PROGRAM PRACTICES
SUBMISSION FORM

IMMUNIZATION PROGRAM PRACTICES INFORMATION

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Program:	Washington State Department of Health, Office of Immunization and Child Profile

Does AIM have permission to share this information on the publicly accessible AIM website? *All materials submitted will be posted on the AIM website.*	X Yes __No

BULL'S-EYE AWARD

The **Bulls-Eye Award for Innovation and Excellence in Immunization** recognizes immunization strategies that "hit their mark" and achieve immunization goals with special consideration for practices that are innovative and easily replicated. Each year, AIM awards three programs the Bull's-Eye Award. Only those practices with activities that are **currently ongoing** or **concluded during 2016** (including implementation, follow-up, and/or evaluation activities) will be considered for the award.

Would you like for this submission to be considered for the 2017 AIM Bull's- Eye Award?	X Yes __No

PROGRAM PRACTICE INFORMATION

Title
Washington Immunization Information System (IIS) Training and Outreach

Keywords (up to 5 main terms/phrases that describe the practice)
Communication and outreach to IIS users, using IIS data to reach out to healthcare providers, electronic communication, IIS user training system

Is this practice Evidence / Guideline Based? *(if yes, please include reference below)* _X_Yes   __No

Reference: U.S. Department of Education. September 2010. Evaluation of Evidence-Based Practices in Online Learning https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Background (scope of the immunization need or problem)
In June 2015, Washington transitioned all IIS work to a small team of Washington State Department of Health (DOH) staff. Prior to this transition, most IIS work was contracted to our largest county health department. This transition allowed Washington's new IIS staff to redesign our IIS user training and communication strategies. Washington IIS training staff was able to create standardized processes and regular electronic

communication to IIS users. This opportunity has been invaluable and allowed us to better understand the needs of Washington's IIS end users.

Program Practice Description

Describe the practice goals and objectives.
The goals for this practice were to begin communicating directly with all IIS users, assess their training needs, and design effective and easily accessible trainings for IIS users in Washington.

What were the main implementation activities?
Most IIS users in Washington have an email address associated with their IIS account and we were lacking in direct communication to users, so we exported all user email addresses and started sending them a monthly electronic newsletter through a third party contact management vendor. The newsletter contains important updates about the system, new training materials and opportunities, and resources related to immunization and IIS work. The newsletter has also been instrumental in assisting Washington with an IIS user inactivation project by helping to identify the amount of accounts that were not being accessed. Accounts not accessed for a certain length of time were inactivated allowing us to clean up user accounts, improve IIS security, and more accurately measure newsletter readership.

In addition, we partnered with our IIS vendor to implement a learning management system that is currently being piloted. Washington worked closely with our IIS vendor to establish a list of requirements needed in order to implement a learning management system that would be useful to our IIS staff and end users. The IIS learning management system will be accessible to all IIS users through a single sign on process by late 2017. The learning management system is also available to all of the states who use Scientific Technologies Corporation (STC) IIS products.

In Fall 2016, we also worked with STC and Tennessee to establish a training and education consortium. All states using the STC products are invited to participate in this consortium to streamline IIS training efforts. The Consortium meets monthly and is co-facilitated by staff from STC, Tennessee, and Washington. This group is another way we are working to improve user training and education.

Where and when did the practice take place?
Washington began sending regular monthly electronic newsletters to all IIS users with an email address in their account in November 2015. This practice continued for the past year and we have received very positive feedback from users. The newsletter is currently opened by over 3,000 IIS users across Washington each month.

The learning management system was first piloted in October 2016 with our state IIS users and will go through a second pilot phase with external users before the end of 2016. The goal is to implement the learning management system and single sign on process for all IIS users in late 2017.

How much staff time was involved?
We did not formally track the staff time involved in these activities, but have supplied estimates of the staff time involved.

Monthly e-Newsletter
Initial setup with third party vendor and designing newsletter template: 20 hours
Monthly newsletter development, review & dissemination: 10 hours

Learning Management System (LMS)

This is an estimate of time spent so far to implement an LMS. There will be ongoing staff time required for course development and LMS maintenance.

