

## Orphan Drug Development Guidebook

### Building Block I415

This document defines the content of the Building Block created for each identified tool, incentives, initiative or practice introduced by public bodies or used by developers to expedite drug development in Rare Diseases (RDs).

ITEM	DESCRIPTION
Building Block (BB) Title	Development and use of Patient-Centred Outcomes Measures (PCOMs)
References	<p>Orphanet J Rare Dis. 2017 Nov 2;12(1):171 :  <a href="https://ojrd.biomedcentral.com/articles/10.1186/s13023-017-0718-x">https://ojrd.biomedcentral.com/articles/10.1186/s13023-017-0718-x</a>  <a href="https://link.springer.com/chapter/10.1007/978-981-10-4068-9_9">https://link.springer.com/chapter/10.1007/978-981-10-4068-9_9</a></p> <p>US FDA Guidance (2009) on Patient-Reported Outcome Measures:  <a href="https://www.fda.gov/downloads/drugs/guidances/ucm193282.pdf">https://www.fda.gov/downloads/drugs/guidances/ucm193282.pdf</a></p> <p>US FDA Draft Guidance (2018) ‘Select, Develop or Modify Fit-for-Purpose Clinical Outcomes Assessments’:  <a href="https://www.fda.gov/downloads/Drugs/NewsEvents/UCM620708.pdf">https://www.fda.gov/downloads/Drugs/NewsEvents/UCM620708.pdf</a></p>
Description	<p>Despite growing acceptance that patients have the clearest view of the health outcomes that matter, the success (or failure) of the majority of rare disease drug development programmes rests on surrogate outcomes (e.g. laboratory measures, organ size) that may not reflect treatment benefits that patients value.</p> <p>Patient-Centred Outcomes Measures (PCOMs) are questionnaires that ‘directly’ quantify the impact of a disease and treatment on health outcomes that matter to patients (as identified or affirmed by patients themselves, or their caregivers). PCOMs embrace all forms of clinical outcome assessments, namely ‘patient-reported outcome’ (PRO), clinician-reported (ClinRO), observer-reported (ObsRO) and performance outcome (PerfO) measures. Ideally, PCOMs should be co-created with patients.</p> <p>At present, appropriate and fit-for purpose PCOMs do not exist for most rare diseases, and their use has been largely omitted across the medical and research community.</p>

	PCOMs are tools to translate care or observed treatment effect into an ‘interpretable’ measure of patient benefit, and thereby help demonstrate clinical effectiveness.
Category	Development Practices Building Block
Geographical scope	International
Availability	Applicants developing medicines for rare and non-rare diseases.
Scope of use	<p>PCOMs are tools that seek to understand the patient’s perspective and daily impact of their disease to better adapt therapies, whenever available. PCOMs may be used for several purposes, such as: efficacy endpoints in clinical trials, outcomes measures in registries, guides to treatment choices for daily care, or tools to monitor care delivery. PCOMs bring value across all healthcare stakeholders involved, as illustrated below.</p> <div data-bbox="590 1064 1141 1601" data-label="Diagram"> </div> <p>The use of PROMs in the development of RD products is to enhance the ability of researchers to understand the effect of new medicines and their impact on the patient’s daily life.</p>
Stakeholders	<ul style="list-style-type: none"> <li>• Network of patients/patient’s groups</li> <li>• Health professionals</li> </ul>

	<ul style="list-style-type: none"> <li>• Researchers</li> <li>• Drug developers</li> </ul>
Enablers / Requirements	<p>Generating an extensive amount of patient evidence and of psychometric data is required to develop/establish the use of a PCOM.</p> <p>Multi-stakeholder collaboration and the conduct of scientific advice (with regulatory and health technology assessment bodies) are highly recommended to promote the scientific rationale and use of a PCOM.</p> <p>When developing a PCOM de novo, it is recommended to seek regular scientific advice from regulatory bodies. Qualification of a new PCOM may also be sought (e.g. US FDA's Drug Development Tool Qualification Programs).</p>
Output	A PCOM is a tool aimed to better capture the patient experience and to measure the outcomes that matter most to patients.
Best time to apply and time window	The tool has its best use at as early as possible during clinical development. Developing and testing a patient-centred outcomes measurement strategy takes time therefore activities should initiate as you start planning phase 1 clinical trial.
Expert tips	<p>Many PCOMs are generic and not tailored to the specifics of individual rare diseases. It is best to identify whether a PCOM is available and usable in early phase clinical trials, because if they are not, developing a new PCOM or adapting a PCOM and then validating it, will require time and resources.</p> <p>PROs:</p> <ul style="list-style-type: none"> <li>– PCOMs generate interpretable data for the demonstration of treatment benefit in patients.</li> </ul> <p>CONs:</p> <ul style="list-style-type: none"> <li>– PCOM development is a time- and resource- intensive activity.</li> </ul>