The need for ethical guidance for the use of Patient-Reported Outcomes (PROs) in research and clinical practice

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To the Editor - Patient-reported outcomes (PROs) are increasingly used in clinical research to provide evidence of the benefits and risk of therapy from a patient perspective. PRO data from clinical trials can inform regulatory approvals and drug labelling, clinical guideline development and health policy.[1] Approximately one third of clinical trials include PROs collected using patient questionnaires.[2] Beyond trials, PRO data is also increasing capture in observational research and routine clinical care to provide information on the burden of disease, real-world evidence of treatment safety and effectiveness,[3] for audit and benchmarking,[1] and to monitor patient status and provide timely care tailored to individual needs. For instance, a recent study demonstrated that systematic web-based collection of symptoms led to improved health-related quality of life (HRQL), survival, quality-adjusted survival, and reduced emergency room (ER) visits and hospitalisation, among patients receiving chemotherapy for advanced solid tumours.[4] Patients value PRO trial results as they can enhance clinician-patient communication regarding treatment options, helping patients to feel more empowered in shared decision-making around their care.[5]

Despite the benefits of incorporating PROs in research and routine practice several ethical challenges can hinder the uptake and benefit to patients of PRO data. The PRO content of trial protocols and reporting of PRO results are often suboptimal; missing data rates are high, and delay of PRO data publications are predominant. A recent study evaluating 228 NIHR (National Institute of Health Research) Cancer portfolio studies demonstrated that 50,000 patients were involved in studies that failed to publish the PRO data collected, which is considered to be unethical.[6]

PRO data collection is associated with a number of ethical considerations which must be addressed. An ethical consideration is defined as one that requires a choice based on moral considerations drawing on established principles, theories and values, which might have implications on the individuals or society's welfare. The differing use of PROs in research and routine care settings, and review/use of data by clinical teams, may lead to uncertainties for patients about why data is being collected and data privacy - how their data is being viewed and used. Research indicates that in some instances PRO measures may not reflect the perspectives of vulnerable groups or older people challenging bioethical principles and threatening the scientific validity of results.[7] Patient burden associated with completing multiple questionnaires is also a concern. Of particular note is the lack of guidance surrounding how staff should manage situations where PRO data reveal “concerning” levels of psychological distress

or physical symptoms that may require an immediate response.[8] Evidence suggests research staff are handling such data inconsistently, which may lead to inequitable patient care, co-intervention bias and confusion.

Furthermore, PROs could be used for long-term follow-up to assess the impact of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on patients' quality of life and alert the clinician of potential life threating symptoms.[9] The increased use of telehealth will also influence the increased use of PRO data to monitor patients' symptoms. Therefore, there is a need to ensure that this is done in an ethical way that protects patient safety and data.

To address these challenges, the PRO Ethics Steering Group comprised of PRO methodologists, patient partners and ethicists and is developing international, consensus-based guidelines for use by researchers and patient partners in preparing ethics submissions and for use by Research Ethics Committees and Institutional Review Boards in the assessment of PRO research. The guidelines will focus specifically on ethical considerations of PRO research and data collection in clinical practice, using the EQUATOR (Enhancing Quality and Transparency of Health Research) Network methodological guideline development.[10] The development process will include a literature review, modified Delphi exercise and international consensus meeting involving members of Research Ethics Committees, experts in research ethics, patient partners, trialists and PRO researchers. Given the dearth of guidance currently available, we plan to hold the Delphi exercise and consensus meeting with a view to publishing the guideline in 2021.

Author contribution:

SCR and MJC conceived the idea. SCR developed the first draft. All authors made substantial revisions, and approved the final manuscript.

Ethics Statement

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