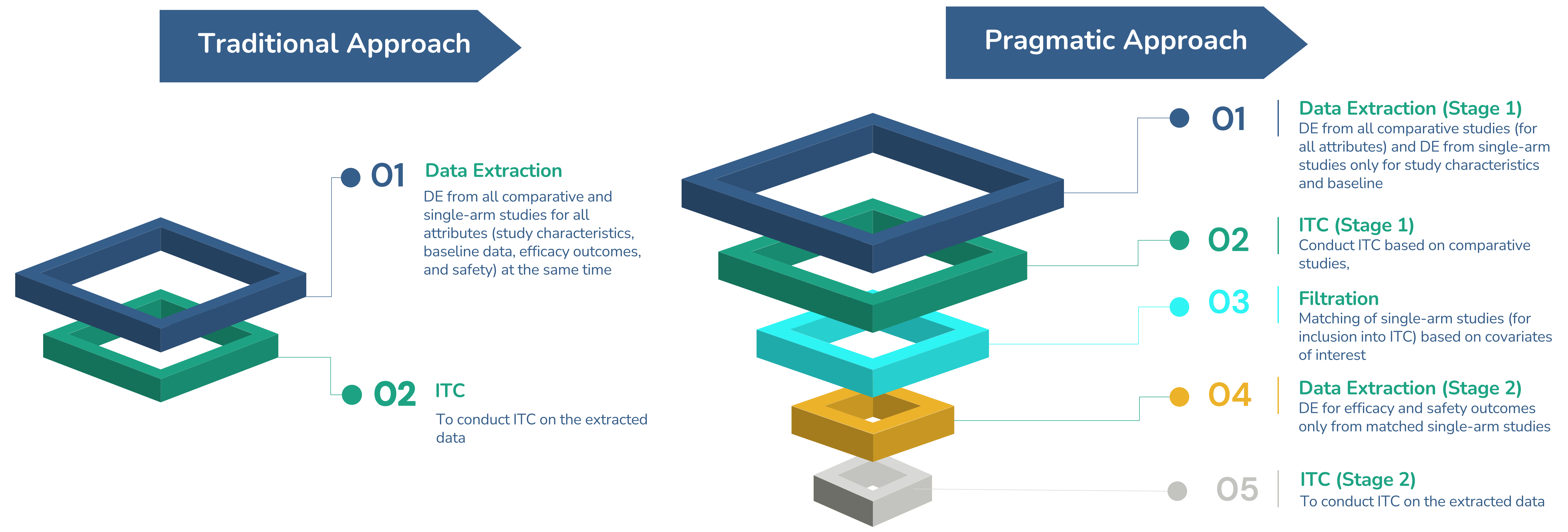
Context: Single-arm real-world evidence (RWE) studies are becoming more prevalent in clinical practice. The advancements in indirect treatment comparison (ITC) methods are enabling the potential use of single-arm RWE studies into ITCs. They may offer valuable insights alongside comparative studies.

Aim: To provide recommendations on the approach for data extraction (DE) when both comparative and single-arm RWE studies are included in the ITC.

METHODS

When conducting systematic literature reviews (SLRs) for ITC in gastrointestinal disease (GID) and addiction behavior disorder (ABD), we considered two approaches for DE after identifying and including studies in the SLR: traditional and pragmatic. The steps involved in both approaches are shown in **Figure 1**.

Figure 1: Comparison of data extraction steps involved in DE approach: traditional vs. pragmatic approach



RESULTS

- More than 200 studies were included in GID SLR and nearly 50 studies in ABD. In both SLRs, 77-80% were single-arm RWE studies. Traditional approach required DE from all single-arm studies.
- However, in the pragmatic approach, about 42% single-arm studies of GID and 27% single-arm studies of ABD were matched for ITC inclusion and required DE for outcomes of interest (**Fig. 2**).
- Compared to traditional, the pragmatic approach provided approximately 30-40% of time savings in DE from single arm studies (**Fig. 3**).

