

# Shared Decision-Making in Advanced Kidney Disease: a scoping review

Engels N, MD<sup>1,2</sup>, de Graav GN, MD/PhD<sup>2</sup>, van der Nat PB, PhD<sup>3</sup>, van den Dorpel MA, MD/PhD<sup>2</sup>, Stiggelbout AM, PhD<sup>4</sup>, Bos WJW, MD/PhD<sup>5,6</sup>

<sup>1</sup>Santeon, the Netherlands, <sup>2</sup>Maasstad Hospital, Internal Medicine and Nephrology, the Netherlands, <sup>3</sup>St. Antonius Hospital, Value based Healthcare, the Netherlands, <sup>4</sup>Leiden University Medical Centre, Biomedical Data Sciences and Medical Decision-Making, <sup>5</sup>St. Antonius Hospital, Internal Medicine and Nephrology, <sup>6</sup>Leiden University Medical Centre, Internal Medicine and Nephrology

On behalf of the Santeon Value Based Healthcare kidney failure group

## Background

Shared decision-making (SDM) is the preferred model to support patients with AKD in treatment modality decisions.

Multiple efforts to foster SDM across the international healthcare community have been made, but there are still signs that patients experience a low degree of SDM, and efforts to incentivize SDM risk being limited to the promotion of PtDAs.

Decision support interventions like Patient decision aids (PtDAs), prognostic tools (PTs) and educational programs (EPs) can all be used to support patients in treatment modality decisions, and facilitate SDM in clinical practice.

We conducted this scoping review to provide clinicians, researchers and other stakeholders with one comprehensive, but digestible source of information on interventions that support SDM for treatment modality decisions in AKD. Our findings may facilitate the future implementation of SDM in clinical practice, as well as stimulate the development and research on new and effective interventions.

## Methods

We conducted this scoping review according to the JBI and PRISMA guidelines for scoping reviews.

We searched the peer reviewed and grey literature for records on the subject. Records in English with a study population of patients  $\geq 18$  years of age and an eGFR  $< 30\text{mL/min/1.73m}^2$  were considered for inclusion. In addition, records had to be on the subject of SDM, or explicitly mention that the intervention they reported on could facilitate SDM for treatment modality decisions in AKD. Records that reported on interventions that could be clearly be to support SDM without explicitly mentioning it were also included.

We categorised the identified interventions as PTs, EPs, PtDAs, or as multicomponent initiatives (MIs) when two or more interventions were combined. We subsequently categorised the identified interventions based on the decisions they were developed to support.

## Results

We included a total of 158 records: 68 observational studies (43%), 39 experimental studies (24.7%), 17 study protocols (10.8%), 16 meeting abstracts (10.1%), 12 mixed-methods studies (7.6%) and 6 websites (3.8%).

Fifty-four records (34.2%) explicitly mentioned SDM and 60 records (38%) used other words to relate the intervention to the decision-making process. Forty-four records (27.8%) did not mention anything related to SDM.

We identified a total of 145 interventions in the included records: 52 PTs (35.9%), 51 EPs (35.2%), 29 PtDAs (20%) and 13 MIs (8.9%).

Forty-three interventions (33.3%) were implemented in clinical practice and sixty-six (51.2%) were evaluated for their effects on the intended users. PTs were the least implemented and evaluated interventions, followed by PtDAs, EPs and MIs.

Interventions were generally evaluated on health-related outcomes and on knowledge, decisional-quality, communication and patient activation. None of the interventions were evaluated with ICHOM or SONG standard sets. Three interventions (2%) were evaluated for their effects on SDM. Patients that were exposed to the interventions generally had better outcomes than patients that were not exposed to the interventions

