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# PROs, Payers and the 5th Hurdle

*From Drug Development to Adoption*

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The power of knowledge. The value of understanding.

## Looking Beyond the Label Claim

### Do PROs have value beyond the label?

- Is it all about the label?
  - PRO instruments included in registration trials to support product approvals and labeling claims pertaining to treatment benefit
- What about the other key stakeholders?
  - Payers, providers, patients, patient advocates
  - Support clinical efficacy data for reimbursement submissions
  - Provide a basis for publication and communication strategies
  - Generate value propositions
- HTA perspective
  - Positive data generated by well-developed PRO measures provide strong support for a drug's patient-centered benefit and increasingly affect decision making by reimbursement authorities

Doward LC, Gnanasakthy A, Baker MG. Patient reported outcomes: looking beyond the label claim. Health Qual Life Outcomes. 2010;8:89

## PROs in HTA and Market Access

- Reimbursement
  - What type of PRO evidence do payers require / expect to see?
  - What role does PRO evidence play in reimbursement?
- Market Access
  - What do providers need to make evidence-based prescription decisions?

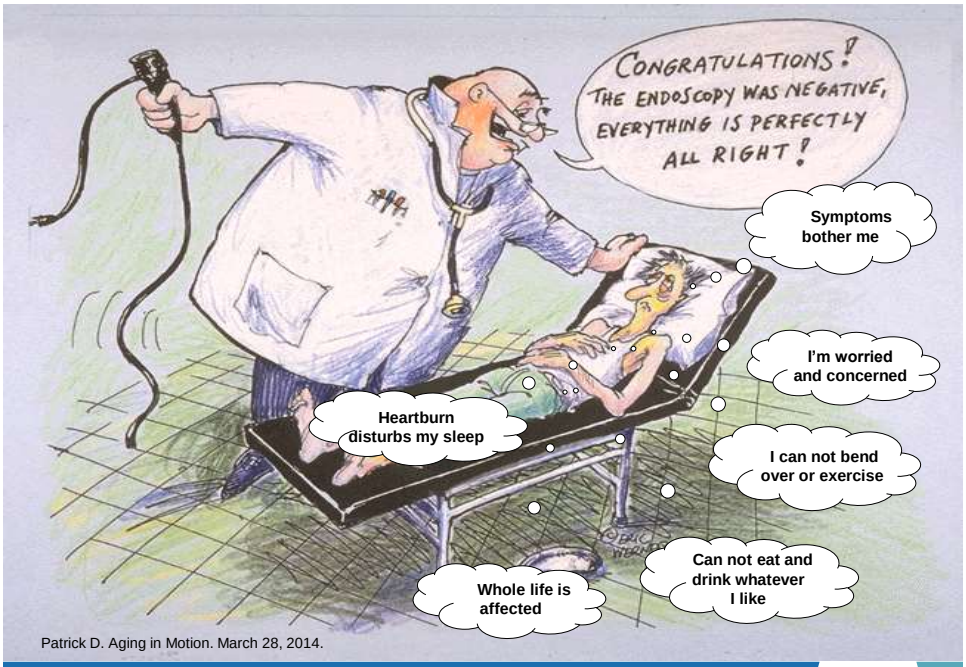
*Are we meeting the needs of payers and providers?*





## Common Types of Patient-Reported Outcome Measures

| Type of PRO Measure | Example Coverage/Domains | PRO Measures |
|---|---|---|
| Symptoms | • Pain<br>• Fatigue<br>• Wheezing<br>• Depression | 0 – 10 numeric rating scale<br>Fatigue Severity Scale<br>Asthma Symptom Diary<br>Beck Depression Inventory |
| Functioning | • Emotional functioning<br>• Productivity<br>• Activities of daily living | Hospital Anxiety and Depression Scale<br>Work Productivity and Activity Impairment Questionnaire<br>Katz ADL |
| Health status | • Multiple domains of functioning | SF-36<br>Sheehan Disability Scale |
| Health-related quality of life | • Impact of health on a patient's subjective sense of well-being | Cystic Fibrosis QoL Questionnaire |
| Treatment satisfaction | • Satisfaction with medication | Treatment Satisfaction Questionnaire for Medication |
| Utility | • Health status for the purpose of computing QALYs | EQ-5D |




Patrick D. Aging in Motion. March 28, 2014.





