

Disability Research and Dissemination Center Cycle 2 Annual Evaluation Years 2 & 3

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Executive Summary

This report summarizes the work of the Disability Research and Dissemination Center (DRDC) in Cycle 2, Years 2 & 3 (April 2, 2019 to April 1, 2020) and includes the second half of Cycle 2, Year 2 and the first half of Cycle 2, Year 3.

In Cycle 2, Years 2 & 3 the Administration Core has continued to provide administrative and technical support to DRDC funded projects, and to facilitate coordination with the CDC through the RFA process. The Research Advisory Council (RAC) members continued to further the work of the DRDC through dissemination and availability for triage of applications.

The Research Core funded three projects, one of which was from restricted/sole source funding streams. The remaining two projects were from unrestricted RFAs. The projects were funded in three states, and the majority had target populations under 18 years old, had anticipated sample sizes above 2,000 participants, and utilized database analysis.

The Research Translation Core continued the development of educational activities and research projects. This included the continuation of the Disability Integration Toolkit (DIT). The Research Translation Core conducted multiple research projects related to disability and collaborated with the Research Core on a DRDC funded project.

The Dissemination Core continued to manage the DRDC website and disseminate both RFAs and information about DRDC funded projects. The website had 4,078 users between April 2, 2019 to April 1, 2020. There was a decrease in website utilization, likely due to fewer RFAs.

The Evaluation Core completed the Years 2 & 3 annual evaluation report, in collaboration with the other cores.

Cycle 2 of the DRDC is anticipated to continue to address the specific aims. There was one restricted/sole source RFA in Year 3. A new round of RFAs is anticipated in early 2021 at the beginning of Year 4. Initial data for those RFAs will be included in the Years 3 & 4 annual evaluation report.

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Introduction

DRDC Description

Cooperative Agreement #1U01DD001007 was initiated on September 30, 2012, with the University of South Carolina (UofSC) acting as the administrative home of the Disability Research and Dissemination Center (DRDC). Subcontracts were established at the American Association on Health and Disability (AAHD) and SUNY Upstate Medical University (UMU). This report presents information from Cycle 2, Years 2 & 3 of the DRDC (April 2, 2019 to April 1, 2020).

For more detailed information about the DRDC see Appendix A: Disability Research and Dissemination Center Logic Model. This logic model incorporates aims and activities agreed upon during post-award negotiation with the CDC's National Center for Birth Defects and Developmental Disabilities (NCBDDD).

Mission

Establish a Disability Research and Dissemination Center (DRDC) that will expand NCBDDD's capacity to conduct research and to disseminate evidence-based practice related to birth defects and developmental and other disabilities.

Administration Core

Project Management and Reporting

The DRDC Administration Core is primarily comprised of Suzanne McDermott, PhD, and Deborah Salzberg Clark, MS, MAT, includes several graduate assistants, and works closely with the UofSC Office of Sponsored Awards. The project manager for the DRDC, Deborah Salzberg Clark, is responsible for day-to-day administrative oversight and management of DRDC funded projects in Cycle 2, Years 2 & 3. This has included attending calls between project PIs and CDC scientific advisors, issuing subcontracts for projects, reviewing and paying invoices, managing carryover requests, and providing technical assistance to project PIs as needed. The Administration Core also completes required reports to the CDC, using the eRA commons system. At this point in Cycle 2, one revised budget request, one continuing application (for Year 4), and seven projects with carryover requests from Year 2 to Year 3 have been reported. These reports require that the Administration Core collects data and project information from all funded PIs, including the Co-Principal Investigators.

In Cycle 2, Years 2 & 3 the Research Advisory Council (RAC) was not required to disseminate the annual call for grant applications (RFAs) or triage applications to assist the DRDC in forwarding applications to CDC, as there were no unrestricted RFAs in Year 3. The eighteen members of the RAC have all remained on the RAC for Years 2 and 3.

Research Core

Requests for Applications (RFAs)

RFA Process

This section addresses the RFA review process, output of RFAs solicited, and funded projects. There were 3 projects funded in Cycle 2, Years 2 & 3. Two of these projects were

funded from unrestricted RFAs^a and one project was funded from restricted/sole source RFAs^b. For a summary of the number of projects funded in Cycle 2, Years 2 & 3 of the DRDC, refer to Table 1, Summary of RFA Process for Cycle 2, Years 2 & 3 of the DRDC.

