Dear colleague,

We are currently evaluating the use and impact of the Firstline CVMA antimicrobial stewardship smartphone application incorporating the Canadian Veterinary Medical Association (CVMA) Guidelines for Veterinary Antimicrobial Use. We are not only interested in the effectiveness of the app, but also in your experiences while using the app.

We would appreciate if you could please answer questions about any potential **barriers** you may have encountered while using the Firstline CVMA app. Knowing the **barriers** that - even in a small degree - hindered you, enables us to generate ideas for the planning of effective solutions for future users. If, for example, many of you agree that 'Using the app is something I easily forget to do', we may design reminders to remove the barrier for the benefit of for future users.

Please read the questions carefully and respond on a six-point Likert scale as to whether you agree or not with the statement. A separate option is provided in case you have no opinion. As we are interested in barriers, most statements are negatively framed which may describe the opposite of what you have experienced. At the end of the survey, there are three additional questions that will help us to evaluate overall user satisfaction.

Link to the questionnaire: https://survey.ucalgary.ca/jfe/form/SV_0VwcVERavtv8Zq6

Thank you.

Important: please read this first!

Fill in the questions based on your own experience. There are no right or wrong answers.

How much time does filling out the questionnaire take?

Filling out the questionnaire will take 15 minutes at most.

How to fill in the questionnaire?

Please tick the box that best represents your opinion, from 'Completely agree' to 'Completely disagree'. If you don't have an opinion, you can tick the box 'I don't know'.

What will we do with your information?

The data generated will be used for the study and analyzed anonymously. Only members of the study group will see your answers, no one else.

Thank you for your participation!

	Demographics
Plea	ase select your gender .
	Male
	Female
	None of these apply to me. I identify as
	Prefer not to answer

Please select your age range.

25 and under
26 - 35
36 - 45
46 - 55
56 and over
Prefer not to answer

Please describe your current status.

Veterinarian
Veterinary Technician/Technologist
Veterinary Student
Other (please specify)

Please select the species for which the app was used (check all the apply):						
Aquaculture						
Bovine – Beef & Calf						
Bovine – Dairy > 20 months						
Canine						
Equine						
Feline						
Poultry						
Small Ruminants						
Swine						

Barriers regarding the device (e.g., Smartphone, iPad, etc) that contains the app

_	-			-	•	No opinion
0	Ο	0	0	0	0	О
True				Fa	ılse	
True				Fa	ulse	0
True				Fa	ulse	Ο
-	•			-	-	No opinion
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	Ο	0	0
0	0	0	0	Ο	0	0
_	Completely Agree			Completely Disagree		No opinion
0	0	0	0	Ο	0	0
0	0	0	0	Ο	0	0
	Agree O True True True O True O	True True <	AgreeOOTrue \cdot True \cdot True \cdot True \cdot OO <th>Agree Image: Normal Sector Secto</th> <th>AgreeDisa$0$$0$$0$$0$$True$<math>Competitive$Fa$$True$<math>Competitive<math>Competitive0</math></math></math></th> <th>AgreeDisagreeOOOOTrueFalseTrueFalseTrueFalseTrueFalseOOO<</th>	Agree Image: Normal Sector Secto	AgreeDisa 0 0 0 0 $True$ $CompetitiveFaTrueCompetitiveCompetitive00$	AgreeDisagreeOOOOTrueFalseTrueFalseTrueFalseTrueFalseOOO<

11. I do not have enough knowledge regarding how to use the Firstline CVMA smartphone app	0	0	0	0	0	0	0
12. I lack confidence in my ability to correctly use the Firstline CVMA app	0	0	0	0	0	0	0
13. There is insufficient assistance for clinicians to use the Firstline CVMA app	0	0	0	0	0	0	0
14. It is unclear to me when to use the Firstline CVMA app	0	0	0	0	0	0	0
15. Using the Firstline CVMA app is something I easily forget	0	0	0	0	0	0	0
Barriers regarding efficacy							
	Complet Agree	tely			Comple Disagr		No opinion
16. The Firstline CVMA app is only useful when there is no access to a computer	0	0	0	0	0	0	0
17. The Firstline CVMA app is redundant as I usually work on a computer	0	0	0	0	0	0	Ο
18. Using two devices (this app and a computer) to prescribe antimicrobial therapy is impractical	0	0	0	0	0	0	0
19. Using the Firstline CVMA app disrupts my workflow	0	0	0	0	0	0	0
20. I already have other tools/sources/apps to get an antimicrobial advice	0	0	0	0	0	0	0
21. I rarely prescribe antimicrobials	0	0	0	0	0	0	0
Barriers regarding expected outcomes							
	Completely Agree				Completely Disagree		No opinion
22. Use of the Firstline CVMA app will not improve how I prescribe antimicrobials	0	0	0	0	0	0	0
23. Use of the Firstline CVMA app will not improve how my practice	0	0	0	0	0	0	0

24. Use of the Firstline CVMA app will decrease my knowledge of appropriate antimicrobial use	0	0	0	0	0	0	0
25. With so many different apps available for antimicrobial stewardship, I doubt that the Firstline CVMA app will serve its purpose	0	0	0	0	0	0	0
26. App use can decrease animal safety by increasing medical errors	0	0	0	0	0	0	0
Barriers regarding social norms							
	Complet Agree	tely			Comple Disagr	•	No opinion
27. The Firstline CVMA app restricts the autonomy of veterinarians	0	0	0	0	0	0	0
28. Using the Firstline CVMA app is an obstacle to me connecting with the animal and client	0	0	0	0	0	0	0
29. Using the Firstline CVMA app is an obstacle to me connecting with my colleagues	0	0	0	0	0	0	0
30. Clients are negative towards use of the Firstline CVMA app by veterinarians	0	0	0	0	0	0	0
31. Use of the Firstline CVMA app adjacent to colleagues is unprofessional	0	0	0	0	0	0	Ο
32. Use of the Firstline CVMA app adjacent to clients is unprofessional	0	0	0	0	0	0	0
33. Clients think veterinarians don't know how to handle the situation when they check the Firstline CVMA app	0	0	0	0	0	0	Ο
34. Veterinary microbiologists and/or other specialists think I should not use the Firstline CVMA app	0	0	0	0	0	0	0
35. Colleagues from my department/practice think I should not use the Firstline CVMA app	0	0	0	Ο	0	0	Ο
36. Using the Firstline CVMA app during discussions with colleagues is impolite	0	0	0	0	0	0	0
37. Using the Firstline CVMA app leads to conflict between colleagues due to difference of opinion over antimicrobial treatment	0	0	0	0	0	0	0
38.	0	0	0	0	0	0	0

Overall satisfaction					
39. How would you rate the usefulness of the Firstline CVMA app (5 = very useful, 1 = not useful)	5	4	3	2	1
40. I would recommend the Firstline CVMA app to a colleague and/or others in the veterinary community	Yes		No	No	opinion
41. Please provide any additional comments:					