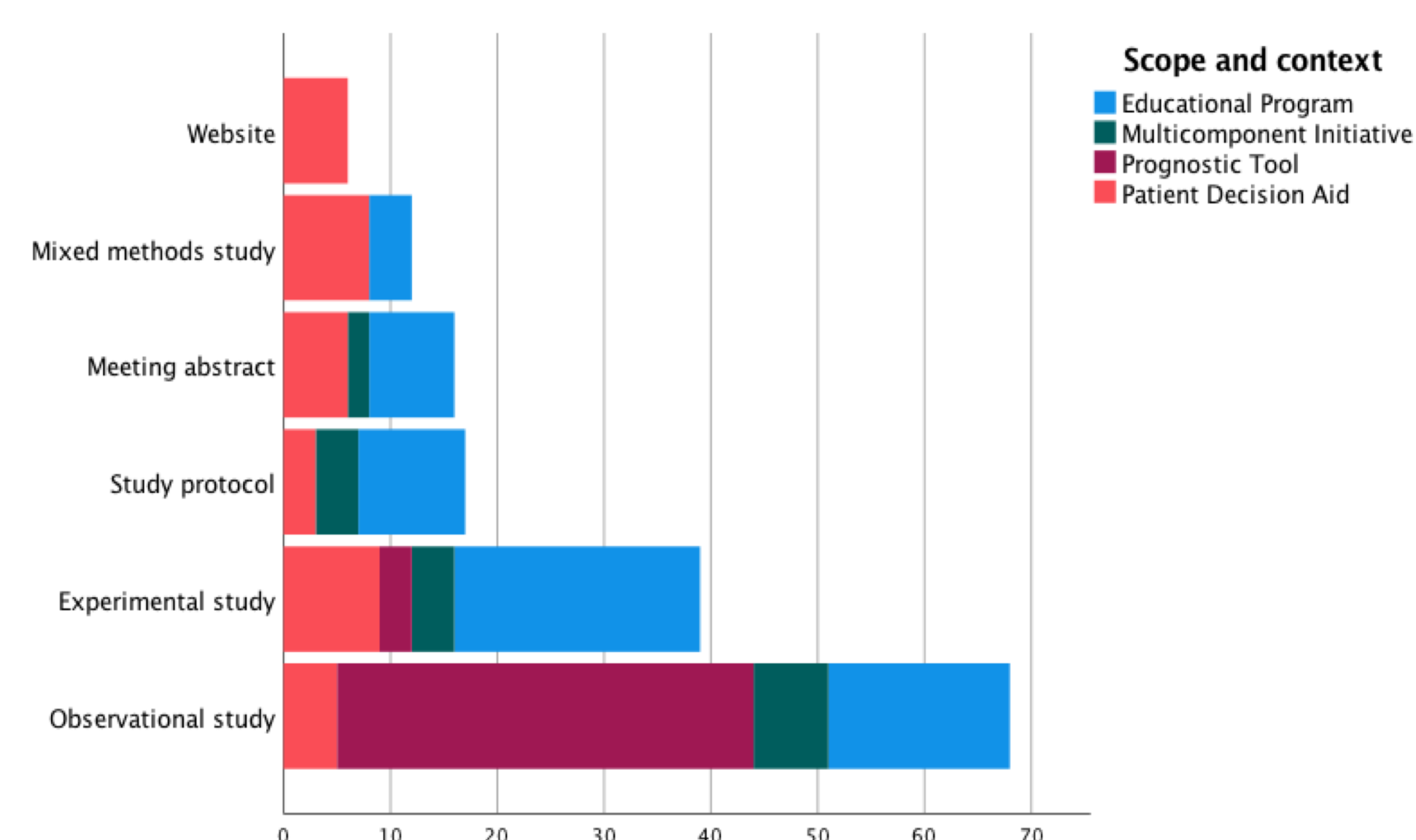


Figure 1: included records stratified by record type, scope and context.