Initial research on available LMS products: 40 hours
Developing LMS requirements: 10 hours
Initial development & installation with vendor: 100 hours
LMS design & initial course development: 120 hours
Establishing & implementing pilot testing process: 50 hours

What were the costs associated with the activity? What was the funding source?

Monthly e-Newsletter
- Third party vendor: $1,018 (funding sources: 317, State, and Other)
- Staff time: $7,000 (funding sources: VFC Operations, 317, PPHF AFIX)

LMS
These estimates cover initial setup & design (not ongoing course development & maintenance):
- One time cost for LMS installation and configuration: $46,000 (funding sources: 317 Operations and PPHF AFIX)
- Staff time: $17,000 (funding sources: VFC Operations, 317, PPHF AFIX)

Identify the target population that the practice affected.

The target population impacted is Washington State IIS users including healthcare providers, local health jurisdictions, school users, pharmacies, and other interested subscribers.

If partners were involved, include who was involved, and how.

Washington uses a third party vendor to manage the monthly email communication and distribution list, but the material sent is created each month by Washington State IIS training staff. The partner involved with the learning management system is our vendor, Scientific Technologies Corporation (STC). This partnership has been instrumental in helping us implement an e-learning platform accessible by all IIS users. We have also worked with all of the other states who use the STC IIS product through the Training & Education Consortium.

Timeframe of Implementation (Start and Stop Dates)

- **IIS monthly e-newsletter**: started November 2015 and is ongoing each month.

- **IIS learning management system**: started research late 2015 and is ongoing with a goal to roll out statewide by the end of 2017.

- **Multi-state IIS Training & Education Consortium**: initiated late 2016

Evaluation Data: Was the implementation and/or effectiveness of this practice assessed? *(if "yes" or "limited," provide any data that is available)*	_Yes __No X_Limited

Data:

IIS e-Newsletter Survey Results

Overall, IIS users were either satisfied or very satisfied with the format of the IIS newsletter, felt the information included was either relevant or somewhat relevant to their immunization work and indicated they preferred to receive the newsletter monthly.

1. How often would you like to receive this newsletter?

	Number of Response(s)	Response Ratio
Weekly	1	2.7%
Every two weeks	2	5.4%
Monthly	22	59.4%
Quarterly	10	27.0%
Semi-annually	0	0.0%
Annually	2	5.4%
No Responses	0	0.0%
Total	**37**	**100%**

2. What is your overall satisfaction with the format of this newsletter?

	Number of Response(s)	Response Ratio
Very satisfied	19	51.3%
Somewhat satisfied	5	13.5%
Neutral	11	29.7%
Somewhat dissatisfied	1	2.7%
Very dissatisfied	1	2.7%
No Responses	0	0.0%
Total	**37**	**100%**

3. Rate your satisfaction with the following features of this email.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Very Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Very Satisfied
Length	2	2	6	6	19
	6%	6%	17%	17%	54%

Design	2 6%	3 9%	8 23%	6 17%	16 46%
Content	2 6%	1 3%	8 23%	5 14%	19 54%
Images	4 11%	0 0%	8 23%	6 17%	17 49%
Color	2 6%	0 0%	10 29%	5 14%	18 51%
Layout	3 9%	1 3%	8 24%	5 15%	16 48%

9 Comment(s)

4. How relevant do you find the information provided in this email?

	Number of Response(s)	Response Ratio
Very relevant	11	29.7%
Somewhat relevant	15	40.5%
Neutral	9	24.3%
Somewhat irrelevant	2	5.4%
Very irrelevant	0	0.0%
No Responses	0	0.0%
Total	37	100%

5. What can we do to improve?

12 Response(s)

6. What information would you like to see in this newsletter in the future? (select all that apply)

	Number of Response(s)	Response Ratio
Updates about changes in the IIS	29	80.5%
Tips about how to use the IIS	30	83.3%
How to find resources, job aids, tools	16	44.4%
DOH staff updates, contacts	19	52.7%

	Number of Response(s)	Response Ratio
Success stories of organizations using the IIS for quality improvement	14	38.8%
Tips on data quality	14	38.8%
Tips for HL7 interfaces	15	41.6%
Other	3	8.3%
Total	36	100%

LMS (IIS Training System) Pilot Survey

On average, pilot testers reported the structure and navigation of the LMS as somewhat easy or very easy to use. For the pilot, we asked testers to complete various tasks as another way to assess ease of use. The majority of the testers were able to complete those tasks successfully (e.g. searching for courses, watching training videos, completing quizzes).

