EHMA
European Health Management Association

POLICY BRIEF

Drawing Attention to RSV and HMPV Surveillance and Testing in Older Adults Across Europe

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The Current Situation

Respiratory syncytial virus (RSV) and **human metapneumovirus (HMPV)** contribute substantially to the burden of lower respiratory tract infections in **older adults (60+)** and other high-risk groups, yet both pathogens remain under-diagnosed and under-reported across Europe.[1] Lower respiratory tract infections are also among the leading causes of hospitalisation in this age group. RSV alone accounts for an estimated **120,000–320,000** hospitalisations and **12,000–20,000** deaths annually among older adults in Europe.[2] RSV can precipitate pneumonia and exacerbate chronic conditions such as heart failure, asthma and COPD, while HMPV causes similar syndromes and may drive even higher hospitalisation rates. Both viruses are among the top 5 respiratory viruses leading to hospitalization in adults.[3] In one study population with high influenza vaccine uptake, HMPV and RSV hospitalisations were nearly double those caused by influenza.[4]

Despite this, both pathogens are **poorly understood and largely understudied** in adult care, a gap amplified by limited routine testing and sparse, inconsistent surveillance. While COVID-19 catalysed broader respiratory surveillance, gains have been uneven. RSV is increasingly integrated into existing surveillance platforms, but focus remains primarily on children.[5] HMPV cases are often only captured incidentally, appearing as "by-catch" from multiplex panels in hospital labs rather than through direct monitoring.[6] Adult testing outside tertiary facilities remains patchy, and reliance on syndromic or ICD-based (International Classification of Diseases) surveillance in hospitals limits pathogen-specific attribution and weakens the evidence base for targeted prevention.[7]

Although our efforts currently fall short, European and global frameworks have attempted to chart a course for improving integrated respiratory surveillance. The **ECDC/WHO Europe ERVISS** dashboard aggregates weekly epidemiological data, and the **WHO Mosaic Respiratory Surveillance Framework** promotes a fit-for-purpose, multi-system "mosaic" to encompass additional pathogens, including HMPV. ECDC has also updated **TESSy** reporting protocols to support integrated respiratory virus surveillance beyond influenza and COVID-19. Nonetheless, national adoption remains uneven, and gaps persist.