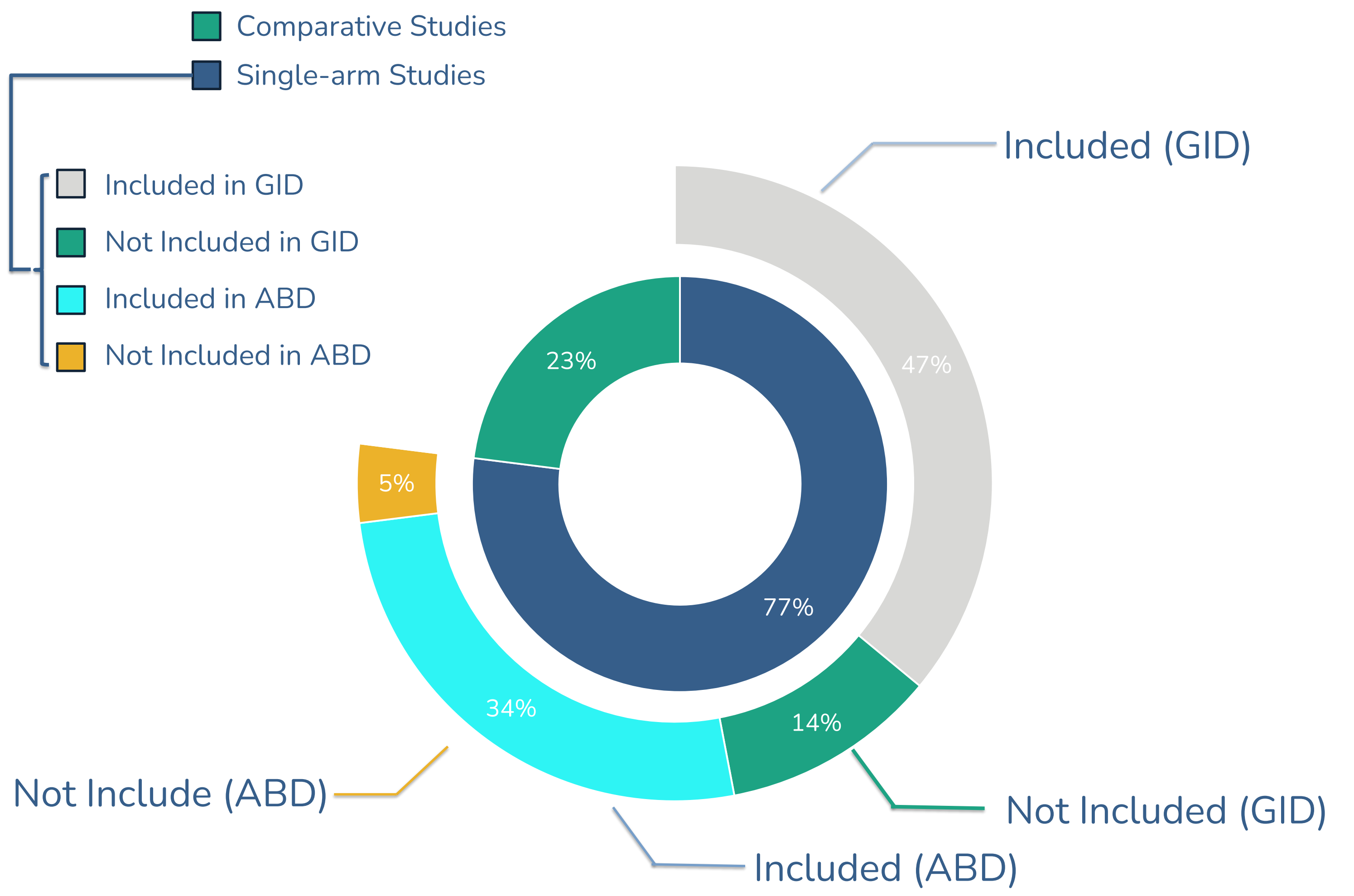


Figure 2: Distribution of comparative vs. single-arm studies and the focus of data extraction in GID and ABD SLRs

Selective Data Extraction:
The pragmatic approach reduced the need for detailed extraction (DE) by focusing only on studies relevant for ITC, covering 42% of single-arm studies in GID and 27% in ABD.

Time Savings:
The pragmatic approach achieved an estimated 30-40% reduction in DE time from single-arm studies compared to the traditional method.

Improved Efficiency:
By selectively extracting data, the pragmatic approach allowed for a more efficient SLR process, reducing the time burden.

Maintained Rigor:
Despite reducing DE workload, the pragmatic approach preserved the quality and integrity of the SLR for ITCs involving comparative and single-arm RWE studies.

Figure 3: Efficiency gains and time savings from the pragmatic approach in data extraction

This study showed that pragmatic approach could provide potential savings in DE time when conducting a SLR for ITC comprising comparative and single-arm RWE studies.

Acknowledgments

The authors express their sincere thanks to Shashwat Gaur (ConnectHEOR, Delhi, India) for developing and designing the content of the poster.

Financial Disclosure

The authors are employees of ConnectHEOR Limited and no external funding was received to conduct this research. The authors have no conflict of interest to declare.

References.

1. Pochopien M, et al. J Market Access and Health Policy. 2021;9(1):2002006.
2. Gozzo L, et al. Front Pharmacol. 2021;12:755052.