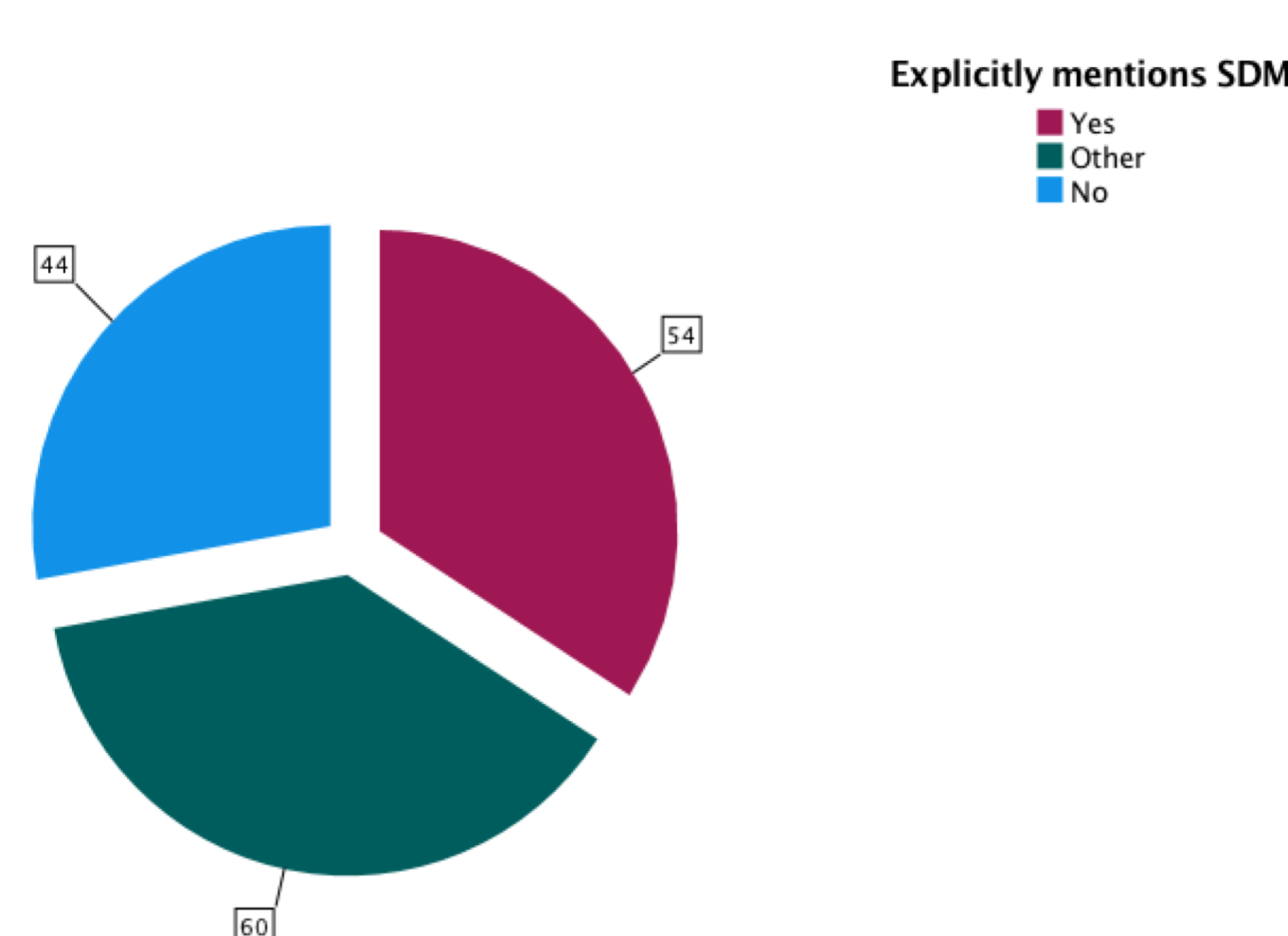


Figure 2: whether or not SDM is explicitly mentioned in the included records.

