

Flu related insights

Qualitative – Quantitative Integrated Report

June 2023



Methodology and sample overview

	Qualitative Research						
	Market	GP/PCP	Nurse	Hygienist	Total		
	US	15	-	-	15		
	UK	6	6	-	12		
	France	8	-	-	8		
	Germany	8	-	-	8		
	Italy	4	-	6	10		
	Total	41	6	6	53		



60 minute virtual in-depth interviews with HCPs



Fieldwork 23rd February 2023 – 15th March 2023



Viewed fieldwork US (23rd Feb)

	Quantitative Research						
	Market	GP/PCP	Nurse	Hygienist	Total		
	US	100	-	-	100		
	UK	30	30	-	60		
	France	60	-	-	60		
	Germany	60	-	-	60		
	Italy	30	-	30	60		
	Total	280	30	30	340		



20 minute online survey with HCPs



Fieldwork 24th March 2023 – 19th April 2023

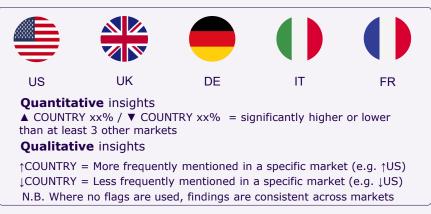
Screening criteria

- ✓ Specialists included a mix of general practitioners / primary care practitioners, nurses and hygienists
- ✓ Spend minimum of 80% of their time in direct patient care
- ✓ At least 30% of their patients 65+ [DE:60+]
- ✓ Involved with adult vaccines (recommend / administer / order / prescribe)

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Presentation key

Market differences



Icons



Abbreviations

RSV	Respiratory Syncytial Virus	<u>Market</u>	
		US	United States
		UK	United Kingdom
НСР	Healthcare professional	DE	Germany
SoC	Standard of care	IT	Italy
BoD	Burden of disease	FR	France
T2B	Top 2 Box		

Prompted awareness

I have heard of it and am very knowledgeable about it	
I have heard of it and have some knowledge about it	– aware
I have heard of it but have limited knowledge about it	aware
I have heard the name but that is all I know	
I have never heard of it	not



FLU related insights

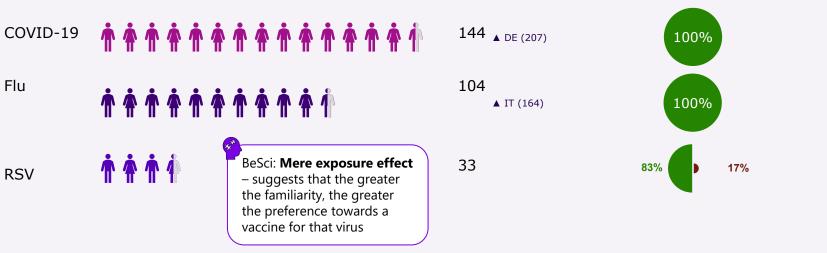
01 PERCEIVED BURDEN OF DISEASE





On average, HCPs claim to have seen 33 patients with RSV in the past year; claimed caseloads of COVID-19 and Flu on the other hand both exceed 100

Cases seen in the past year (not necessarily confirmed cases) (Mean no. of patients)







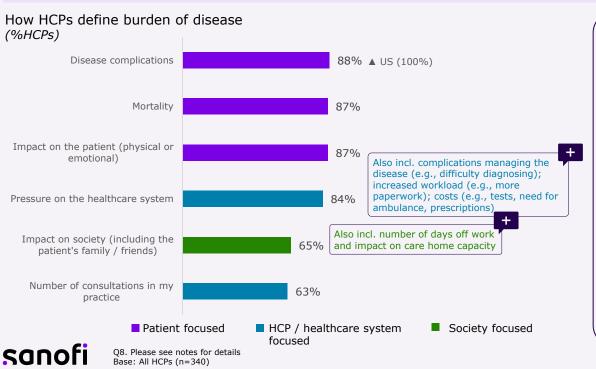
Proportion that have ever seen a case

(%HCPs)



