Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence
Awareness of vaccines and the health benefits of getting vaccinated	Apaydin 2018, Fontenot 2016, Gerend 2019,	Moderate concerns	No or very minor concerns	No or very minor concerns	No or very minor concerns	Moderate confidence
Participants acknowledged the physical and psychological health	Grace 2018, Kesten 2019, Koskan 2018,	(small sample size reported in 6 of the studies which	(data is of direct relevance and is applicable to the	(there is a good fit between the	(data is sufficiently rich	This finding was graded as moderate

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence
benefits of vaccination in general and HPV vaccination and were enthusiastic about the ability to protect both themselves and their partner(s). Some men expressed the positive benefits to vaccination, including reducing their anxieties around the risk of anal cancer. They also mentioned feeling 'safer', having 'one less thing to worry about' and feeling better by not 'spreading' a sexually transmitted infection (STI)"	Nadarzynki 2017, Wheldon 2017	might be due to sampling method.)	context specified in the review question).	studies and the review finding)	and comes from all 8 studies)	confidence because of moderate concerns regarding methodological limitations
Participants noted the lack of MSM-specific sexual health and relationship information provided in the sexual health education curriculum in schools and suggested including information about the vaccine for YMSM in primary care. The suggested that HPV education should be more widespread and more inclusive of all sexes, and believed that better understanding of the benefits and side effects of the vaccine would encourage uptake.						

Supporting statements:

"Yeah like I care about my health, but I also care about other people's health too and I don't want anyone else to get infected or have to go through with something like that"

	Studies contributing to					CERQual assessment of
	the review	Methodological				confidence in the
Summary of review finding	finding	limitations	Relevance	Coherence	Adequacy	evidence

"I'm not going to say like get rid of worry because you still have to...it's your sexual health, but it would be safer in a sense (...) I'm better protected – I think would be a better way of putting it. So, I think my own health would encourage me more [to ask or accept the HPV vaccine]. I'd rather be protected than not protected"

"Not getting HPV and not developing any of the cancers or anything related to it"

"Don't have to worry as much. One of the few STIs have vaccine for-click that one off the list"

"I'm looking at HPV vaccine I'm thinking that it will prevent me from getting this [virus]. I don't think I've ever had a doctor speak of it either. But I would be willing to take it if it's going to prevent me from getting sick"

"I would be less susceptible to anal cancer at least from HPV"

"It would be one less thing to worry about"

"I'm definitely pro vaccine"

Interactions with health care practitioners (HCPs)	Fontenot 2016, Gerend 2019, Grace 2018,	Moderate concerns	No or very minor concerns	No or very minor concerns	No or very minor concerns	Moderate confidence
Participants perceived healthcare providers and doctors to be the most trusted source of information, and their opinions as well as recommendations would substantially influence their decision to obtain the vaccine Overall, participants reported that provider recommendation was the most significant interpersonal influence. This was linked with the importance of being able to discuss sexual activity with healthcare professionals and the approachability of healthcare professionals in this. Conversely, participants reported	Jaiswal 2020, Kesten 2019, Koskan 2018, Nadarzynki 2017, Wheldon 2017	(small sample size reported in 6 of the studies which might be due to sampling method.)	(data is of direct relevance and is applicable to the context specified in the review question).	(there is a good fit between the studies and the review finding)	(data is sufficiently rich and comes from 7 of the 8 included studies)	This finding was graded as moderate confidence because of moderate concerns regarding methodological limitations
lack of communication from						

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence
healthcare providers as a barrier to HPV vaccination. Many reported minimal, if any, communication, and those that were offered the vaccine reported scant communication about it and inadequate support or follow-up to ensure vaccine completion.						