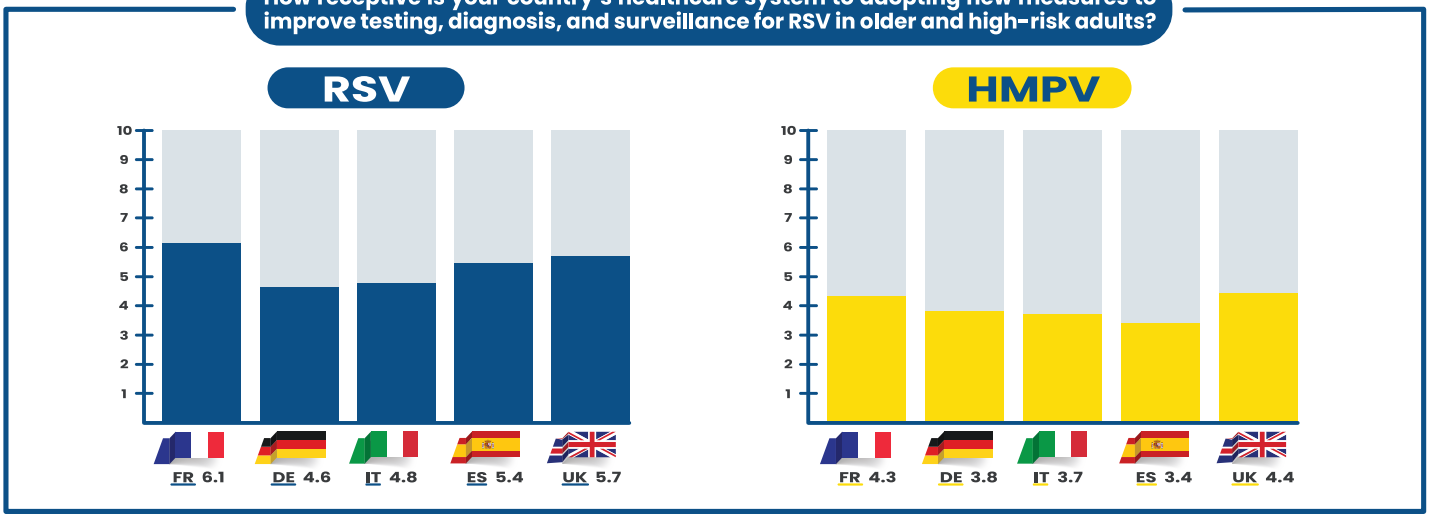
An Analysis of 5 Countries

To illustrate the levels of fragmentation in surveillance across Europe, EHMA conducted a comprehensive literature review capturing how RSV and HMPV are tracked for older adults in France, Germany, Italy, Spain and the United Kingdom. **France** mandates RSV notification and integrates multiple subsystems (Sentinelles, SOS Médecins, OSCOUR), yet routine adult RSV testing is limited, and HMPV is not systematically targeted. **Germany** combines ARI dashboards, sentinel networks, and hospital SARI systems. RSV outbreaks are reported, and adult severity is increasingly visible in administrative data, but outpatient testing and age-stratified lab confirmation remain constrained while HMPV testing is largely incidental.

Italy coordinates respiratory surveillance via **RespiVirNet** with age-stratified virology, yet adult severe case capture and year-round reporting are still maturing. HMPV data exists alongside the broader panel without dedicated outputs. **Spain's SiVIRA** integrates syndromic and SARI sentinel systems, providing granular RSV data. HMPV, however, appears in regional feeds (e.g., Catalonia) rather than a single national dashboard. The **United Kingdom** deploys RDMS lab surveillance, primary care and ED syndromic systems, and SARI Watch for hospitalisations. RSV is tracked well, while HMPV is included but less extensively characterised.[8]

To complement the literature review and provide more context to the case for improving surveillance and testing for RSV and HMPV, EHMA also conducted a targeted cross-country expert survey (n=52) of clinicians, laboratorians, public health, and policy/administrative professionals. Across all five study countries, experts perceived progress in the last three years as **limited for RSV** and **stagnant or regressing for HMPV**. Experts also perceived their national receptivity to improving their systems to be **moderate for RSV (5.46/10)** and lower for HMPV **(4.00/10)**.

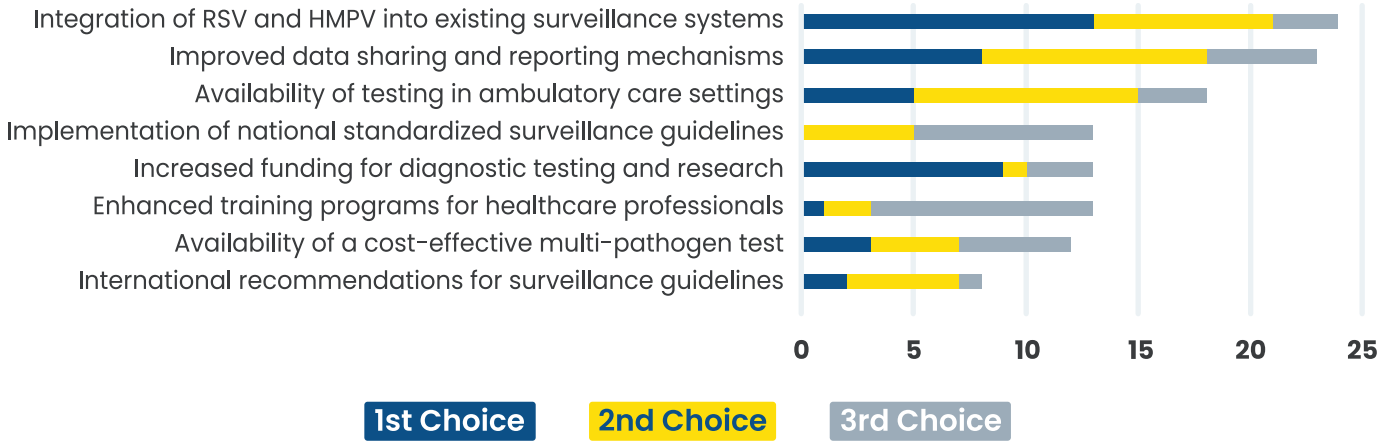
How receptive is your country's healthcare system to adopting new measures to improve testing, diagnosis, and surveillance for RSV in older and high-risk adults?