The perceived prevalence and familiarity with respiratory viruses contributes to how burdensome HCPs perceive them to be and, therefore, plays a key role in determining which viruses are prioritised

HCPs ultimately prioritise respiratory viruses felt to be most burdensome (i.e., those that have the greatest impact of the disease on the patient and pressure on the healthcare system)



Determining what is a priority virus is ultimately decided by HCP familiarity and the perceived burden of disease HCP familiarity with / awareness of the disease HCP definition of BoD Extent to which each respiratory disease is prioritised

▲ / ▼ Significantly higher / lower than at least 3 other markets



Verbatim: Defining burden of disease



[I] would define it from the patient perspective and from the clinician perspective. From the patient's perspective, it's about hospitalization, suffering, risk of morbidity or death. From the HCP's perspective it's about managing disease and complications when they arise."



For the GP, burden of disease means severity of the disease which requires more challenging management, and it might lead to hospitalization."

GP, UK

GP, Italy



Burden of disease is absolutely massive, it's not just the person concerned but the family as well."



"Burden of disease can be defined as the effect on quality of life, number of hospitalized patients and the severity of illness."

Nurse, UK

GP, US

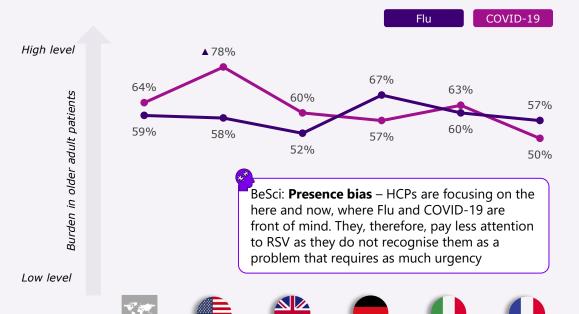




Flu and COVID-19 are considered priority viruses to protect against in older adult patients due to their high level of burden

Perceived burden of respiratory infectious diseases which affect older adults

(Top 2 Box – 6-7 selected on a 7-point scale, %HCPs)



Flu and COVID-19 both cover many aspects of burden of disease:



- High workload
- High number of hospitalizations
- Large cost to the healthcare system
- Severe disease and symptoms
- Negative impact on patient's OoL
- Can require time off work
- Impacts caregiver / family / care home

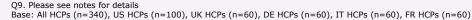
Perception of Flu and COVID-19 also impacted by HCP familiarity - frequently referred to e.g., in the news, by friends and family, at GP practice / hospital



COVID-19 higher burden in US versus Flu - perceived as resulting in more severe cases (esp. long-term), and puts most pressure on healthcare system







02 HCP PERCEIVED NEED TO VACCINATE

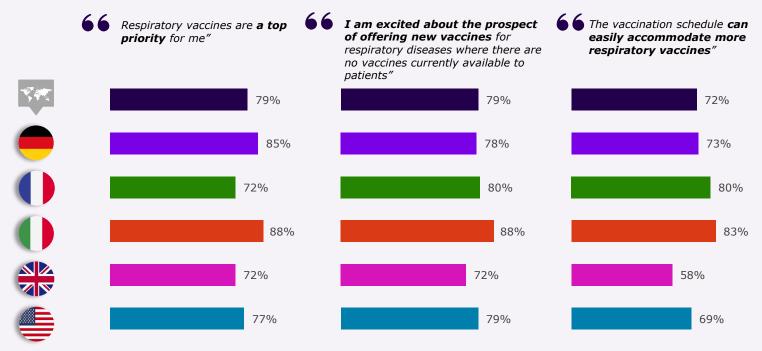




In principle, HCPs are open to and excited about the possibility of new respiratory vaccines in the older adult population

Attitudes towards respiratory vaccines (Bottom 2 Box – 1-2 on a 6-point scale, %HCPs)

Asked at a high level and did not include details about the frequency or method of administering the vaccines.







