Patient-Driven Outcome Selection (PDOS): a patient-focused approach for selecting outcomes using patient-generated data



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INTRODUCTION

- Patient-Reported Outcomes (PROs) are increasingly used to support the development and the evaluation of health products and services. Due to the wide
 variety of instruments available, identifying the most suitable PRO to use in a specific context might be complex.
- There is no consensus on a standardized method to choose PROs considering the scientific context and the regulatory recommendations.
- This research aimed at developing a patient-centric, structured, replicable and generalizable method for PROs selection and development using patientgenerated data.

PATIENT-CENTRIC APPROACH (PATIENT-DRIVEN OUTCOME SELECTION - PDOS) TO OPTIMIZE PRO SELECTION

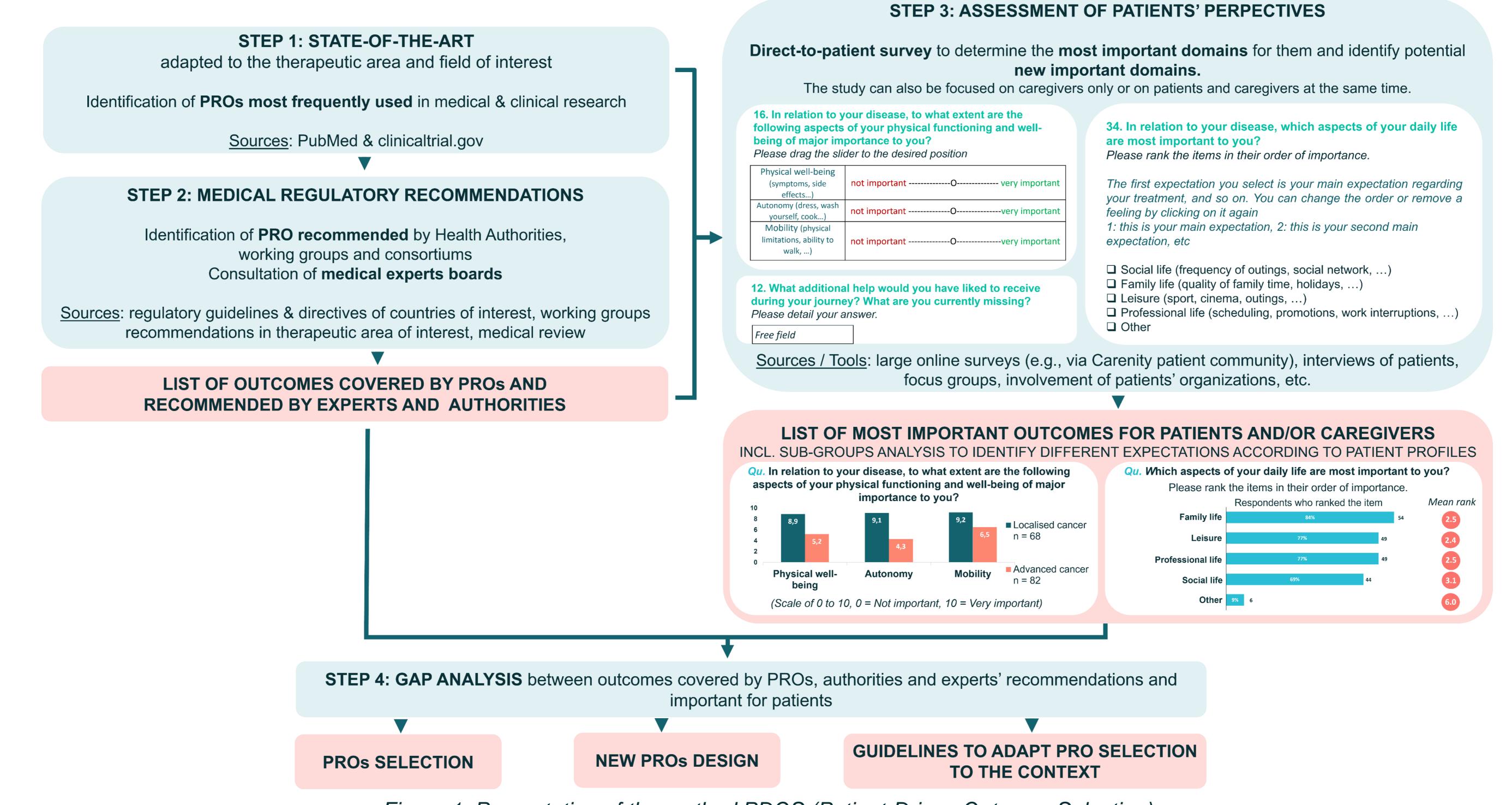


Figure 1: Presentation of the method PDOS (Patient-Driven Outcome Selection)