[1] Watson & Wilkinson. 2021. Respiratory viral infections in the elderly. Ther Adv Respir Dis.
[2] Havers et al. 2023. Characteristics and Outcomes Among Adults Aged ≥60 Years Hospitalized with Laboratory-Confirmed Respiratory Syncytial Virus. CDC MMWR.
[3] Zimmerman RK, et al. 2022. Population-based hospitalization burden estimates for respiratory viruses, 2015–2019. Influenza Other Respir Viruses.
[4] Widmer et al. 2012. Rates of Hospitalizations for Respiratory Syncytial Virus, Human Metapneumovirus, and Influenza Virus in Older Adults. J Infect Dis.
[5] Busse R et al. 2019. Improving healthcare quality in Europe. European Observatory on Health Systems and Policies Health Policy Series.
[6] Kulkarni et al. 2024. The Global Burden of Human Metapneumovirus-Associated Acute Respiratory Infections in Older Adults: A Systematic Review and Meta-Analysis. Lancet Healthy Longev.
[7] Rigoine de Fougerolles et al. 2022. A comparison of coronavirus disease 2019 and seasonal influenza surveillance in five European countries. Influenza Other Respir Viruses.
[8] Martyn et al. 2025. A cross-country comparison of RSV and hMPV surveillance systems. [Poster] Presented at the 13th International RSV Symposium, Iguazu Falls, Brazil

Respondents were also asked to rank the importance of potential opportunities for action, and gave credibility to solutions such as **national guidance, sustainable diagnostics funding, improved federal–regional coordination, reinvestment in infectious-disease prevention**, and **digital data integration**; for HMPV, **awareness-raising** among policymakers and clinicians and tackling pandemic fatigue were seen as prerequisites for action.

Respondent Rankings: Best Opportunities to Improve for RSV



Respondents were asked to rank up to three opportunities for improving surveillance and testing, based on perceived impact.

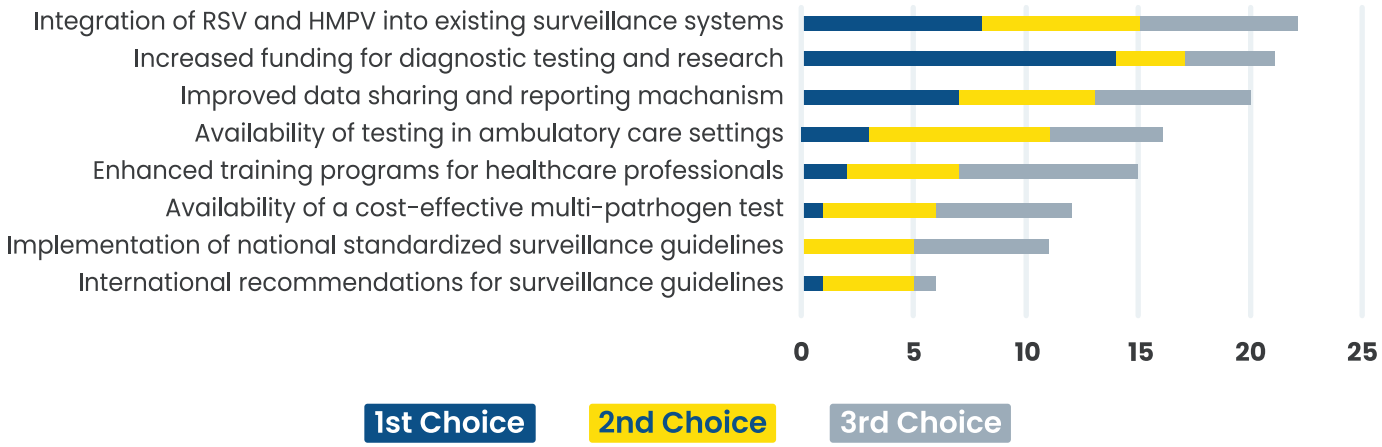
Barriers cluster around **fragmented data collection, limited testing access, absence of standardised fields and severity capture, insufficient policy prioritisation**, and **funding cuts/fragmented governance.** Positive shifts include broader multiplex use, enhanced outbreak investigation, rising clinical awareness, new prophylactic tools and an expanding vaccination policy context.