However, adding a new vaccine to the current older adult vaccine schedule would need to be carefully considered, as some HCPs feel unable to recommend all of them. Perceived patient acceptance also remains a barrier

The older adult vaccine schedule is potentially crowded and already tough to manage – lots of vaccines out there that HCPs need to choose from / decide which to prioritise for each individual patient

HCPs logistically cannot vaccinate everyone, nor can they get patients to agree to vaccinate against everything – HCPs need to be clever in what they select

HCPs need to consider:

- The **number** and type of existing vaccines
- When (how often each vaccine needs to take place / whether can be administer on the same day)
- How (logistics regarding administration / storage)



"When we think about adding vaccines to our regiment it is an exhausting battle to try to vaccinate people for COVID and then now trying to create an uptake for people getting vaccinated."

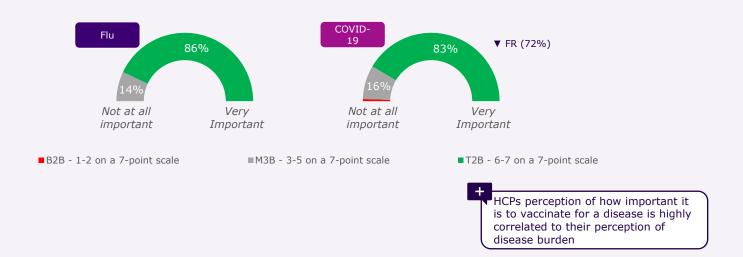
GP, US





Majority of HCPs believes that vaccinating for Flu and Covid-19 is very important. Covid-19 vaccination is perceived as less important by HCPs in France.

Perceived importance of vaccinating older adults for respiratory infectious diseases (%HCPs)

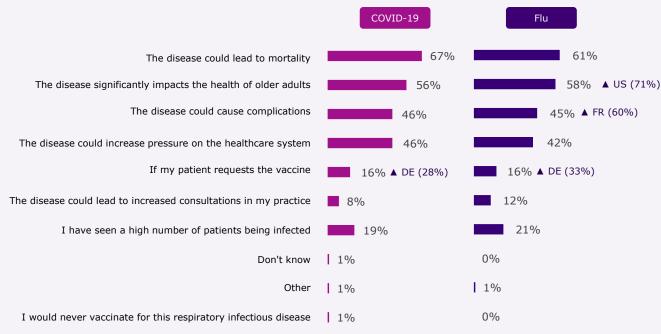






Perceived impact on patients and pressure on healthcare systems are top drivers for HCPs to vaccinate for respiratory viruses

Top 3 reasons for vaccinating against respiratory diseases (%HCPs)

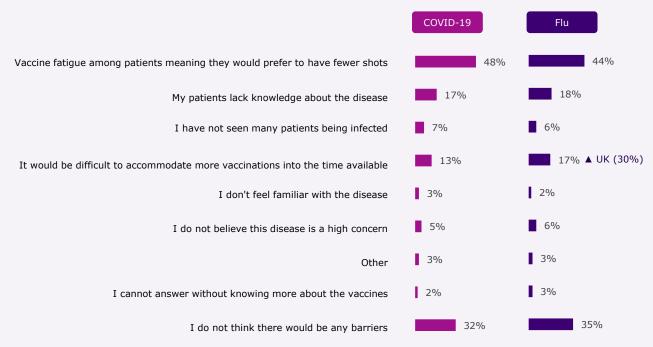






Patient preference to have fewer shots due to vaccine fatigue is the main barrier to vaccinating against the most burdensome viruses Covid-19 and Flu

Top 3 barriers to vaccinating against respiratory diseases (%HCPs)





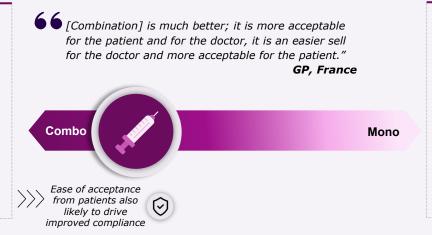


Of the primary drivers to vaccine choice, HCPs are generally united on their preference for combo vaccines (versus mono) due to the ease of use associated with combinations



Overall preference for combo vaccines:

- Fewer injections for the same amount of cover
- Convenient for both the HCP and patient as easy to:
 - Schedule and organize
 - Administer (for patient and HCP)



Mono vaccines preferred for small minority:

- Sometimes preferred by patients (e.g., concerns with side effects with combos) allows HCPs to provide them with individual options
- Provides flexibility for HCPs able to outsource vaccines rather than administering in their own office



Important to also consider what disease protection is included in the combination:

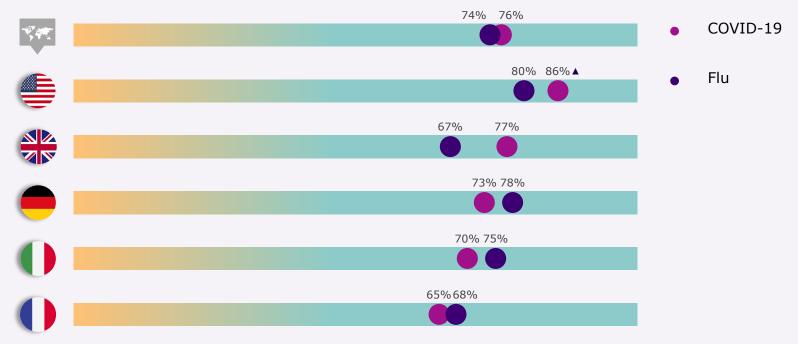
- Some preference for COVID-19 to be as a standalone due to shorter duration of protection and more controversial in terms of patient acceptance*
- Ingredients in some vaccines may impact uptake for some patients (e.g., single mention gelatin UK)





HCPs in US and UK believe their patients are less likely to prioritize Flu vaccination over Covid one.

Perception of how older adult patients will prioritise vaccinations against diseases (%HCPs Top 2 Box – 6-7 on 7-point scale)

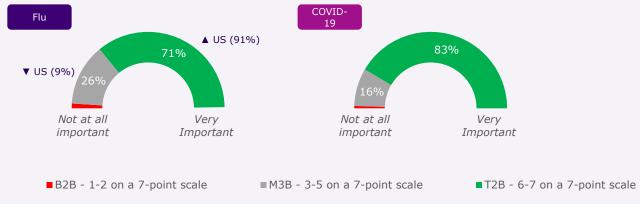






The idea of testing for Covid-19 among older patients is viewed to be more important than for Flu

Perceived importance of potentially testing older adults for respiratory infectious diseases (%HCPs)







Having COVID-19 component in combo vaccine deter a minority of patients as it is seen as more controversial. The option to have COVID-19 as a standalone for these patients would therefore be preferable

- Receive pushback from some patients about COVID-19 (↑FR)
 - Concerns / fear about COVID-19 vaccines versus other vaccines
 - Worried about / experience of side effects COVID-19 vaccines
 - Min. brand / MOA preferences (e.g. for mRNA / against AZ (UK))



- Some patients are already anticipating / expecting a COVID-19 combination vaccine (↑UK, DE)
- Will be easier to have Flu + COVID-19 in one go

- Logistically COVID-19 is on a separate schedule
 - Boosters may have been missed / may not last full year
 - Unclear where COVID-19 seasonality will settle
 - HCPs themselves are also thinking of it separately
 - Expectation that manufacturers need more time to optimise it (in terms of MOA, variant inclusion, side effects etc.) before including in combinations

Reducing overall number of vaccines is appealing for HCPs

Are wanting / requesting a combo Flu-COVID-19 vaccine as will be easier to have it all in one (for compliance and practice logistics)



Verbatim



[RSV-Flu-COVID] To date, in my opinion, it could generate some perplexity... A good proportion of my patients did not do the 4th [COVID-19] dose so I do not know if they will be favourable to this triple combination."



Patients this year were quite surprised we didn't have a combined Flu and COVID vaccine."

GP, IT

GP, UK



Standalone COVID probably still beneficial as likely the first one to be declined by patients."



[RSV-Flu-COVID] It depends which COVID vaccine is in it. If it is a vaccine that is known, and which was accepted during the COVID pandemic the cursor will be in a similar place. If it is a vaccine with a bad reputation, it will change the cursor position (to the left)."