PRACTICAL APPLICATIONS OF PDOS IN DIABETES, BREAST CANCER AND LUNG CANCER

PDOS method has been applied in the **diabetes** (n=249 respondents) and **breast cancer** (n=146 respondents) areas and respectively showed that patient's perspectives can differ for a treatment than for a digital health solutions (figure 2) and can depend on the profile of the patients (e,g, age). For instance, in the application to breast cancer, impact on quality of life was ranked among the 3 most important domains by 62% of patients younger than 60 years but only by 31% of patients older than 60 years old.

Ranked in 1 st position	TREATMENTS	Ranked in top 3	DIGITAL HEALTH SOLUTIONS	Ranked in 1 st position
34%*	61%	User satisfaction / Efficacy perception	37%	14%
11%	36%	Patient empowerment in daily diabetes management	37%	14%
12%	31%	Quality of Life	33%	14%
12%	33%	User experience / Ease of use	37%	15%
8%	30%	Patient autonomy in diabetes management	36%	12%
4%	18%	Adherence / Trust / Compatibility with lifestyle	27%	8%
5%	16%	Health litteracy / Diabetes understanding	23%	8%
4%	19%	Copying	23%	7%
10%	29%	Side-effects Life privacy	21%	8%

*: these patients ranked in top 3 for DHS: efficacy (48%), user experience (38%) and empowerment (35%)

Figure 2: Most important domains for patients with **diabetes** for the evaluation of treatments and digital health solutions (n= 249 respondents)

Evaluation of the method in **breast and lung cancer** have also shown that domains valued by medical and HEOR experts and those valued by patients in existing PROs could differ (table 1 and 2).

CONCLUSIONS

Table 1: Comparison of domains covered by PROs and valued by patients with **breast cancer** (n=146 respondents)

DOMAIN		Patients' perspectives
Quality of Life (personal, professional, social, physical and emotional well-being)		
Survival vs QoL considerations (efficacy, side effect)		
Satisfaction with cancer heathcare pathway		
Coping strategy (attitudes and behaviors used to maintain emotional well-being and to adjust to the stresses caused by cancer)		
Satisfaction and confidence in decision-making		
Burden of the disease (lack of energy, ability to feel like a woman, pain, weight loss)		
Information provided on treatment efficacy, side effects, administration		
Use of complementary therapies to reduce the side effect and the impact on QoL		

Table 2: Comparison of domains covered by PROs

Intermediate Domain

Minor Domair

- The increasing importance of Health-Related Quality of Life (HR-QoL) in healthcare decisionmaking reinforces the need to choose relevant PRO measures.
- This new patient-centric approach presents the advantage of considering patients' expectations in the choice of instruments. This approach also contributes to more in-depth discussions, streamlines the study process, and enhances its overall credibility by backing up the measured outcomes.
- The methodology developed in this pilot showed promising results tending to apply to several conditions (breast cancer, lung cancer or diabetes). Further investigations could be implemented in order to test this methodology in other therapeutic areas.

REFERENCES - COMMUNICATION

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and valued by patients with lung cancer

Major Domain

ITEM	PROs (FACT-L, EQ5D-5L, QLQ-C30, QLQ-LC13, ICHOM guidelines)	Medical & HEOR experts (n= 4)	Patients & caregivers Online questionnaire (n=150)
Daily life			
Professional life			
Physical functioning and well-being			
Emotional well-being			
Medical care			
Treatment care			
End-of-life care			
Economic burden			
Relationship with HCPs			
Caregivers' perspectives			
Major Domain	Minor Do	main	Not represented Domain