## PROs and Reimbursement



- Variation between reimbursement agencies on use of PRO data
  - Nature of evidence required
    - Evidence of impact on HRQOL
    - Productivity
    - Utility
  - Type of measurement
    - Generic or disease-specific PRO measures
    - Driven by need to provide cost-effectiveness models (HTA process)

# Reimbursement: Europe (ex. Germany)

## HTA's: UK, France, Italy, Spain, Sweden

- Cost-effectiveness
  - QALY is a key parameter to assess 'value for money'
  - Utility data required for cost-effectiveness models
  - Data based on a preference-based measure preferred
- Clinical Efficacy
  - PRO data can be used to support clinical efficacy (included within the clinical evidence section of HTA submissions)
  - Measures of productivity may have highest value

| Country | Agency | Preference for Utility Measurement |
|---|---|---|
| UK | NICE<br>SMC | EQ-5D<br>EQ-5D |
| France | HAS | EQ-5D or other MAUI (e.g. HUI, SF-6D) |
| Italy | l'Ufficio Coordinamento OsMed e attività HTA | EQ-5D |
| Spain | Spanish HTA Network | EQ-5D or SF-6D |





# Reimbursement: Germany

- Benefit of an intervention should be related to the patient
- Assessment is based on the results of studies that have investigated the effects of an intervention on patient-relevant outcome
  - "Patient-relevant" refers to how a patient feels, functions, or survives
- Consideration given to both intentional and unintentional effects of the intervention that allow an assessment of the impact on morbidity, mortality (complaints and complications) and HRQoL, in order to determine the changes related to disease and treatment

# Reimbursement: Australia and Canada

## Cost Effectiveness

- Cost-effectiveness
  - QALY is still the key parameter to assess 'value for money'
  - Utility data required for cost-effectiveness models
  - Prefer data collected via a preference-based measure
  - Direct methods (SG / TTO) will be considered

| Country | Agency | Preference for Utility Measurement |
|---|---|---|
| Australia | PBAC | MAUI – no preference<br>Will consider direct methods |
| Canada | CADTH | MAUI or direct assessment (TTO or SG) |





# Reimbursement: Australia and Canada

## Clinical Efficacy

### Australia

- Analysis of effectiveness includes "less tangible factors such as patients' quality of life"
- Calls for the use of quality of life measures where
  - Improved quality of life is the principal aim of therapy (e.g., pain, palliation of cancer symptoms)
  - Where HRQOL may be impaired by the new treatment or main comparator

### Canada

- Considers efficacy and impact on HRQOL supported by valid and reliable measures

# Payers and Economic Advisors Research

## Impact of PRO Data on Reimbursement and Market Access

- Interviews conducted with payers in US (4), UK (2), FR (2)
  - US: Medical or pharmacy directors from large commercial health insurance plan
  - Europe: Locally positioned academic health economists / advisors to national health systems
- Focus on diabetes and obesity
- PROs considered les important than key clinical outcomes (glycated hemoglobin (HbA1c) levels [Diabetes] and weight loss [obesity]).
- PROs provide a valuable means of providing insight into patient experience
- Generic HRQOL measures rated highest in France and UK
- Disease specific HRQOL measures rated highest in the US
- Data from postmarketing trials may provide an opportunity to change prescribing decisions

Doward L, Højbjerre L, DeMuro C, Hogue S, Fernandez M, Barrett A, Crawford R, Kragh N, Aagren M. Influence of Patient-Reported Outcomes on Regulatory, HTA, and Market Access Decisions: Obesity and Diabetes Case Examples Poster presented at the ISPOR 20th Annual International Meeting; May 2015. Philadelphia, PA



# Payers and Economic Advisors Research

## Evaluation of PRO Measures by Health System

**UK**

- French Transparency Committee mainly consider clinical parameters of efficacy and mortality; PROs are important if related to adverse events (AEs) or comorbidities
- Quality of life, patient satisfaction, or symptom measures are not critical data, except in specific medicines (e.g., pain measures for pain medicines)

**FR**

- French Transparency Committee mainly consider clinical parameters of efficacy and mortality; PROs are important if related to adverse events (AEs) or comorbidities
- Quality of life, patient satisfaction, or symptom measures are not critical data, except in specific medicines (e.g., pain measures for pain medicines)

**US**

- Health plans are interested in PROs; specifically those that add to the evidence base related to adherence, persistence and, tolerability
- Patient-centric data are viewed important measures in current and future environments; particularly if the data can be linked to clinical outcomes

## Payers and Economic Advisors Research

### PROs and Broader Market Access

- PRO data can be a key component in the production of a value proposition that is truly “patient centered”
- Publish PRO data, even when these are not used to support a regulatory label claim
  - A broad PRO publication strategy will not only support HTA submissions but also will support uptake by payers
  - Prescriber “pull-through” can be critical to success
- Develop relationships with patient associations and patient advocates





## NICE Annual Conference 2015

### Key Messages:

- Recognition of value of patient reported views on health and treatment
- Importance of data that reflects real world patients
  - Shared decision making
  - Appropriate treatment decisions based on solid evidence
- Generation of evidence base
  - Registration trials do not always provide the evidence that providers need
  - Especially for rare diseases
    - Every patient is a potential data point
- Innovate! Think outside the box
- NICE views on PROs – value goes beyond utility!