Year 2

There were two unrestricted RFAs in Year 2 with 4 funding opportunities and one restricted/sole source RFAs with one funding opportunity. There were three applications for unrestricted RFAs and one application for restricted/sole source RFAs, for a total of four applications. The DRDC utilizes Triage Panels to eliminate low-scoring applicants whenever the number of applications exceeds the maximum number that CDC might fund for a particular RFA. However, this process was not necessary in Year 2 due to the low number of applications. All three were sent to CDC for consideration. In addition, one restricted/sole source application was also sent to CDC, for a total of four applications (unrestricted and restricted RFA/ sole source funded opportunities). After CDC's review, two of the three applications for unrestricted RFAs were funded, and the application for restricted/sole source RFAs were funded. There were three new projects awarded in Year 2. Ten projects from the previous year received funding in Year 2. For a list of the three funded projects as of the end of Year 2, see Appendix B.

Year 3

Due to the new reporting and evaluation timeline, data is now collected in April. Therefore, the first half of the data from Year 3 is reported here. This RFA data will be reported again along with the second half of the Year 3 data and the first half of the Year 4 data in Spring 2021.

In Year 3, due to a lack of funding, there was only one restricted/sole source RFA. This restricted/sole source application is being reviewed by CDC. Therefore, there may be one project funded from RFAs from Year 3. It is anticipated that new RFAs will be posted for Year 4 early in 2021.

^a Unrestricted RFAs are opportunities for funding that are not limited to a certain applicant

^b Restricted/Sole Source RFAs are opportunities for funding of specific projects that may be limited to specific research groups

Table 1. Summary of Application Process for Cycle 2 Years 2 & 3 of the DRDC

Table 1-A Unrestricted RFAs

	RFAs Posted by DRDC ^a	Funding Opportunities ^b	Applications Received by DRDC ^c	Applications Reviewed by DRDC ^d	Applications Reviewed by CDC ^e	Funded Projects ^f
Year 2	2	4	3	not necessary	3	2
Year 3	0	0	N/A	N/A	N/A	N/A

Table 1-B Restricted/Sole Source RFAs

	RFAs Posted by DRDC ^a	Funding Opportunities ^b	Applications Received by DRDC ^c	Applications Reviewed by CDC	Funded Projects ^f
Year 2	1	1	1	1	1
Year 3	1	1	1	1	Not yet available

Table 1-C Unrestricted & Restricted/Sole Source RFAs

	Applications Received by DRDC ^c	Forwarded to CDC ^g	Funded Projects ^h	Funded (Previous Year) ⁱ
Year 2	4	4	3	10
Year 3	1	1	Not yet available	3

- a. RFAs Posted by DRDC – number of RFAs posted by the DRDC
- b. Funding Opportunities – maximum number of possible funded applicants
- c. Applications Received by DRDC – total number of applications received by the DRDC
- d. Applications Reviewed by DRDC – applications from RFAs reviewed by DRDC Triage Panel
- e. Applications Reviewed by CDC – applications for RFAs forwarded to CDC for review after DRDC Triage Panel review
- f. Funded Projects – number of funded RFAs
- g. Forwarded to CDC – number of applications forwarded to CDC for review
- h. Funded Projects – total number funded projects
- i. Funded (Previous Year RFAs) – Total number of projects funded through the DRDC for that year. These represent the funded projects that in the RFA process from the previous year.

Geographic Spread of Projects Funded in the United States

Geographic Spread

The DRDC funded projects and cores in three states. The majority of funded projects were located in the northern half of the United States, including projects located in Minnesota and New York. Refer to Figure 1, Geographic Spread of Projects Funded in the U.S., for a visual representation of this information. Refer to Appendix B, List of Funded Projects for a summary of information of the funded sites including location.

Figure 1 Geographic Spread of Projects Funded in the U.S.