Supporting statements:

"I think I'd be more likely to accept it if it were offered than I would actively request it. I think because if it was, if it was recommended to you it would be coming from a trusted source"

"It was the doctor's recommendation. I honestly wouldn't have thought about it had he not recommended it"

"As long as there was someone professional telling me what's it about, what's it going to do, and what it could do if it goes wrong"

"Telling your family GP you're gay before you've told your family would be a big no I think because the GP might go back and tell your parents and then out you"

"If my doctor brings it to my attention that I need to get a vaccine for something, I will take it. I know it's in my best interest"

"Now knowing all the cancers, it causes, which I wasn't aware of before it seems like more of a reason to get it"

"No doctor has ever brought [HPV] up to me. And I've always had to advocate for this. I remember when it came out, and it was just women getting it, I read somewhere like gay men need to get this because you can get anal cancer, so I went to my doctor, and she was like "Oh I guess that's technically correct," and I was like "Okay so vaccinate me," and she was like "Well, your insurance isn't gonna cover it." So I ended up getting it, but I had to pay for it out of pocket."

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence
Support from friends and family	Apaydin 2018, Fontenot 2016,	Moderate concerns	No or very minor concerns	No or very minor concerns	Serious concerns	Very low confidence
Participants highlighted that most people in their lives would be supportive of their decision to get		(small sample size reported in	(data is of direct relevance and is	(there is a good fit between the		

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence
vaccinated; however, awareness and knowledge about the vaccine through their social networks were primarily limited to female friends and siblings. Participants with unsupportive referents typically mentioned their parents (notably their father) or extended family members.		included studies which might be due to sampling method.)	applicable to the context specified in the review question).	studies and the review finding)	(data is limited and comes from 2 studies)	This finding was graded as low confidence because of moderate concerns regarding methodological limitations and adequacy of data

Supporting statements:

"I have a very good relationship with my entire family. They all know I'm gay. No one cares one bit. I'm very fortunate. So if I were to say I was getting the Gardasil vaccine, they would be (very supportive)"

"Maybe my dad. Because he's just ignorant with regard to sexuality and vaccines and stuff like that. He's kind of a anti-government conspiracies person, so I don't really have a good relationship with him"

"I know [about HPV vaccine] because my sister got it"

Making vaccine part of other clinical interactions	Fontenot 2016, Gerend 2019, Nadarzynki 2017	Moderate concerns	No or very minor concerns	No or very minor concerns	Moderate concerns	Low confidence
Participants described wanting to combine HPV vaccination with other types of visits like annual physical examinations and other STI tests. They gave examples of their routine HIV tests or sexual health screening and how HPV vaccination could have been incorporated into those visits.		(small sample size reported in 2 out the 3 studies included, which might be due to sampling method)	(data is of direct relevance and is applicable to the context specified in the review question).	(there is a good fit between the studies and the review finding)	(data is moderately rich and comes from 3 studies)	This finding was graded as low confidence because of moderate concerns regarding methodological limitations and adequacy of data

Supporting statements:

"Well, it was offered right there while I was getting the physical done. So I didn't even have to make a special trip or anything"

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Relevance	Coherence	Adequacy	CERQual assessment of confidence in the evidence	
"If they start routinely testing for this at GUM clinics, and you're negative and not carrying it, then it should be suggested to you at the same point [like] they would suggest a hepatitis A and C vaccine"							
Mobile applications	Fontenot, 2016	Moderate concerns	No or very minor concerns	No or very minor concerns	Very serious concerns	Very low confidence	
Participants suggested the use of mobile applications for booking appointments, creating a reminder system, keep track of health history. They were of the opinion that flexibility in scheduling and		(limited small sample size reported, which might be due to sampling method)	(data is of direct relevance and is applicable to the context specified in the review	(there is a good fit between the studies and the review finding)	(data is limited and comes from one study)	This finding was graded as very low confidence because of	

question).

Supporting statements:

app-based reminder systems

would facilitate 3-dose completion.

"People are uncomfortable having to make phone calls... it's a lot easier to just do something on your phone, like an appointment confirmation, so that you can go in without having to talk [to someone] or feel uncomfortable disclosing things [on the phone]"

moderate concerns

regarding methodological limitations and very serious concerns regarding adequacy

of data