A composite infrastructure readiness score reveals an approximately 40-percentage-point divide between different cardiology systems in Europe: a multinational cross-sectional survey

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Background

- EU Safe Hearts Plan (2025) [1] and OECD/EC [2] workstream call for interoperable data and coordinated care to cut cross-country disparities
- Major European cardiology systems conduct benchmarking. However, this remains mostly descriptive [3]

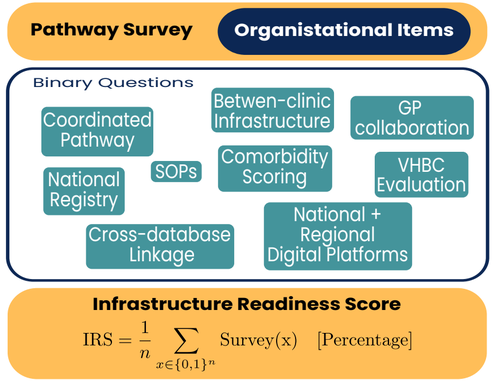
Purpose

Develop an Infrastructure Readiness Score (IRS) and map variation across regions/countries, testing alignment with national wealth

Methods

- Cross-sectional web survey of cardiologists at leading European hospitals (Aug 2025–Feb 2026)
- 10 binary organisational items (no=0/yes=1), cf. Figure 1
- Sum (0–10) → percentage IRS across 4 regions: Nordic + Baltic, Western, Southern, Eastern Europe
- Respectively, Kruskal-Wallis for regional and Mann–Whitney U for item-level hypothesis testing

Methods cont.



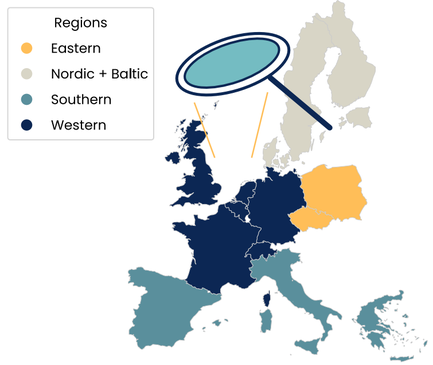


Figure 1: Our infrastructure readiness estimation approach

Results

- Responses across 118 distinct centres in 15 countries
- $\mathrm{IRS}_{\mathrm{Nordic+Baltic}} = 72.8\%$ vs. $\mathrm{IRS}_{\mathrm{Eastern}} = 34.5\%$ $\rightarrow \triangle\,\mathrm{IRS}_{\mathrm{max}} = 38.3\%$ $(p < 0.001)$
- $\mathrm{IRS}_{\mathrm{Western}} = 48.2\%$ $(p < 0.001)$
- $\mathrm{IRS}_{\mathrm{Southern}} = 47.2\%$ $(p < 0.001)$

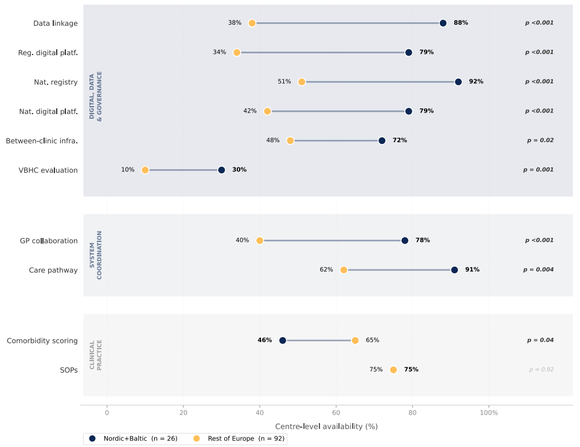


Figure 2: Item-level comparison of the regions "Nordic + Baltic" vs. the rest of Europe.

- Digital and data-related item availability differs between Nordic + Baltic and the rest of Europe, while clinical practice-related items present no major differences

Results cont.

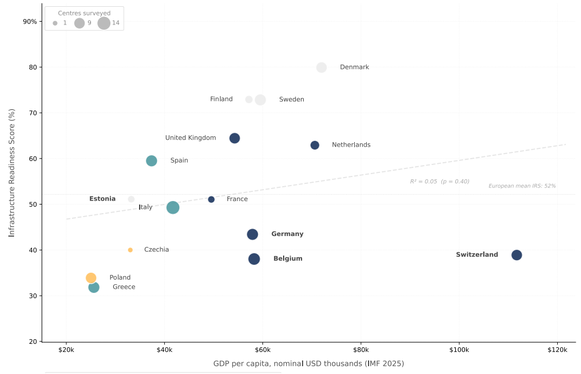


Figure 3: Comparison between GDP (2025) and the Infrastructure Readiness Score

Conclusion

- Variation concentrates in digital infrastructure & data governance, not clinical protocols
- National wealth does not predict readiness
- As EU Safe Hearts Plan & EHDS reach implementation, readiness mapping can corroborate digital investment over new clinical guidelines

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The accepted abstract reported an interim dataset with 106 responses (75 centres). This poster reports an updated dataset with 118 centres and updated analysis. Trends and conclusions are either preserved or reinforced.

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