1. Was it easy to login to the IIS Training System through the single sign on application?

	Number of Response(s)	Response Ratio
Yes	8	100.0%
No	0	0.0%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
4 Comment(s)		

2. Could you navigate to the IIS homepage from the tool bar at the top of the IIS Training System homepage?

	Number of Response(s)	Response Ratio
Yes	8	100.0%
No	0	0.0%
Can't find it	0	0.0%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
4 Comment(s)		

3. Were you able to navigate to the calendar?

	Number of Response(s)	Response Ratio
Yes	5	62.5%
No	1	12.5%
Other	2	25.0%
No Responses	0	0.0%
Total	8	100%
5 Comment(s)		

4. Were you able to register (or at least see the registration link) for a live webinar posted to the calendar?

	Number of Response(s)	Response Ratio
Yes	5	62.5%
No	3	37.5%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
5 Comment(s)		

5. Were you able to navigate to the IIS Training System News and read the latest IIS Newsletter?

	Number of Response(s)	Response Ratio
Yes	8	100.0%
No	0	0.0%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
1 Comment(s)		

6. Were you able to get more information about the programs in the banner at the top of the homepage of the IIS Training System?

	Number of Response(s)	Response Ratio
Yes	4	50.0%
No	2	25.0%
Other	2	25.0%
No Responses	0	0.0%
Total	8	100%
5 Comment(s)		

7. Use the search feature on the homepage to find a course. Try typing in keywords like "Reporting", "Basics" or "School" . Did the courses display as you would expect in the search results?

	Number of Response(s)	Response Ratio
Yes	6	75.0%
No	0	0.0%
Other	2	25.0%
No Responses	0	0.0%
Total	8	100%
5 Comment(s)		

8. Rate how easy it was to find the Course Catalog.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Difficult	Somewhat difficult	Neutral	Somewhat easy	Very Easy
	0	0	0	2	6
	0%	0%	0%	25%	75%
2 Comment(s)					

9. Do the categories in the Course Catalog make sense as they are currently displayed?

	Number of Response(s)	Response Ratio
Yes	7	87.5%
No	0	0.0%
Other	1	12.5%
No Responses	0	0.0%
Total	8	100%
2 Comment(s)		

10. What categories may be missing from the Course Catalog?

5 Response(s)

11. Did you find the courses you expected to see within the different categories?

	Number of Response(s)	Response Ratio
Yes	6	75.0%
No	0	0.0%
Other	1	12.5%
No Responses	1	12.5%
Total	8	100%
2 Comment(s)		

12. Rate how easy it was to navigate to the Available Courses section from the IIS Training System homepage.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Difficult	Somewhat Difficult	Neutral	Some what Easy	Easy
	1	0	1	3	3
	13%	0%	13%	38%	38%
3 Comment(s)					

13. Would you like to see all available courses with icons in the Available Courses section of the home page, or is it enough to see only a subset of the Available Courses?

	Number of Response(s)	Response Ratio
Show all available courses with icons	0	0.0%
Showing eight courses with icons is enough	4	50.0%
Other	4	50.0%
No Responses	0	0.0%
Total	8	100%
8 Comment(s)		

14. Rate how easy it was to find the IIS Basics training module.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Very difficult	Somewhat difficult	Neutral	Some what easy	Very easy
	0	0	0	3	5
	0%	0%	0%	38%	63%
2 Comment(s)					

15. Navigate to the IIS Basics Module and view the materials available. Did they open?

	Number of Response(s)	Response Ratio
Yes	7	87.5%
No	1	12.5%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
4 Comment(s)		

16. Could you find the Mass Immunization Module under the IIS Basics for All Users category?

	Number of Response(s)	Response Ratio
Yes	8	100.0%
No	0	0.0%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
0 Comment(s)		