Proposals of Funded Projects

Proposals for projects were submitted in response to RFAs. The proposals for each of the three projects funded in Cycle 2, Years 2 & 3 were coded for project topic, methodology, target population, anticipated sample size, and dissemination. This section covers projects funded to commence in Year 3.

The target population age was captured for each funded proposal. The target population age for the funded projects includes two projects (67%) focused on children, and one (33%) project that investigated the literature and therefore focused on any ages represented in the literature. No projects specifically reported being focused on adults or family units (Figure 2, Age of Target Population).

The anticipated sample size for each of the funded projects included two projects with a sample size over 2,000, with both projects anticipating sample sizes between 8,000 and 15,000. One project assessed the literature, and therefore did not have an intended sample size (Figure 3, Anticipated Sample Size).

A dissemination plan was also included in each proposal. Three of the proposals (100%) included information about dissemination to scientific audiences, such as presentations and publications in peer reviewed journals. One (33%) of proposals included dissemination to the public, including sharing information on websites. One (33%) of the funded proposals included dissemination to the community such as through advocacy groups.

The intended methodology of projects funded to begin in Years 2 and 3 fell into two categories: review and database analysis. Of the funded projects, 67% involved database analysis and 33% utilized systematic search and scoping review methodology (see Figure 4: Methodology of Funded Projects).

Research Impact

The research impact of the DRDC is summarized here through publications generated from internal and external research projects. Research impact was assessed using Scopus Metrics, which provided data on the dissemination of scholarly publications. Both internal and external DRDC funded research projects are expected to produce publications; however, as this report only covers the first two and a half years of the five-year cycle, there have been twelve publications so far. Additional publications are expected as projects are completed. See Appendix C for the citations of the publications to date.

Dissemination is being evaluated using Scopus which provides metrics for publication dissemination on several platforms (see Appendix D). Metrics are collected through internet data tracking.¹ These metrics can be used to understand how publications are accessed. For more information on the specific data collection used by Scopus Metrics visit the Scopus Metrics website.²

For this report, data was collected from Scopus including exports/saves, abstract views, clicks, full text views, links out and readers. Other included metrics were dissemination through other platforms, such as blog mentions; news mentions; shares, like and comments; and tweets. Finally, there are measures of citation such as citations, citation indexes, clinical citations and field weighted citation impact. For further information about these metrics and dissemination of research refer to Appendix D, Scopus Metrics Data.

Figure 2 Age of Target Population

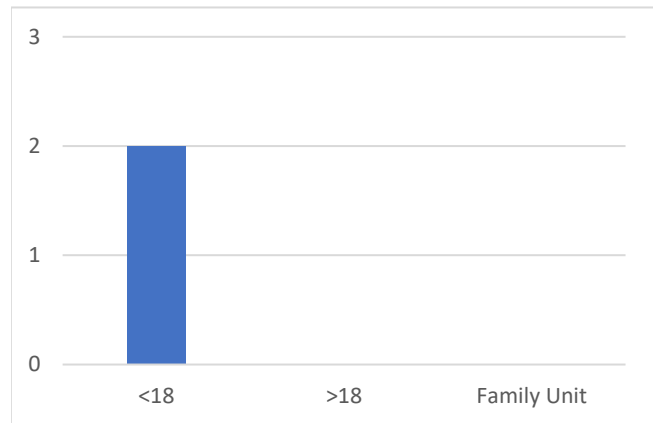


Figure 3 Anticipated Sample Size

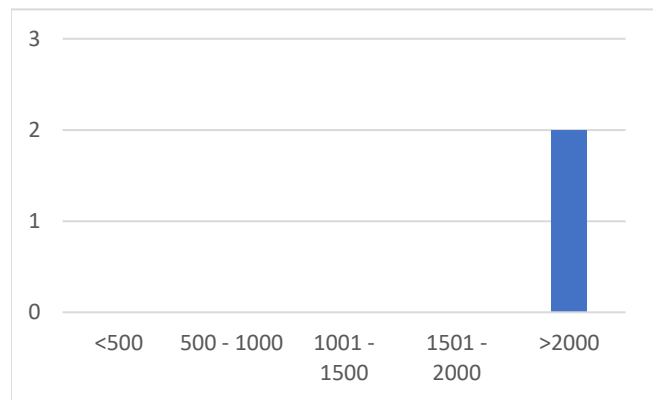
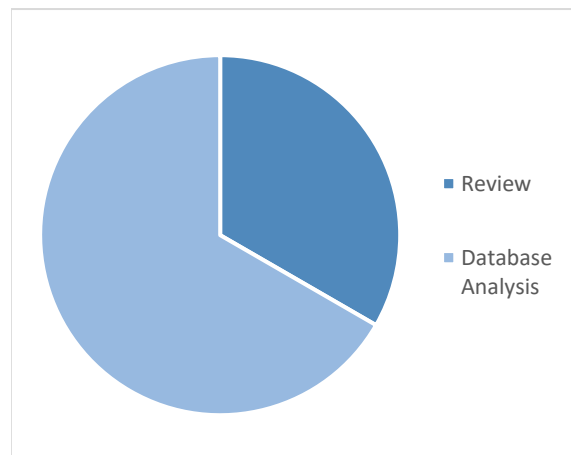


Figure 4 Methodology of Funded Projects



Research Translation Core

Training and Professional Development

The research translation core supports research, training, and professional development efforts through the Disability and Health Research team (DHR) at Upstate Medical University (UMU). The Research Translation Core is led by Dr. Margaret A. Turk, and is composed of two full time employees (previous DRDC Fellows Katherine D. Goss, MPH and Jeremy French-Lawyer, MPH, CAS, CHES) and two graduate assistants (GSA). The GSAs employed in Cycle 2, Years 2 & 3 were Caitlin Ward and John Angles, both Master of Public Health candidates at SUNY Upstate. The GSAs were hired to work on the DRDC project funded in Year 2, *Systematic Review and Meta-analysis of Pain Interventions for People with Longstanding Disability*, including project development, research, and analysis.

In Year 2, members of the DHR have attended presentations about disability and have accessed online webinars related to the Americans with Disabilities Act (ADA), serving people with disability, statistical methodology, and disability statistics. Ms. French-Lawyer and Ms. Goss also presented posters at the Association of Academic Physiatrists/International Society of Physical and Rehabilitation Medicine (AAP/ISPRM) 2020 meeting. DHR members regularly attend and have also facilitated UMU faculty development seminars related to adult learning. The DHR maintains a journal study group and a statistics study group.

Additional Projects

The Research Translation core continues to develop the Disability Integration Toolkit, with a particular focus on the translation of research into educational interventions. In addition, the Research Translation Core is collaborating with the Research Core on a DRDC funded project, *Utilization of Hospital Services for Opioid Users with Disabilities, using Population-based Nationally Representative Data*. In Year 2 and 3, the DHR has developed or begun development of three products for dissemination, using Xu X, Ozturk OD, Turk MA, & McDermott SW (2018). Physical activity and disability: an analysis on how activity might lower medical expenditures. *Journal of Physical Activity and Health*, 15(8), 564-571):

- i) A journal club activity (under peer review)
- ii) An interactive module on physical activity (PA) for people with disability (planned peer review beginning Spring 2020)
- iii) An interactive module about pre-participation physical examinations, directed at Special Olympics participation (completed peer review 2/28; with minor modifications, will be posted to the DIT website)

Dissemination of these activities is planned in collaboration with partners at other institutions, including Thomas Jefferson University and University of Maryland School of Medicine, with eventual submission to American Association of Medical Colleges MedEdPortal and indexing in PubMed. Additional translation of research into educational activities is planned to continue in the second half of Year 3 and in Year 4 and 5.

Dissemination Core

Outreach and Dissemination

Website Utilization

The DRDC website,^c acts as a platform for the RFAs, dissemination of research, publications, and information about the DRDC. The DRDC website was launched on January 17, 2013; and it is maintained by the Dissemination Core, which is led by Roberta S. Carlin, MS, JD. All data from Google analytics was extracted in April 20, 2020.