1. Jarvis A. The NHS as a research lab: Developing a robust evidence base. NICE Annual Conference, Liverpool, 2015.
2. Elwyn G, Frosch D, Thomson R et al. Shared Decision Making: A model for clinical practice. J. Gen Intern Med 2010 Oct; 27(10): 1361-1367

# How can you score points with NICE?

**Health improvements**

- Is your product improving quality of life?
- Is your product extending life?

**Costs savings**

- Is your product worth paying for?

**Other benefits**

- Reducing inequalities? Convenience? Preferences? Method of administration?

Source: Osipenko L. What evidence does NICE look for from Industry? Demonstrating the value of medical technologies. NICE Annual Conference, Liverpool, 2015.





# Australia

## Tobi® Podhaler® for Cystic Fibrosis: November 2013

- Initial Submission (March 2013)
  - The PBAC rejected Novartis's claims for non-inferiority and comparative benefit of tobramycin inhalation powder (TIP) compared to tobramycin solution for inhalation (TSI)
  - Higher rate of discontinuation with TIP compared to TSI.
- Resubmission (November 2013)
  - Post-hoc revealed that TIP discontinuers had a higher rate of coughing and antibiotic use; had a similar rate of hospitalisations, and higher convenience scores on TSQM compared to TSI discontinuers.
  - The PBAC noted that a formal claim of improved adherence or compliance had not been made, but that the sponsor presented real world data, as well as data from a stated preference survey that estimated that patients were less likely to miss taking their twice daily medications when using TIP (median: once per week) compared to TSI (median: 3 times per week).
  - The PBAC considered the claim of superiority with respect to patient satisfaction remained inadequately supported by the trial data, although better persistence and adherence for continuing patients may be expected in clinical practice if the continuation rule in the proposed restriction proves adequate to target treatment to patients who can best tolerate TIP treatment
- PRO data supported premium pricing for TOBI Podhaler

# Beyond the Fourth Hurdle:

## Local Access and Affordability


**"The race is finished"**





# Developing a Robust Evidence Base for Adoption

## Shared Decision Making

- Differentiation of sources of expertise[1]

| | |
|---|---|
| Clinician expertise | Diagnosis, Disease aetiology, Prognosis, Treatment options, outcome probabilities |
| Patient expertise | Experience of illness, social circumstances, attitude to risk, values, preferences |

- Importance of shared decision making

'The first task of shared decision-making is to ensure that individuals are not making decisions in the face of avoidable ignorance'[2]

1. Jarvis A. The NHS as a research lab: Developing a robust evidence base. NICE Annual Conference, Liverpool, 2015.
2. Elwyn G, Frosch D, Thomson R et al. Shared Decision Making: A model for clinical practice. J. Gen Intern Med 2010 Oct; 27(10): 1361-1367

# PROs and Providers

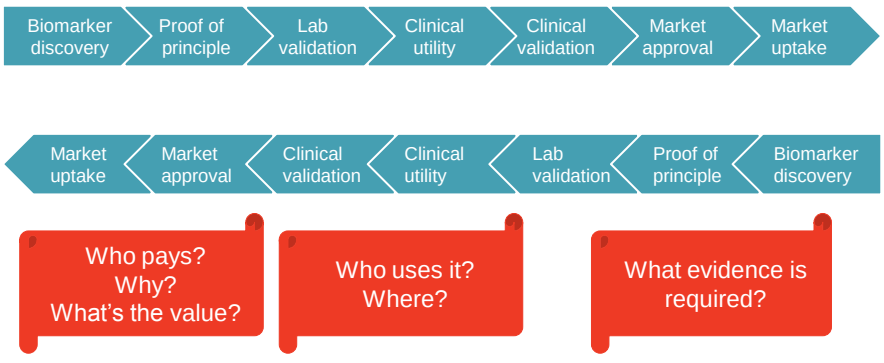
## A word from health care providers!

- Making treatment decisions based on evidence that does not reflect real world practice
- Express frustration with suitability of evidences based on registration trials
  - Designed for regulation not reimbursement and not real world practice
    - Clinical trial population
      - Patients with comorbidities excludes BUT in real world, majority of chronically ill patients have at least one major comorbidity
      - Question how valid and relevant the evidence presented to them is for this patient sitting in front of them right now
      - Sometimes have to make tough decisions – treat one condition at a time



# Planning ahead!

## From Development to Adoption



# Moving forward …

## Maximising your PRO data

- Start with the end goal in mind
- Innovation in trial design
- Collect real-world evidence
- Seek advice!
- Parallel EMA/HTA advice
  - Comparators/design of trial and endpoints/ measures to show added value
  - Interaction between regulators and HTA: listening to each other's views allows contemporaneous evolution of drug development strategies to satisfy all parties before development plans and HTA/EMA decisions have been finalised
  - Focus early on how you will show value
  - Target fundamental issues: population / comparator / SOC / interventions / outcomes
- HTA Advice
  - NICE – Office for Market Access
- Publish, publish, publish!