17. Could you open and view the mass immunization videos?

	Number of Response(s)	Response Ratio
Yes	6	75.0%
No	2	25.0%
Other	0	0.0%
No Responses	0	0.0%
Total	8	100%
2 Comment(s)		

18. Did the course materials in the Mass Immunization Module mark as complete when you completed reviewing them?

	Number of Response(s)	Response Ratio
Yes	5	62.5%
No	2	25.0%
Other	1	12.5%
No Responses	0	0.0%
Total	8	100%
2 Comment(s)		

19. You may notice that the different modules use different methods for opening course materials. Some are pop ups in a new window (IIS Basics Module & Improving Rates Module), some are embedded in the course (Mass Imms Module), and some open automatically to the link provided (Additional Resources). Which method is more appealing to you?

	Number of Response(s)	Response Ratio

	Number of Response(s)	Response Ratio
Pop-up in new window (like the Basic and Improving Rates Modules)	3	37.5%
Embedded in course (like the Mass Imms Module)	2	25.0%
Automatic opening to link (like the Additional Resources section)	1	12.5%
Unsure	0	0.0%
Other	2	25.0%
No Responses	0	0.0%
Total	8	100%
3 Comment(s)		

20. Take the quiz at the end of the IIS Basics Module. Did you get a score and a completion certificate?

	Number of Response(s)	Response Ratio
Yes	7	87.5%
No	0	0.0%
Other	0	0.0%
No Responses	1	12.5%
Total	8	100%
4 Comment(s)		

21. Please rate the difficulty of the IIS Basics Module quiz questions.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Too Easy	Somewhat Easy	Just Right	Some what Difficu lt	Too Diffi cult
	0	1	5	2	0
	0%	13%	63%	25%	0%
3 Comment(s)					

22. Could you see the course "IIS Basics" that you were automatically enrolled in on the homepage under My Courses?

	Number of Response(s)	Response Ratio

Yes	6	75.0%
No	1	12.5%
Other	1	12.5%
No Responses	0	0.0%
Total	8	100%
3 Comment(s)		

23. Do you have any additional feedback to help make the IIS Training System better for all IIS users?

4 Response(s)

Conclusions / Lessons Learned / Key Factors for Success

The implementation of a regular electronic communication source has been invaluable to assist us in connecting with and informing Washington's IIS users about vital updates and information related to their daily immunization work with the IIS. The implementation of a learning management system within our IIS is still in pilot phase but the reviews so far indicate that IIS users and state immunization programs (school immunizations, VFC, and data exchange to name a few) are all looking forward to the opportunity to streamline their training practices and provide users with a comprehensive self-study option accessible right from their IIS account.

The lessons learned with these projects included the need to consider the bounced email rate and need for email contact clean up in the process of sending an electronic newsletter. We also learned that many email accounts were sending the newsletter to a user's junk email folder so education and resources were provided to assist users in correcting this. With the learning management system we have learned many lessons so far including that the use of an additional technology platform can take longer than anticipated to roll out, the use of an e-learning platform is not preferred by all, and the time to upload courses into the learning management system in a way that is consistent requires a lot of thought and planning for the design, updating, and maintenance of each course.

Check if any of the following are being submitted to complement your submission:
(All materials will be posted on the AIM website)

__Testimonials	X_Project photo(s)
__Quote from partner/participant	__Publication (e.g., news story, journal article)
X _Sample of materials produced	__Video/audio clip
__Press release	__Website URL
__Promotional materials	__Tables or graphs
	__Other — Explain: _____

Links to IIS e-Newsletters:

November 2016 IIS e-Newsletter

October 2016 IIS e-Newsletter

September 2016 IIS e-Newsletter

Image of LMS:

Available courses

IIS Basics
Read More

Data Exchange
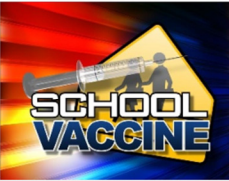Read More

Mass Immunization Module
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School and Early Education Basics
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School Module
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Annual Immunization Reporting
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Approvals, Reports, and Enrollment
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Perinatal Hepatitis B
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Image of planning meeting with WA State Department of Health staff and STC staff: