

The background of the slide is a blurred, close-up photograph of two hands. One hand is holding a small, rectangular device, possibly a medical sensor or a small tablet, which is held against the palm of the other hand. The lighting is soft and warm, with a color palette dominated by pinks, purples, and oranges. The text is overlaid on this background.

MEDLIOR™

HEALTH OUTCOMES RESEARCH

CORD – Fall Conference
Calgary, AB
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How Does RWE Differ from Clinical Trials?

RCT

- Controlled population (similar characteristics)
- Shorter follow-up period
- Limited sample size
- Comparator treatment is limited
- Time/resource consuming data collection

RWE

- Diverse population (reflective of the real patient population)
- Long-term follow-up period
- Larger sample size
- All available comparator treatments
- Time/resource efficient data collection



RWE for Rare Disease

Fit for Purpose

Benefits

Health System Data

- Robust source of provincial-level data
 - ✓ Larger population, routinely captured
- Real-world population-level data
 - ✓ Demographics, comorbidities, tx patterns, overall survival, cause of death
- Strong utilization data
 - ✓ Hospitalizations, procedures, emergency visits, outpatient visits, lab tests, etc
- Longitudinal data (+10 years)
 - ✓ Long-term safety and effectiveness
- Potential for AI/ machine learning

Registry data

- National level data
 - ✓ Valuable for smaller/ rare populations
- Rich source of self-reported data
 - ✓ Quality of life, caregiver burden, barriers to treatment, income status
- Potential to import novel data
 - ✓ Wearables, health/fitness apps, patient journals for symptom tracking
- Ability to collect longitudinal data
 - ✓ Change in self-reported data over time
- Potential for AI/ machine learning

RWE for Rare Disease

Fit for Purpose

Health System Data

- Limited primary care data
- Limited structured data for clinical outcomes
- No data on inpatient medications
- Limited patient-reported outcomes data
- Some provinces limited to public plan drug data
- Time lag of >6 months for data release
- Access is variable across provinces
- Lack of standardization to pool data nationally

Registry data

- Concerns with data quality/ bias
- Patient consent needed for secondary use
- Resources to analyze and report data

Drawbacks



RWE for Access

Unmet need for national registry data/ platform

- ✓ Patient-centric data collection
 - Collect measures that matter to patients to demonstrate value of therapy
 - Research framework with robust methodology for analysis/reporting
- ✓ Data linkages
 - Link to administrative data to examine impact of patient-reported outcomes on utilization and costs
 - Extrapolate provincial-level admin data to national level using registry data
- ✓ Long term surveillance
 - Longer-term data collection is feasible for monitoring outcomes
- ✓ Automated reporting
 - Agreement on reporting needs to inform and improve access to therapies





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