Google Analytics was used to collect data for Cycle 2, Years 2 & 3. This data includes information from April 2, 2019 to April 1, 2020, which represents the second half of Year 2 and the first half of Year 3. During this period, there were 4,078 users of the DRDC Website. There were 5.4 % new visitors to the DRDC webpage, and 94.6% returning visitors (Appendix E, Google Analytics Data; Visitors to www.disabilityresearchcenter.org Over Time April 2, 2019 to April 1, 2020).

The DRDC website was visited a total of 4,461 sessions, and there were 7,626 pageviews. The visitor bounce rate was 76.78%.^d There were 1.09 sessions per user, and 1.71 pages per session. The average session duration was 1 minutes and 28 seconds. The website had users from every continent except Antarctica. For a map overlay of the visitors to the DRDC webpage, refer to Appendix E, Google Analytics Data; Map Overlay of www.disabilityresearchcenter.org Users from April 2, 2019 to April 1, 2020.

The majority of website users were from the United States (55.02%), Canada (8.97%), France (7.92%) and China (4.66%). In addition, Japan, South Korea, and the United Kingdom represented less than 3.5% and more than 1% of users. For more information, see Appendix E.

A peak in webpage visitation occurred in June 2019. Smaller peaks also occurred in July, October and November of 2019, as well as March 2020. These peaks were smaller than in year 1 and 2, with the maximum peak of 204 visitors in June 2019 (see Appendix E).

There was a significant decrease in website use in Years 2 and 3, likely due to the fact that there were fewer RFAs in Year 2 and no RFAs in Year 3. The number of sessions was much lower in Years 2 and 3 only 4,461 compared to 15,794 sessions in Years 1 and 2. Similarly, the number of pageviews was decreased from 30,188 in Years 1 and 2 to 7,626 in Years 2 and 3. However, the geographic spread of website users was maintained, with more users in China than in Years 1 and 2. It is important to note that the Year 2 & 3 Evaluation Report also covers only one calendar year (April 2, 2019 to April 1 2020), whereas the Year 1 & 2 Evaluation Report covered one and a half years (September 31, 2017 to April 1, 2019), which is a large difference in timeframe.

Social Media

Social media strategies were implemented to target public health professionals to ensure current research and practices were widely disseminated. The Dissemination Core used a social media platform, Buffer, to schedule on-going social media posts via Twitter, Facebook and LinkedIn.

The twitter account for the DRDC was initiated in January 2014, in Cycle 1, Year 2 of the DRDC. Since then there have been a total of 2,386 tweets. The account has 1,485 followers and is following 869 other twitter accounts. The DRDC Twitter account has 276 likes (data

^c The DRDC website is www.disabilityresearchcenter.org

^d Bounce rate refers to the number of users that visit only one page before exiting the site

extracted April 20, 2020). From October 1, 2019 to February 15, 2020, the DRDC Twitter (@DisabilityRDC) posted 99 times with a total reach of 17,000 and had 1,600 engagements. The account has been used to disseminate information about RFAs, as well as information on research, disability facts, and news.

Facebook has also been employed for dissemination of information related to the DRDC. From October 1, 2019 to February 15, 2020 the AAHD Facebook posted 27 times relating to DRDC and reached 44,421 accounts and had 1,976 engagements.

The Twitter account has three fewer followers than reported in April 2019 and is following 20 fewer accounts. There was also decrease reach, with 24,253 in Years 1 and 2, and 17,000 in Years 2 and 3. However, there was an increase in engagements, from 201 in Years 1 and 2 to 1,600 in Years 2 and 3. There were fewer posts to Facebook in Years 2 and 3 compared to Years 1 and 2 (27 vs. 39) and as a result also had a decreased reach. Unlike the Google Analytics data, above, this information covers approximately the same timeframe (October 2018 to March 2019 in the Year 1 & 2 Evaluation Report, and October 1, 2019 to February 15, 2020 in the Year 2 & 3 Evaluation Report).

