From Testing to Targeted Treatments

Access Barrier Cause-Effect Canvas for Precision Medicine (PM) - Beta version
Access Barrier Cause-Effect Canvas (Beta)
An adaptable resource for PM advocates

Why is this tool relevant to the PM work?
The challenges in making Precision Medicine (PM) more accessible to patients are complex and interconnected. To be able to design the right solutions and make sustainable impact, we need to understand the access barriers experienced by different stakeholders at every step of the patient pathway.

What is this tool?
This skeleton “canvas” aims to help identify the patient pathway in a given condition and/or geography, the barriers faced by different stakeholders at each step in the pathway, the root causes to these barriers, and good practices and potential solutions to these barriers.

Who is this tool for?
For PM advocates and those working in PM

How should this tool be used?
We recommend working on this canvas collaboratively in a workshop or a series of workshops involving different stakeholder groups. This ensures that the constraints and needs of each stakeholder group can be taken into account in addressing barriers and solutions. We recommend aiming for balanced representation from patient community, healthcare professionals, industry, payors and regulators, and any other stakeholders who could benefit from the outputs.
How to use the canvas

We recommend following these steps in a collaborative workshop with other stakeholder types.

1 - Print or draw the blank canvas

2 - Using the example, identify the different steps in the patient pathway in the disease or condition concerned.

3 - At each step of the patient pathway, identify potential access barriers

4 - Identify the possible root causes of each barrier (e.g. using a Fishbone methodology)

5 - Identify possible solutions for each barrier

Sources:
Step 1: Print or draw the canvas on a large piece of paper

Add rows for any missing stakeholder groups
Here is an example patient pathway

**Patient Experience (Feel / Do)**
- Anxiety: knows something is wrong
- Trouble sleeping: Seeks information online

**Patient**
- Pre diagnosis / screening
- Suspected disease
- Tissue or liquid biopsy
- Histology biomarker testing
- Interpretation of test results (tumor type and Dx testing)
- Oncologist confirms cost & reimbursement of test
- Select Dx test

**HCP**
- Confirmed tumor type / diagnosis
- Oncologist confirms cost & reimbursement of test
- Interpretation of test results
- Biomarker Dx testing
- Patient matched to approved treatment or clinical trial
- Reaches out for support from family, friends, and patient support groups
- Frustration with delay to receive test results
- Disease monitoring
- Managing long term care

**Pathologist**
- Tissue or liquid biopsy
- Interpretation of biomarker test result
- Second line treatment matched

**Payer**
- Coverage of biomarker test
- Coverage of drug

**Caregivers**
- ngies
Step 2: Draw or use Post-its to map out the patient pathway in your area (example)

- Patient Experience (Feel / Do)
- Patient
- HCP
- Pathologist
- Caregivers

Suspected disease
Tissue or liquid biopsy

Payer
Here are some examples of access barriers at different steps of the patient pathway
Step 3: Fill in the access barriers at each step of the pathway (example)

Suspected disease

Patient unaware of testing

Tissue or liquid biopsy

Sub-optimal tissue procurement and triaging

Patient Experience
(Feel / Do)

Payer

HCP

Pathologist

Caregivers
Step 4: Identify root causes to each barrier

Define possible root causes through a co-creation exercise that can be performed in a multi-stakeholder workshop. An example methodology that can be used is the cause-effect Fishbone methodology. Take each barrier, and investigate the root cause of the barrier and the interdependence between the stakeholders in overcoming this obstacle.

Beyond the classic causal factors such as People, Methods, Materials, Equipment, and Environment, you may also want to consider Data or Evidence factors, Awareness and Education factors and Health System factors.