Where do we go from here?

The evidence presented here offers a clear message: **European health systems are close to being able to measure what matters for older adults, but there is still work to be done.** Infrastructure, expertise, and proposed surveillance frameworks exist, but adult-focused **virologic attribution** and **comparable minimum datasets** are inconsistent, especially for HMPV. In practice, diagnostic capacity shapes surveillance: when multiplex PCR is confined to secondary/tertiary labs and outpatient reimbursement is unclear, many older adults managed in primary care remain untested, blunting both epidemiological precision and clinical decision -making.

This matters for policy because prevention choices, such as **RSV vaccination** for selected older groups and high-risk adults, depend on **age- and severity-stratified** burden data, not syndromic proxies. For **HMPV**, with combined RSV+HMPV vaccines in development, building a coherent baseline now is essential to shorten the timeline from product readiness to policy adoption.

Respondent Rankings: Best Opportunities to Improve for HMPV



The **political economy** is also relevant: budget pressure and "pandemic fatigue" reduce appetite for expansive new programmes.

There is a clear case for **pragmatic, low-friction steps** that leverage existing platforms, demonstrate early value, and keep options open. These could come in the form of harmonised minimum datasets, small **year-round sentinel multiplex pilots** at GP and SARI hospital sites, time-boxed reimbursement codes for older-adult testing, and clinician **CME micro-modules** with simple decision aids.

In short, **the credible path forward is incremental, integrated, and evaluative**. Our systems need to get comparable data flowing quickly, use pilots to test reimbursement and logistics in real settings, align outputs with WHO/ECDC frameworks to ease scale-up, and translate early wins into sustained policy.

The following recommendations are drawn directly from EHMA's in-depth research and offer some steps forward along this path.

National health systems should:

1. Adopt a minimum interoperable dataset for RSV and hMPV and phase reporting to EU platforms.
A compact, standardised set of variables will make national data comparable, actionable and credible. Countries should begin by requiring these fields from sentinel sites and hospitals for RSV and then phase-in HMPV fields as laboratory capacity permits.

2. Conduct an evaluation of existing diagnostics and surveillance capacity.
Where possible, collect a minimal estimate for the capacity of the health system to rollout different RSV and HMPV testing and surveillance programmes for older adults. Coordinated evaluation will allow for more informed reimbursement, vaccination and prevention decisions into the future.

3. Raise clinician and community readiness with focused education and outreach.
Low clinician awareness and unclear testing algorithms suppress demand for diagnostics even where capacity exists. Rapid, low-cost interventions like brief CME-accredited training modules and one-page clinical decision aids will increase appropriate test use.

4. Implement pragmatic sentinel testing pilots within current resource constraints.
Instead of assuming immediate, universal year-round multiplex testing, start with realistic pilots that maximise existing assets: test residual samples from influenza/RSV sentinel streams and SARI hospitals, prioritise high-yield contexts, and use pooled testing or targeted NAAT panels for sentinel subsets. Run seasonal pilots in peak months and expand to year-round only where sustainable.

5. Remove immediate testing barriers by reforming reimbursement and specimen pathways.
Where testing is unaffordable or logistically impossible, surveillance will remain incomplete. Short-term, targeted measures, such as temporary reimbursement codes for specimen collection from older adults, would make testing feasible without requiring universal expansion of lab capacity.

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