Evaluation Core

Annual Evaluation Reports

The Evaluation Core of the DRDC completes annual evaluations. It is comprised of Telisa Stewart, MPH, DrPH, and Jeremy French-Lawyer, MPH, CAS, CHES. All of the previous evaluation reports are available on the DRDC website, as is the Cycle 1 Evaluation.^{3,4,5,6,7,8,9}

Substantial Changes to DRDC Evaluation Process

Change to the Data Reporting and Evaluation Timeline

There were no substantial changes in the Evaluation process in Years 2 and 3. A consistent method has been developed and successfully implemented in the first three years of Cycle 2. Data is collected from project PIs in the spring of each year by the Administration Core, and the report to CDC is made by the end of April. After this process is complete, the Evaluation Core completes the annual evaluation process, using the data that was collected by the Administration Core as well as data from other sources such as Scopus and Google Analytics. The evaluation process includes data analysis and additional data collection related to dissemination and other aspects of the DRDC. This process allows for efficient data collection from the PIs of each project and aligning the timeline of the annual evaluation report and the report through eRA Commons. The data represented in the Cycle 2, Years 2 & 3 report includes the second half of the Year 2 data, and the first half of Year 3. The next annual evaluation report will be produced by July of 2021 and will include data through the first half of Year 4.

Conclusion and Future Action

Cycle 2 of the DRDC in the second half of Year 2 and the first half of Year 3 has continued progress in each of the five cores, although reduced funding has impacted RFAs. The DRDC is fulfilling its mission to expand the capacity of the CDC's National Center on Birth Defects and Developmental Disability to conduct research, and to disseminate evidence-based practices related to birth defects and developmental and other disabilities. This has included the funding of 3 projects in Years 2 & 3.

Future actions for the DRDC will include adding to its research portfolio, completing the currently funded projects with dissemination of their results, and implementing strategies to accomplish the broader goal of conducting research translation. Activities will continue in the second half of Year 3 and into Year 4. The next annual evaluation report will cover the second half of Year 3 and the first half of Year 4, and will be made public in the summer of 2021.

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Appendix A. Disability Research and Dissemination Center Logic Model

Figure 4 - Logic Model for Inputs (Cores and Activities), Outputs, and Outcomes.

Each program input (defined as the creation of cores with specific tasks, and the activities of those cores) leads to specific work products, which in turn lead to measurable outcomes. The outcomes are identified by "SMART" criteria, originally described by Doran as "Specific, Measurable, Attainable, Relevant, and Timely" variables that indicate whether a program has or has not had a desired effect, and to what extent. The Evaluation Core for this project will focus on immediate (proximal) outcomes, with distal outcomes measured as opportunities to measure SMART variables arise.

Core component	Activities	Planning Outputs	Program Outcomes		Distal/ Outcomes
			Program Outcomes	Distal/ Outcomes	
Infrastructure	→ Convene Research Advisory Committee (RAC); Establish partnerships; Manage & coordinate Core activities and programs; Conduct subcontracts and working arrangements; Establish	→ # of RAC activities convened; Management & administrative structures in place for internal reporting and budgeting; Informational meetings held; Collaborations maintained; # of scoring rubrics established.	→ Increase in RAC directed activities; Increase in internal monitoring for centralized management; Increase in reviews for priority areas of interest; Increase in networks; Increase in maintaining	→ Increase in flexible multi-disciplinary administrative systems; Increase in sustainable partnerships; increase extramural grant competition.	
Research Core	→ Conduct intramural research; Develop RFAs for extramural research; Solicit research projects; Dissemination of research initiated.	→ # of Active research structures devised and maintained; Support services developed; Research projects solicited; Research projects disseminated.	→ Increase in completed studies related to NCBDDD priorities; Increase in acceptance of research manuscripts to conferences and published in scholarly journals.	→ Increase number of PIs managing their own prevention and disability studies; Increase in dissemination of best research in the field.	
Research Translation Core	→ Identify and prioritize topics and areas for translation efforts; Develop translation products in formats for specific audiences; Disseminate products; Evaluate product usage; Evaluate individual	→ # of topic areas for translation prioritized including NCBDD participation; External stakeholder participations in development; Translation products formatted; Products disseminated for target audiences.	→ Research translation strategies completed and products developed; Increase evaluation for product effectiveness; Increase in disseminated products.	→ Increase knowledge and skills translated for health professionals working with people with disabilities; increase overall translation of individual projects.	
Dissemination and Policy Core	→ Maintain web/social media implementation plan; Update core dissemination plan; Engage stakeholders in dissemination; Support NCBDDD RFA; Participate in NQF and other policy	→ # of web/social media plans developed; Core dissemination plans created; Stakeholders engaged in dissemination; NCBDDD supported RFAs; # and type of policy activities.	→ Increase usage of web/social media; Improved dissemination plans; Increase in network for dissemination of RFA's and research findings; Research translation products uploaded; Successful meetings.	→ Increase in dissemination about evidence-based practice /policies.	
Evaluation Core	→ Organize and implement routine evaluations for all processes, research, training, dissemination strategies, and other activities related to the grant; Complete annual report.	→ # of evaluations that collect information on process, research, training, dissemination; Annual reports completed.	→ Increase indention of process implemented; Increase effectiveness of data collected, analyzed; Increase research & training programs monitored for effectiveness; Increase program database support; Increase annual report.	→ Increase the use of evaluations that ensure program fidelity and continual quality improvement; Increase external dissemination; Increase dissemination of results.	
Inputs		Immediate Outputs	Proximal and Distal Outcomes <i>(Evaluation will focus on proximal outcomes)</i>		