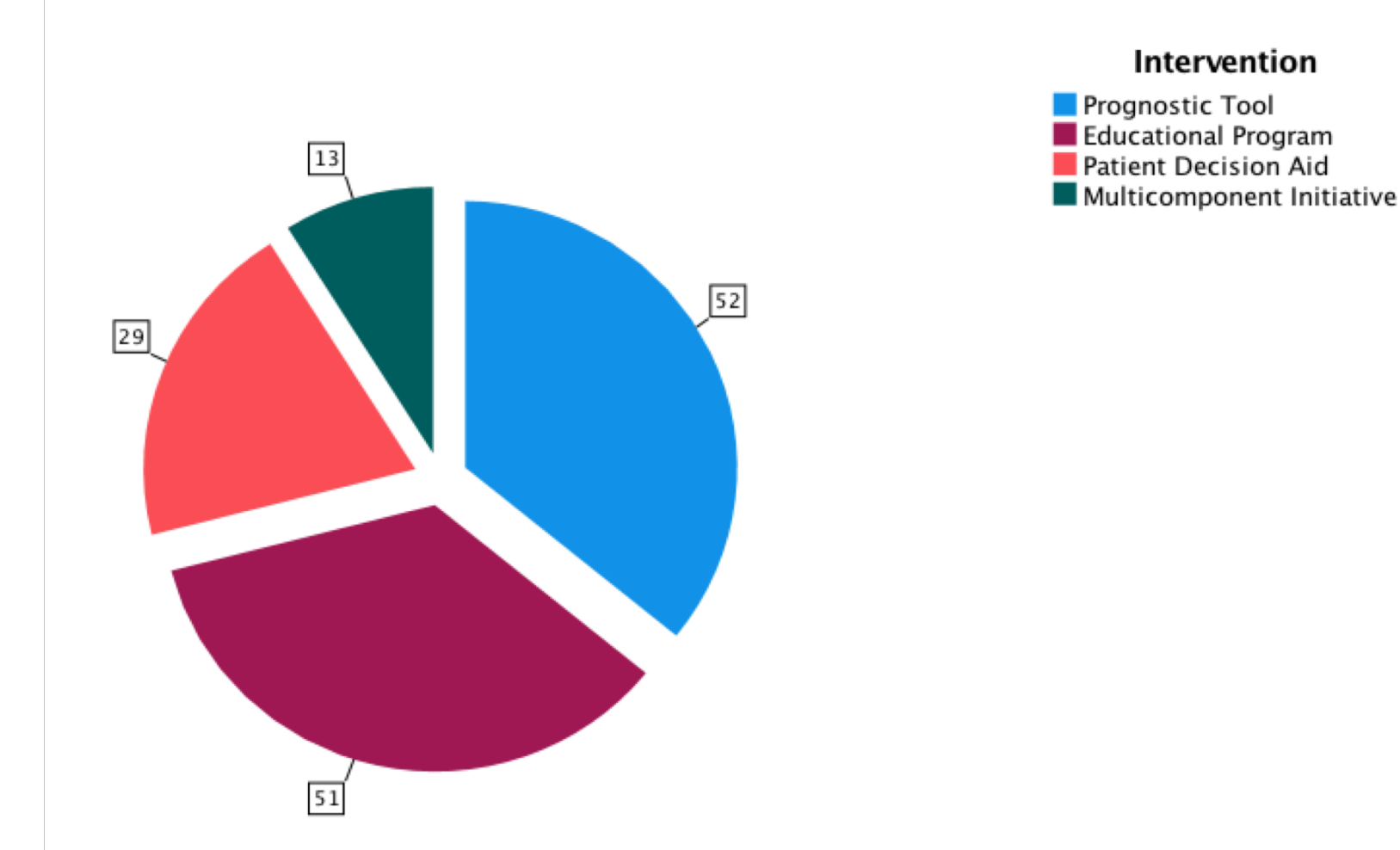


Figure 3: distribution of the identified interventions.

## Conclusion

The terminology that defines and relates to SDM is inconsistently used in the literature. There was a lot of variation in the level of detail given on the contents of the identified interventions. About half of the interventions were evaluated for their effects on the intended users. Less have been implemented in clinical practice. Outcomes were generally better in patients exposed to the interventions. However, this is primarily based on observational research. None of the interventions were evaluated with ICHOM or SONG standard sets. There is a knowledge gap when it comes to the effect that these interventions have on SDM, and the impact that these effects have on the decision-making process, the decisions-made and on healthcare outcomes.

Researchers and developers should strive to clearly describe how new interventions support the decision-making process in the context of SDM, and should preferably evaluate these interventions on SDM in experimental study designs in future endeavours.

### N. Engels, MD

Resident Internal Medicine and Nephrology

Maasstad Hospital Rotterdam

PhD candidate

Santeon

E-mail: n.engels@santeon.nl

Phone: +31 10 219 2645