

Use of Patient-Reported Outcomes (PROs) and its implementation in clinical care in India: A Clinician's Perspective

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Introduction

- Patients are taking centre stage in Clinical research with patient-centric initiatives at all stages of drug development to commercialization.
- With time, **patient-reported outcomes (PROs)** have gained paramount importance besides other outcome measures including clinical, and physiological.

What are PROs?

- Any report of a patient's current health condition that comes directly from the patient and is unadulterated by a physician or other party is referred to as PRO or patient-reported outcome measure (PROM).¹
- PROs are sensitive, precise, and valid indicators of symptoms, function, and quality of life in patients.
- They enable clinicians and researchers to fully comprehend how patients perceive their health, objectives, and experiences with healthcare across a variety of domains, including physical, emotional, and social well-being.

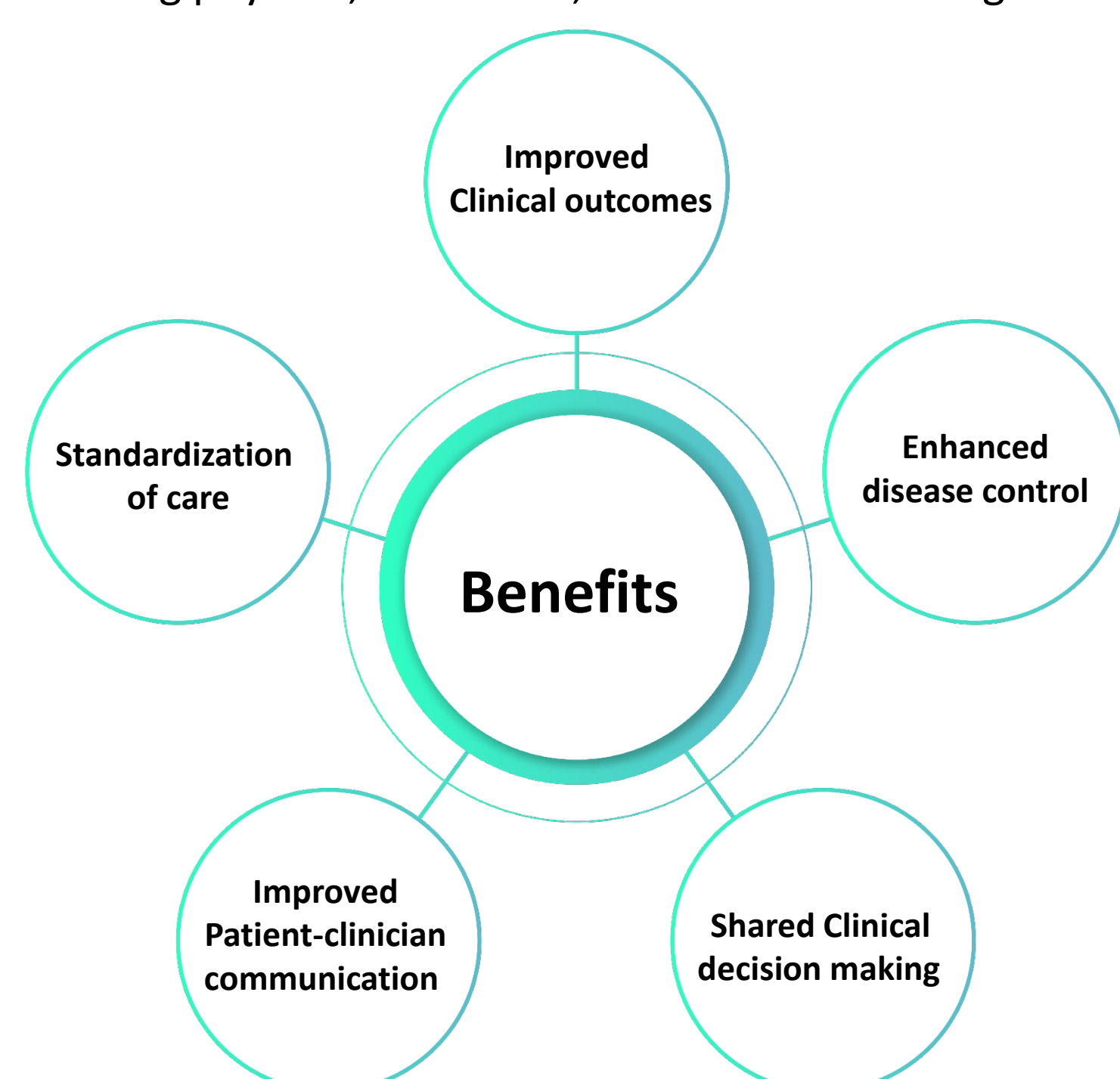


Figure 1. Benefits of PRO in Clinical Care

- PRO is an umbrella term and broadly classifies into the following categories² (Figure 2):

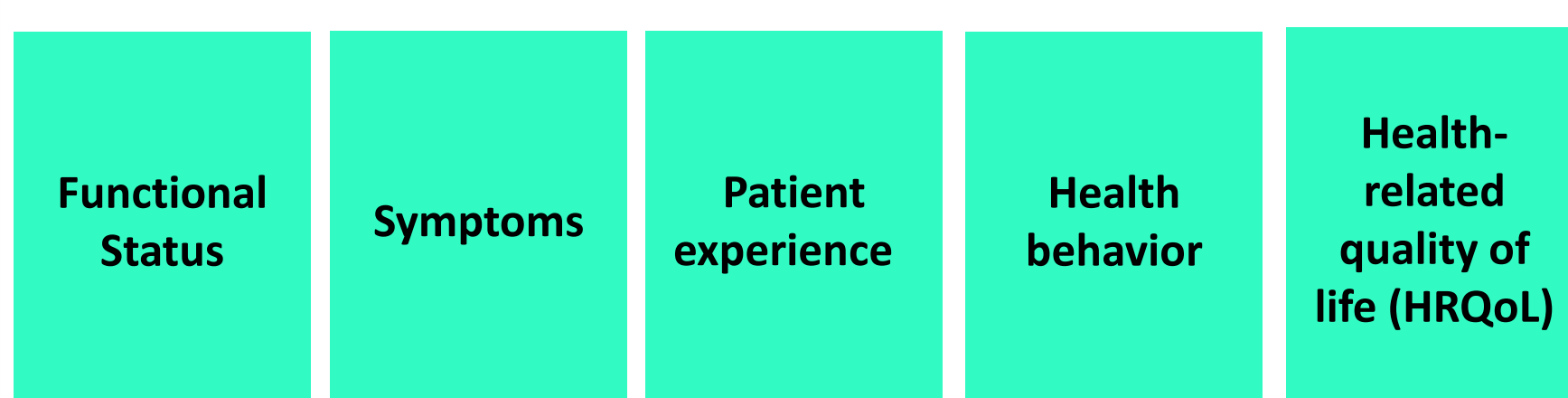


Figure 2. Types of PROs

- While the developed countries are now using PRO in clinical care settings, low- and middle-income countries (LMICs) still lag behind.
- Asian countries such as India with high healthcare burden and low resource/healthcare infrastructure requires PRO implementation for improved outcomes.

Objective

- To assess **the usage of PROs in routine clinical care in India** and determine the **impact of PRO implementation in outpatient management**.

Methods and Materials

- The questionnaire used a **5-point Likert scale** and included **applicability, rate of use in routine practice, decision-making, and impact on outpatient flow**.
- We disseminated the questionnaire amongst the clinicians irrespective of their specialization through social media platforms (LinkedIn, messaging apps).
- Descriptive statistics were performed (percentage) on the data.

Results

- Overall, **40 clinicians** participated in this pilot survey.
- **85% (n= 34 of 40)** of clinicians were aware of the term PRO, however **55% (n = 19 of 34)** of them used it in their routine practice (Figure 3).

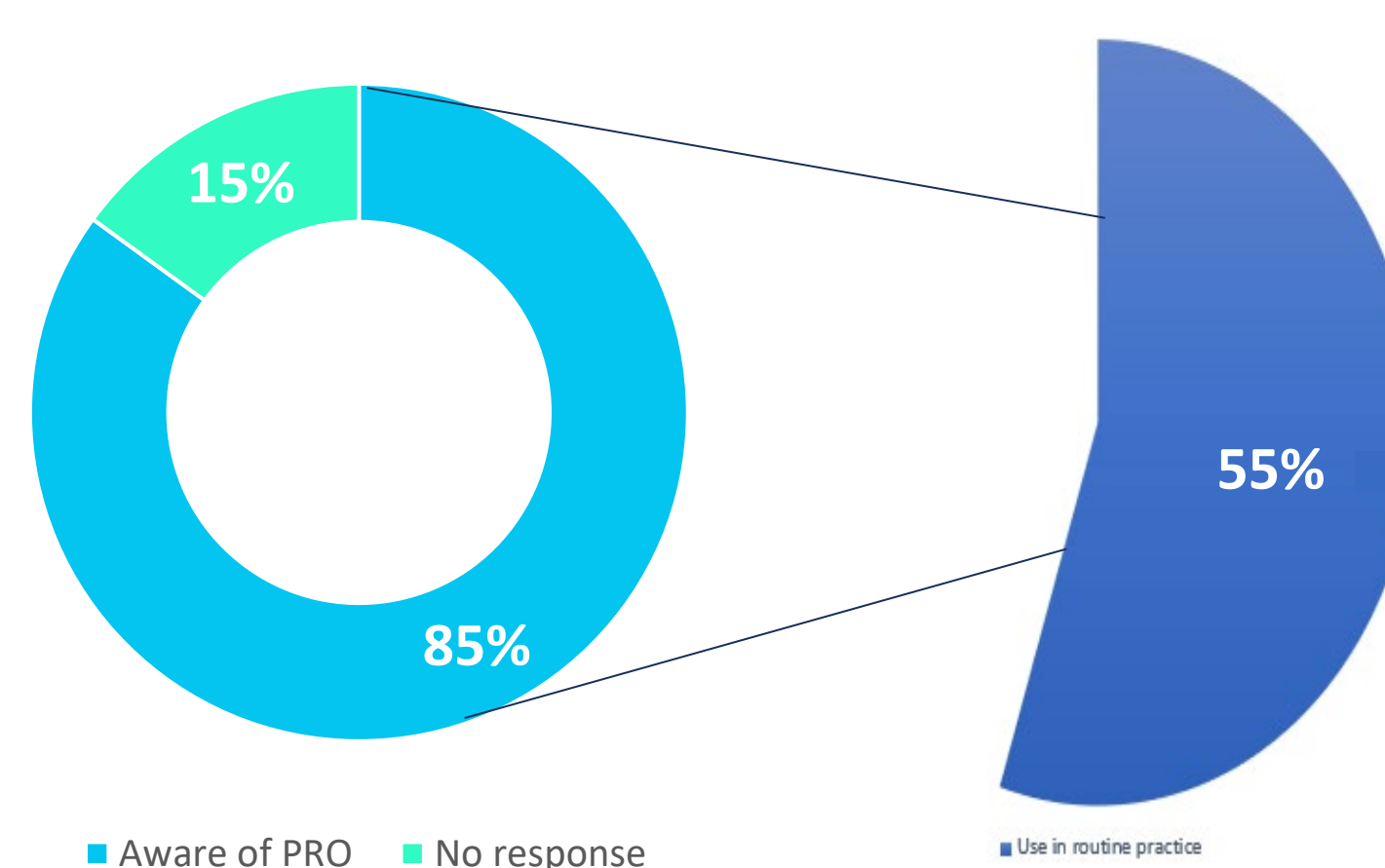


Figure 3. Awareness of PROs & application in routine practice

- **Of those who used PROs, 58% (n=11 of 19)** reported PROs as highly likely feasible for managing outpatients (Figure 4).