Appendix B. List of Funded Projects, Primary Investigators and Academic Homes Years 2 & 3

1. Assessing Impact of Congenital Cytomegalovirus Infection on Development and Language in Infants Identified by a Universal Screening Program – University of Minnesota – Mark Schleiss, MD, Consortium PI
2. Impact of Early Hearing Detection and Intervention (EHDI) on the Educational Costs and Placements of Hearing-Impaired Children – University of Colorado – Yoshinaga-Itano, PhD, Consortium PI
3. Systematic Review and Meta-analysis of Pain Interventions for People with Longstanding Disability – SUNY Upstate Medical University – Turk, PI, McDermott, Co-I

Appendix C. List of DRDC Publications during Cycle 2, to date

1. VanDam M, Yoshinaga-Itano C. Use of the LENA Autism Screen with Children who are Deaf or Hard of Hearing. *Medicina* (Kaunas, Lithuania). 2019 August 16;55(8). PubMed PMID: 31426435; PubMed Central PMCID: PMC6723169; DOI: 10.3390/medicina55080495.
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+articles not indexed in Scopus and not included in Scopus analysis

Appendix D. Scopus Metrics Data*

Included in this Appendix is a summary of the data collected via Scopus metrics for the two publications indexed in Scopus produced by projects funded through the DRDC in Cycle 2, Year 2 & 3 of that organizations funding. The final data from Scopus was extracted collected in April, 2020.

Eleven articles reported Readers, which are defined as “The number of people who have added the artifact to their library/briefcase.”⁹ Six articles reported Links Out, which are defined as “The number of times an outbound link has been clicked to a library catalog or link resolver.”² Three articles reported Full Text Views which are “The number of times the full text of an article has been viewed.”²

Readers

Articles	Readers
1. VanDam, 2019	12
2. Gale, 2019	7
3. Goss, 2019	3
4. Bennett, 2019	2
5. loerger, 2019	4
6. Cyrus, 2019	9
7. loerger, 2019	7
8. loerger, 2019	4
9. Barger, 2018	33
10. De Diego-Lazaro, 2018	17
11. Yoshinaga-Itano, 2018	26

Links Out

Articles	Link-outs
5. loerger, 2019	2
6. Cyrus, 2019	18
9. Barger, 2018	124
10. De Diego-Lazaro, 2018	7
11. Yoshinaga-Itano, 2018	7
12. Thomson, 2018	1

Full Text Views

Articles	Full Text Views
5. loerger, 2019	758
6. Cyrus, 2019	115
10. De Diego-Lazaro, 2018	71

Five articles reported Exports/Saves. Export/saves are defined as “This includes the number of times an artifact’s citation has been exported direct to bibliographic management tools or as file downloads, and the number of times an artifact’s citation/abstract and HTML full text

(if available) have been saved, emailed or printed.”⁹ Six articles had reported Abstract Views, which are “The number of times the abstract of an article has been viewed.”²

Exports/Saves

Articles	Exports/Saves
5. loerger, 2019	5
6. Cyrus, 2019	6
9. Barger, 2018	13
10. De Diego-Lazaro, 2018	16
11. Yoshinaga-Itano, 2018	1

