



Inequity in Vaccine Access: Variation in Vaccine Decision-Making Processes Across Five Countries

Gregg E¹, Watts K¹, Graham C¹, Butler K¹, Mealing S¹

¹ York Health Economics Consortium

INTRODUCTION

- Quick and equitable access to vaccines is a global priority.
- The World Health Organisation has developed a guide for standardisation of economic evaluations of immunisation programmes as part of the Global Vaccine Action Plan's aim of achieving universal access to immunisation.¹
- However, vaccine assessment is complex and decision-making bodies and the processes used in different countries may vary.
- Consequently, variation still exists in vaccine schedules between countries. This heterogeneity further contributes to inequity of vaccine access.



Objective: This work aims to increase awareness of the key elements involved in vaccine assessments across five countries (England, France, Germany, Italy and the United States [US]).

METHODS

- Pragmatic desk-based research was conducted in June 2024 to explore the key stages involved in vaccine market access and how these differ across England, France, Germany, Italy and the US.
- Where available, data were extracted about the stakeholders involved in vaccine appraisal, the key assessment factors and value framework considered, and the number and type of vaccines included in the national vaccination schedule.

RESULTS

- National Immunisation Technical Advisory Groups (NITAGs) are key stakeholders in all five countries but play different roles (Figure 1). In some countries the NITAG is solely responsible for vaccine appraisal (England, Germany, US), but in other countries the vaccine appraisal is conducted by the health technology assessment (HTA) body (Italy), or both the NITAG and HTA body in parallel (France).
- There are key differences in the vaccine assessment by NITAGs and HTA bodies. For example, NITAGs consider public health impact, which is not generally considered by HTA bodies (Figure 2).²

Figure 1: NITAG and HTA bodies



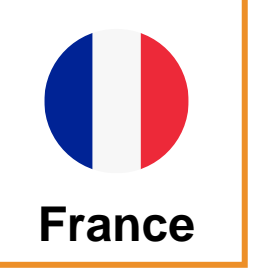
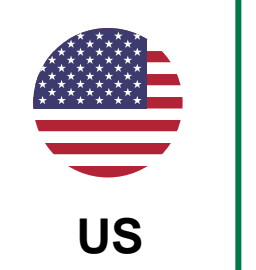

| | | | | | |
|--|----------------|-------------------|---|------------------------|------------------|
|  England | NITAG JCVI | HTA Body NICE |  Italy | NITAG Italian NITAG | HTA Body AIFA |
|  France | NITAG CTV | HTA Body HAS |  US | NITAG ACIP | HTA Body N/A |
|  Germany | NITAG STIKO | HTA Body IQWiG | <small>Abbreviations: ACIP, Advisory Committee on Immunization Practices; AIFA, Agenzia Italiana del Farmaco; CTV, Technical Vaccination Committee; HAS, Haute Autorité de Santé; IQWiG, Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen; HTA, health technology assessment; JCVI, Joint Committee on Vaccination and Immunisation; NICE, National Institute of Health and Care Excellence; NITAG, National Immunization Technical Advisory Group; STIKO, Standing Committee on Vaccination; US, United States</small> | | |

Figure 2: NITAG vs HTA body vaccine assessment

| Vaccine assessment by HTA bodies | Vaccine assessment by NITAGs |
|---|--|
| <ul style="list-style-type: none"> Public health impact not generally considered. | <ul style="list-style-type: none"> Public health impact (including transmission modelling) is often an important consideration. |
| <ul style="list-style-type: none"> Funding recommendations are based on clinical and economic aspects in most countries. | <ul style="list-style-type: none"> Funding recommendations are based on clinical and economic aspects in most countries. |
| <ul style="list-style-type: none"> No vaccine-specific decision-analysis framework in place in most countries, meaning vaccines are assessed similarly to therapeutic drugs. | <ul style="list-style-type: none"> Formal decision-analysis frameworks can be implemented. However, these are not consistently implemented across NITAGs. |

Figure 3: Value elements considered in vaccine appraisal

Formally considered in all countries:

Burden of disease
Disease impact on length of life
Disease impact on quality of life of patients



Formally considered in some countries:

Transmission value



Costs-offset to healthcare system

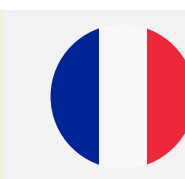


Formally considered in only one country:

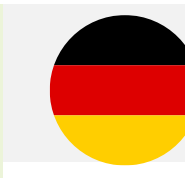
Disease impact on quality of life of carers



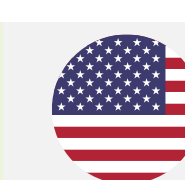
Value to other interventions



Social equity



Productivity of patients



Productivity of carers

| Key: | |
|---|---------|
|  | England |
|  | France |
|  | Germany |
|  | Italy |
|  | US |

- The formally assessed value elements considered in each country are shown in Figure 3.³ These elements may still be commonly considered informally. For example, transmission value is considered informally in Italy, social equity is considered informally in France and Italy, and productivity of both patients and carers are considered in Italy. Macroeconomic effects are not considered by any countries, but may be informally considered in the US, though this is uncommon.
- Consequently, the key vaccine assessment factors differ between countries, resulting in different vaccines in each country's vaccination schedule (Table 3).⁴⁻⁶
- There is also variation in the recommendations of vaccines. For example, Germany, Italy and the US recommend childhood vaccinations for varicella, with it being mandatory in Italy. In France and England varicella vaccinations are not included in the vaccine schedule.

Table 3: Vaccine schedules

| Number of diseases covered in vaccine schedules | England | France | Germany | Italy | US |
|---|---------|--------|---------|-------|----|
| | 18 | 17 | 17 | 18 | 20 |

CONCLUSIONS


- Several between-country differences in vaccine market access are identified; for example, the role of NITAGs, vaccine assessment factors, and value frameworks.
- Vaccine developers should consider these results when planning market access strategies to ensure rapid and equitable vaccine access across countries.

REFERENCES

- World Health Organisation. WHO guide for standardisation of economic evaluations of immunisation programmes, 2019 [online].
- Laigle et al. 2021. *Vaccine* 39(39): 5706-5718
- Bell et al. 2022. *Appl Health Econ Health Policy* 20:105-117
- House of Commons Library. UK vaccination policy [online]. 2022.
- EDDC. Vaccine scheduler [online]. 2024.
- Centres for Disease Control and Prevention. Immunization Schedules [online].

CONTACT US

 emily.gregg@york.ac.uk

 +44 1904 326475

   York Health Economics Consortium  www.yhec.co.uk

Providing Consultancy & Research in Health Economics