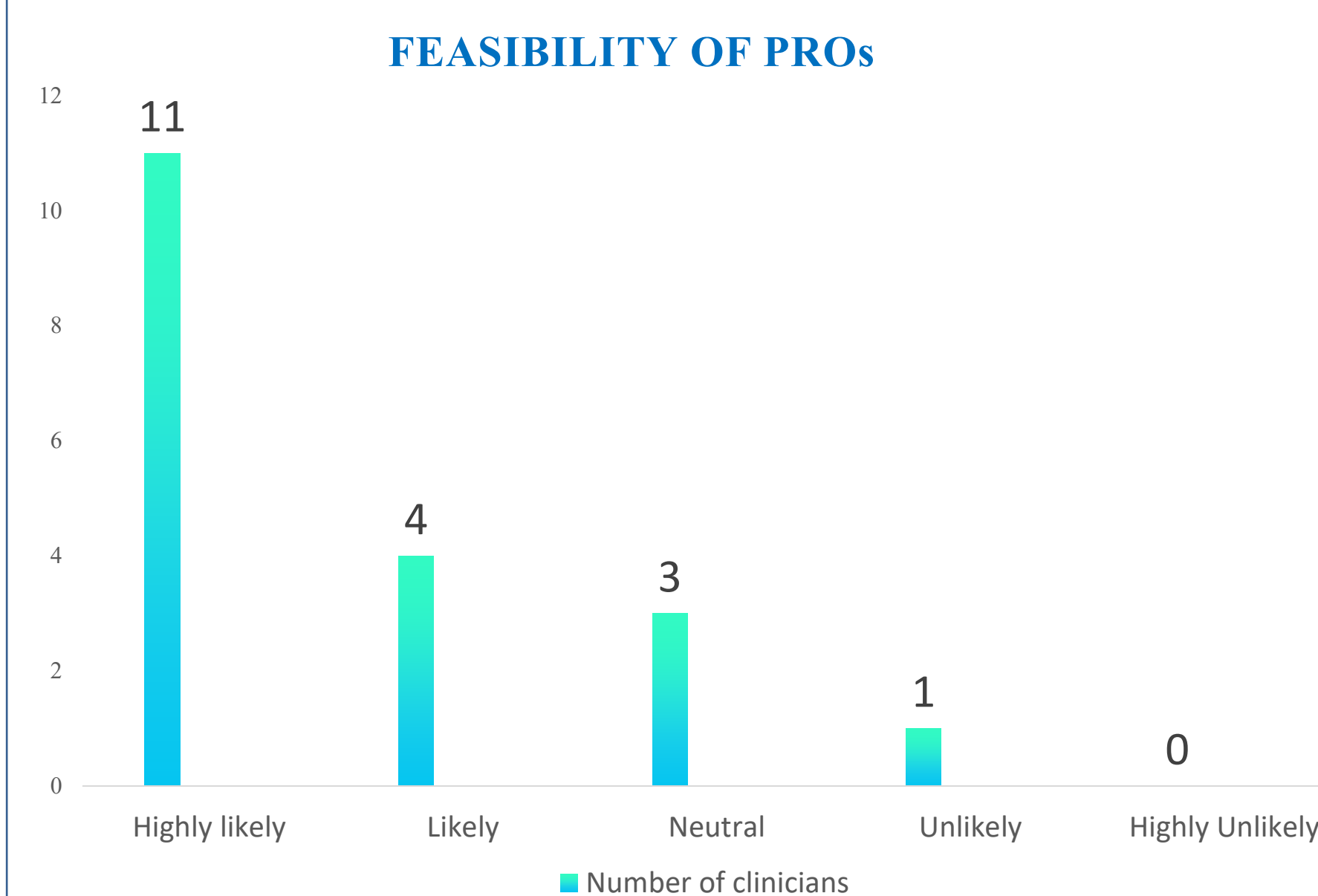


Figure 4. Feasibility of usage of PROs among Clinicians

- More than 50% (n=10 of 19) of the clinicians found PRO helpful in the treatment management of outpatients during follow-ups.

- 63% (n=12 of 19) of the clinicians reported PROs were well accepted among the outpatient population (Figure 5).

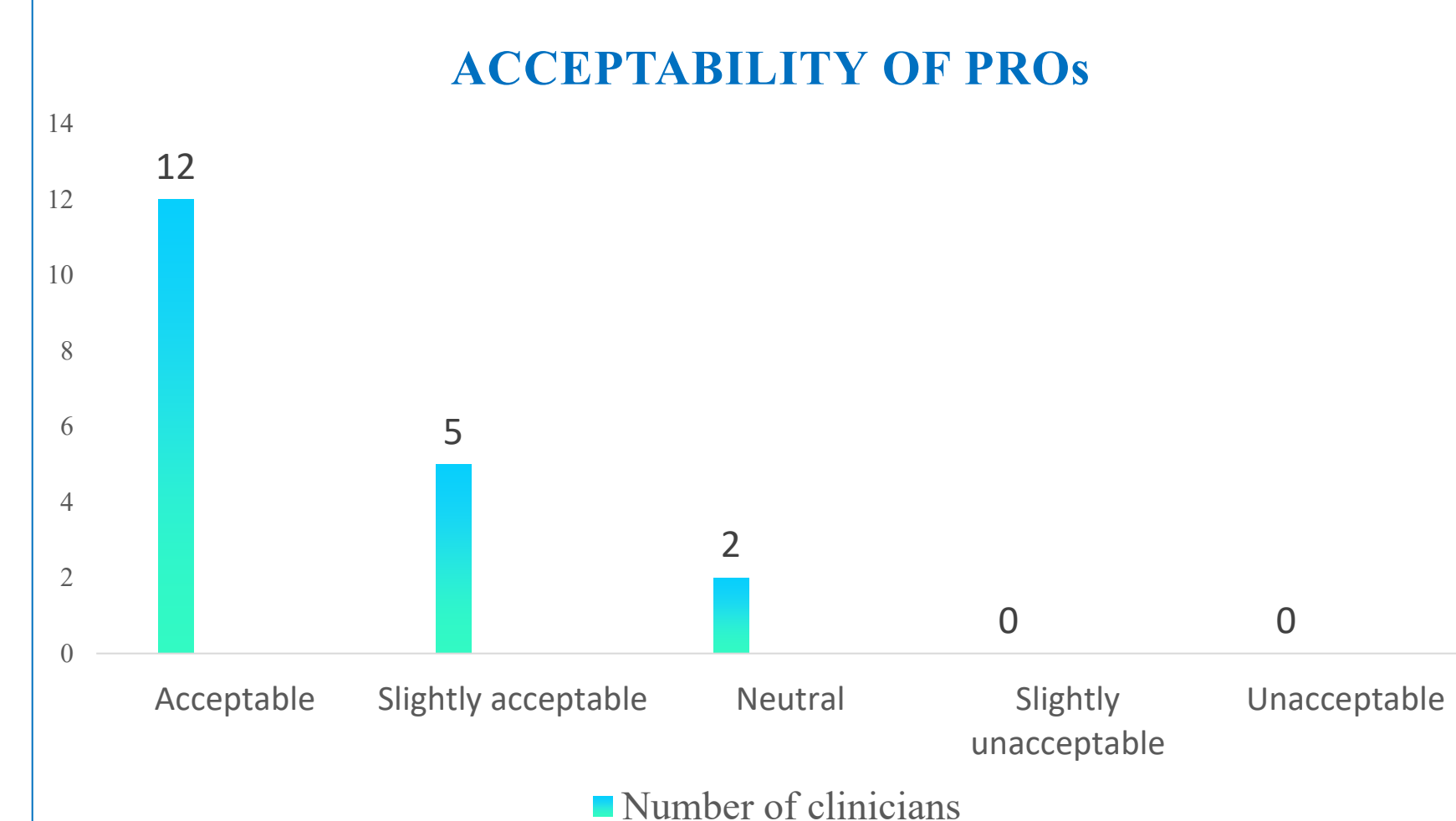


Figure 5. Acceptability of Clinicians reported PROs

- The highest-voted PRO measure used among the clinicians was **HRQoL**.
- Overall, it was found that **73% (n=25 of 34)** of the clinicians are of the opinion that using PROs in routine clinical practice will **benefit the overall healthcare management of a patient**.

Conclusions

- The pilot survey reported that the majority of the clinicians were aware of PRO however the rate of use of PRO in routine clinical practice was relatively low.
- The confounding factors found for less usage of PRO in routine clinical practice could be due to lack of compliance and time, absence of robust health care workflow, high patient in-flow, and technological support.
- In Asian countries like India, a few barriers to the implementation of the usage of PRO in the healthcare system include (not exhaustive):
 - Low literacy level among the patients about the advantages of PRO
 - Communication gap between the patients and the clinicians
 - Cultural/Linguistic diversity
 - Resource/operational limitations in handling PRO
- PROs aid clinicians in treatment decisions for outpatient management which can be further strengthened by improving the health-care system.

Recommendations

- A larger study is required to further understand the clinician's perspective and roadblocks on the usage of PRO in routine clinical practice in India and other LMICs.

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