

**VP 09  
CHEAT  
SHEET**

**Outcome Measures in VRT — Cheat Sheet for Physiotherapists**

*Pair patient-reported with performance-based, score against MCIDs, plot the curve, drive every decision from the data.*

► **Why outcome measurement matters**

*Outcome measurement replaces subjective impression with objective data. Baseline severity, plateau triage, patient buy-in, and referrer/funder confidence all come from numbers — not impressions. Pair patient-reported with performance-based every time; subscale patterns drive treatment focus more reliably than totals.*

**Indications — when this approach fits**

► **When to use this pathway**

- Every VRT patient at session one — set baseline severity, confidence and visual-motion sensitivity, plus one performance-based measure.
- Re-test every 4–6 weeks to detect MCID, identify plateaus, redirect emphasis mid-program, and confirm discharge readiness.
- Battery selection follows presentation: acute peripheral, PPPD or visual-dependent, and functional dizziness each have a default trio.

**Why outcome measurement changes care**

| Mechanism                    | Source                                  | Result                                      |
|------------------------------|---|---|
| Baseline severity            | DHI, ABC, VVAS at session 1             | Defensible starting point for every re-test |
| Plateau detection            | 4–6 weekly re-test vs MCID              | Triggers triage, dose change or referral    |
| Patient buy-in               | Visible curve with MCID overlay         | Engagement and adherence rise               |
| Referrer & funder confidence | Documented numbers vs subjective letter | Numbers travel beyond discharge             |

► **Pearl: pair patient-reported with performance-based**

*Pair every patient-reported tool with at least one performance-based tool. High DHI with normal FGA points to anxiety-driven handicap; low ABC with low FGA confirms genuine balance deficit. The pairing is the clinical insight — totals alone mislead.*

**Assessment battery**

| Domain                | Test   | Notes   |
|-----------------------|--|---|
| Handicap              | Dizziness Handicap Inventory (DHI)           | 25 items 0–100; 18-pt drop meaningful                   |
| Confidence            | Activities-specific Balance Confidence (ABC) | 16 items 0–100%; under 67% flags falls risk; 10-pt gain |
| Visual sensitivity    | Visual Vertigo Analogue Scale (VVAS)         | 14 items mean 0–100; 9-pt change meaningful             |
| Cervical contribution | Neck Pain Questionnaire (NPQ)                | Cervicogenic / post-concussion screen                   |
| Dynamic gait          | Functional Gait Assessment (FGA)             | 10 tasks 0–30; under 22 flags falls risk; 4-pt gain     |
| Balance subsystems    | Mini-BESTest                                 | 14 items 0–28; 4-pt MCID; exposes deficit subsystem     |

**Prescription / treatment cheat list**

| Category              | Frequency          | Duration           | Progress when...                      |
|-----------------------|--------------------|--------------------|---------------------------------------|
| Baseline battery      | Once at session 1  | 30–45 min          | Goals set; re-test booked at week 4–6 |
| Re-test battery       | Every 4–6 weeks    | 20–30 min          | 2+ domains meet MCID → progress       |
| Visual curve review   | Every re-test      | 2–3 min in-session | Patient engages with chart and goals  |
| Subscale & sub-domain | Every re-test      | 5 min              | Dominant pattern redirects emphasis   |
| Discharge battery     | Once at week 8–12+ | 30 min             | Normative cutoffs across 2+ domains   |

► **Pearl: act on the pattern, not the total**

*Subscale and sub-domain patterns guide the next program block. High emotional DHI plus low ABC favours psychology referral; physical DHI dominance points to active provocation; high residual VVAS with normalised vestibular tests pushes optokinetic exposure. Totals are signal, patterns are direction.*

► **Red flags — escalate**

*Worsening FGA week-to-week. DHI rising despite engagement. Emergent fall events. Sudden ABC collapse — psychological or vestibular crisis. Plateau across all domains by 6–8 weeks → vestibular physician for vHIT, VEMP and MRI. New focal neurology, sudden hearing loss, or vertical/direction-changing nystagmus → urgent neurology or ENT.*

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**Outcome measures — re-test every 4–6 weeks**

| Domain             | Tool                         | MCID / threshold                                   |
|--------------------|------------------------------|--|
| Handicap           | Dizziness Handicap Inventory | Drop of 18+ points clinically meaningful           |
| Confidence         | ABC scale                    | Less than 67% = falls risk; 10+ pt gain meaningful |
| Visual sensitivity | VVAS                         | Drop of 9+ points clinically meaningful            |
| Dynamic gait       | FGA                          | Up 4 points clinically meaningful                  |
| Balance subsystems | Mini-BESTest                 | Up 4 points clinically meaningful                  |

▶ **Compliance — what helps adherence**

*Plot the curve at every re-test with MCID overlays — the visual drives engagement more reliably than any single number. Tie goals to patient values. Week-2 telehealth check-in halves drop-off. Re-test exactly every 4–6 weeks — too frequent frustrates, too rare misses plateaus. Frame the questionnaires as 'your data, not the test of you'.*

▶ **When to refer onward**

- ▶ Plateau across all domains by 6–8 weeks → vestibular physician for vHIT, VEMP and MRI.
- ▶ Persistent high VVAS with normalised vestibular tests → consider PPPD pathway and psychology referral.
- ▶ High emotional DHI subscale with low ABC → clinical psychology or graded exposure work.
- ▶ Sudden hearing loss, new focal neurology, or vertical / direction-changing nystagmus → urgent ENT or neurology.

▶ **Twelve-second tips**

*Cover ICF domains. Pair patient-reported with performance-based. MCID, not p-value. Plot the curve. Re-test 4–6 weekly. Subscale patterns drive focus. Numbers travel — impressions do not.*

▶ **Common pitfalls — and how to avoid them**

- ▶ Reporting statistical change without MCID context.
- ▶ Single-tool monitoring — pair patient-reported with performance-based every time.
- ▶ Ignoring subscale and sub-domain patterns; treating totals.
- ▶ Re-testing too often (frustrates) or too rarely (misses plateaus).
- ▶ No written maintenance plan at discharge — patients drift without one.

▶ **Special populations**

- ▶ Older adults — add Berg Balance Scale and Five-Times Sit-to-Stand for falls risk stratification.
- ▶ Post-concussion — add VOMS and Neck Pain Questionnaire alongside core battery.
- ▶ PPPD — emphasise VVAS and ABC; document subscale dominance.
- ▶ Functional dizziness — emphasise ABC + DHI plus brief mood screen (PHQ-9 / GAD-7).

▶ **Patient communication scripts**

*"These numbers are your baseline — we re-test every six weeks to prove the program is working." | "A meaningful change is at least 18 points on the DHI or 4 points on the FGA." | "The curve, not the number, is the story — we chart your progress so you can see what's improving."*

▶ **References / further reading**

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- ▶ Dannenbaum E et al. Visual Vertigo Analogue Scale. *J Vestib Res* 2011;21(3):153–9.