GP, UK

GP, FR



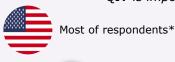


In US, DE & UK, relative benefit versus standard dose QIV is a differentiator for some physicians, however not a main driver to use

Two main groups of physicians emerge regarding importance of relative benefit versus standard dose QIV:

I want my patient to have the **highest protection available** (and relative benefit versus standard dose

QIV is important for this)





- Give older patients (65+ / DE: 60+) relative benefit versus standard dose QIV already – don't want to lose that level of protection
- Unhappy with the idea of reducing efficacy of a top priority vaccine
- For HCPs already open to breadth of protection from scenario Y (Sanofi combo), the additional Flu efficacy pulls them closer towards this (versus scenario X (competitor combo))

ection ord dose km

More clarity needed around meaning of relative benefit versus standard dose QIV so can interpret according to their SoC. Overall accepting of equivocal efficacy to the QIV Flu vaccine – would not want Flu efficacy less than what they are administering currently

I want my patient to have the vaccine, and I know that **less vaccines are preferrable**





Some respondents*



respondents*

- Disappointed in lower efficacy but on balance will trade off in order to gain RSV protection in a 2-in-1
- Question what impact relative benefit versus standard dose QIV actually has (e.g. on severity / hospitalisation / death)
- Some are interested to see data in order to make a decision between combination QIV versus standalone relative benefit



Verbatim: Reactions to flu efficacy



65 years and older need a high dose of Flu vaccine, it's a deal breaker for me and CDC recommends high dose as well."



I do prefer [flu efficacy] being more beneficial [as in Sanofi combo], but it's offset [in competitor combo] with the combination with the RSV. So, it's swings and roundabouts really."

GP, US

GP, UK



I can accept slightly lower efficacy around standard Flu vaccine, if that means covering more viruses possible."



Similar efficacy to QIV is good; if it was inferior, I would look for another vaccine."

Nurse, UK

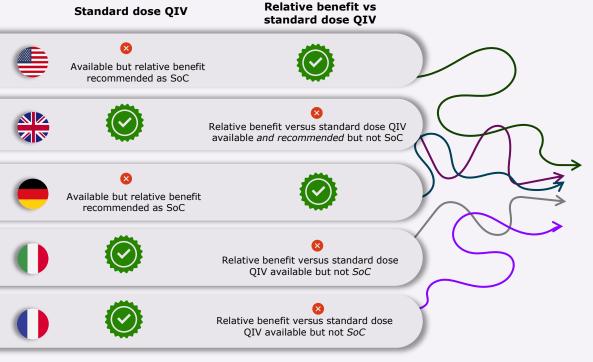
GP, France





Flu is a priority disease to protect against however SoC in each market sets the baseline for HCPs expectations for Flu efficacy





SoC varies in each market

Overall preference for relative benefit versus standard dose QIV, however efficacy similar to standard dose QIV is considered acceptable in markets where this is SoC

Much more pushback in the US for standard dose QIV as this feels like a step backwards compared to what they have had for many years





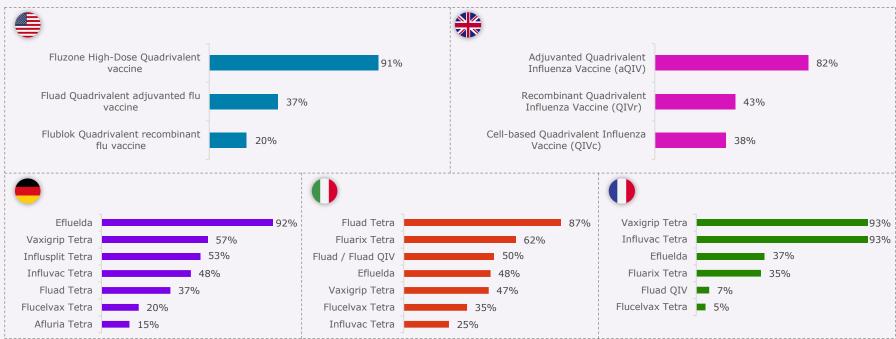
*More detail covered in slide 50





Flu vaccines recommended by HCPs in each market

Influenza vaccines usually prescribed / recommended to older adult patients (%HCPs in each market)





Thank you

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