Example tutorial: How to create cause-effect diagrams
Here are examples of solutions for each access barrier

**Patient Experience (Feel / Do)**

- **Pre-diagnosis / screening**
  - Low awareness of screening / genetic counseling
  - Fear of disease with family history
  - Suspected disease
  - Lack of communication

- **Confirmed tumor type / diagnosis**
  - Patient not told results
  - Patient receives incorrect treatment
  - Financial burden
  - Inadequate referrals
  - Insufficient support

- **Treatment**
  - Delayed adoption of innovative treatments
  - Treatment started before correct diagnosis
  - Incorrect treatment prescribed

- **Managing long-term care**
  - Diagnosis monitoring
  - Frustration with delay to receive test results

**Caregivers**

- **Patient**
  - Reaches out for support from family, friends and patient support groups

**HCP**

- **Pathologist**
  - Histology / biomarker testing
  - Multiple testing not performed
  - Long turnaround time
  - Lack of continuity of care across institutions

- **Biomarker Dx testing**
  - Long turnaround time for patients
  - Lack of continuity of care across institutions

**Pathologist**

- **Biomarker Dx testing**
  - Encourage and incentivize best practices in test selection and result reporting
  - Long turnaround time for patients

**Payer**

- **Coverage of biomarker test**
  - Drug not covered or inadequate reimbursement

**Coverage of drug**

- Drug not covered or inadequate reimbursement
- Policy

**Tissue or liquid biopsy**

- Tissue or liquid biopsy
  - Sample optimal tissue (procurement and triaging)
  - Biomarker testing not prescribed

**HCP-focused research**

- HCP education
  - Policy changes

**Patient**

- Patient Education & support
  - Patient-focused research
  - Patient-friendly biomarker reports
  - Patient engagement best practices

**Pathologist**

- Tissue or liquid biopsy
  - Tissue and sample handling

**Pathologist**

- Tissue or liquid biopsy
  - Tissue and sample handling

**Pathologist**

- Tissue or liquid biopsy
  - Tissue and sample handling

**Pathologist**

- Tissue or liquid biopsy
  - Tissue and sample handling
Step 5: Add potential solutions for each of the barriers (example)

- **Suspected disease**
  - Patient unaware of testing
  - Patient Education
  - Patient-focused research

- **Tissue or liquid biopsy**
  - Sub-optimal tissue procurement and triaging
  - Develop best practices in tissue and sample handling

- **Patient Experience**
  (Feel / Do)
  - Payer
  - HCP
  - Pathologist
  - Caregivers
Pre-diagnosis/screening

- Low awareness of screening programs counseling for those with family history
- General gap in discussing PM using appropriate language

Suspected disease

- Patient unaware of testing
- Presence of unanswerable questions causes emotional and financial burden
- Inadequate care to patients lacking actionable mutations

Confirmed tumor type/diagnosis

- Patient not test results
- Patient receives incorrect treatment
- Physician-patient communications may not be adapted to the needs of the patient
- Inadequate care to patients lacking actionable mutations

Patient Experience (Feel/Do)

- Patient education & support
- Patient-focused research

Trouble sleeping

- Seeks information online

- Reaches out for support
- From family, friends and patient support groups

Frustration with delay to receive test results

HCP

- Tissue or liquid biopsy
- Interpretation of test results (tumor type and Dx testing)
- Select Dx test

- Policy
- Fragmentation testing guidelines
- Lack awareness of actionable biomarkers
- Lack of continuous support in workflows

- Biomarker Dx testing
- Long turnaround time for patients
- Lack of continuity of care across institutions

- Policy
- Encourage and incentivize best practices in test turnaround times
- Encourage and incentivize best practices in test selection and result reporting

Pathologist

- Histology biomarker testing
- Biomarker Dx testing

- Multiple testing not performed
- Long turnaround time
- Lack of continuity of care across institutions
- Policy
- Encourage and incentivize best practices in test turnaround times
- Encourage and incentivize best practices in test selection and result reporting

Payer

- Coverage of biomarker test

- Coverage of drug

- Policy

Caregivers

- Patient education & support

- Disease monitoring

- Managing long-term care