Abstract Views

Articles	Abstract Views
5. loerger, 2019	158
6. Cyrus, 2019	64
9. Barger, 2018	198
10. De Diego-Lazaro, 2018	112
11. Yoshinaga-Itano, 2018	15
12. Thomson, 2018	2

Two articles reported Shares, Likes & Comments, which are defined as “The number of times a link was shared, liked or commented on.”¹⁰ Five articles also reported Tweets, which are defined as “The number of tweets and retweets that mention the artifact.”¹⁰ One article had a Blog Mention which is defined as “The number of blog posts written about the artifact.”⁹

Shares, Likes & Comments

Article	Shares, Likes & Comments
9. Barger, 2018	34
12. Thomson, 2018	9

Tweets

Article	Tweets
2. Gale, 2019	34
7. loerger, 2019	1
9. Barger, 2018	9
10. De Diego-Lazaro, 2018	6
12. Thomson, 2018	9

Blog Mentions

Article	Tweets
1. VanDam, 2019	1

Scopus Metrics also report metrics related to references. Two article had reported Citations, which are defined as the number of articles that cite the artifact in, Scopus, and SSRN.¹¹ Four articles reported a Field Weighted Citation Impact which “shows how well this document is cited when compared to similar documents. A value greater than 1.00 means the document is more cited than expected.”¹²

Field Weighted Citation Impact

Article	Field Weighted Citation Impact
8. loerger, 2019	1.17
9. Barger, 2018	2.17
10. De Diego-Lazaro, 2018	1.89
11. Yoshinaga-Itano, 2018	2.4

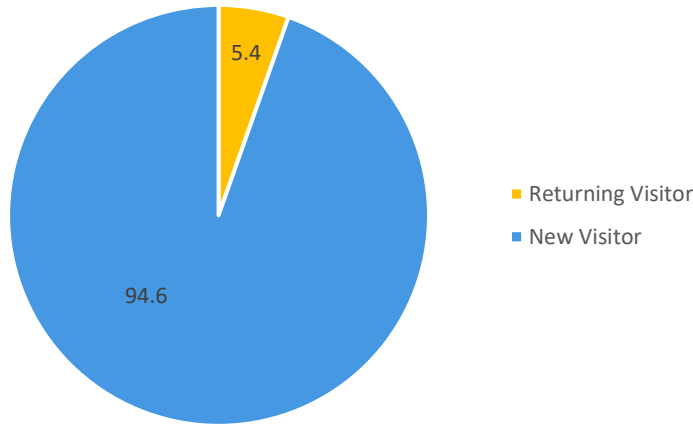
Citations

Articles	Citations
9. Barger, 2018	6
10. De Diego-Lazaro, 2018	1

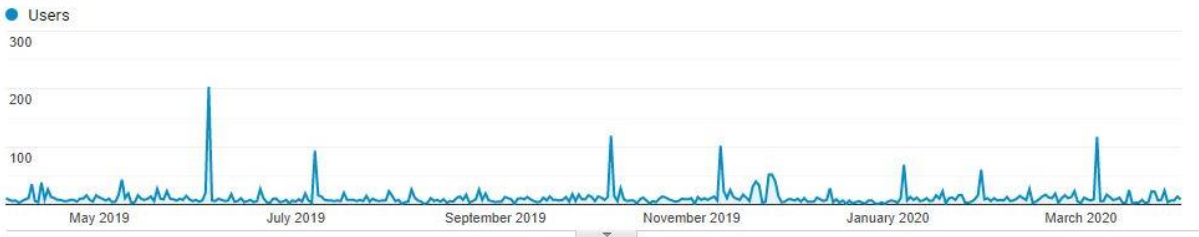
* Includes both publications resulting from internal (not funded through RFA process) and external projects.

Appendix E. Google Analytics Data

Percentage of New and Returning Visitors to the DRDC Website from April 2, 2019 to April 1, 2020



Visitors to DRDC Website from April 2, 2019 to April 1, 2020



Percentage of Visitors to DRDC Website from April 2, 2019 to April 1, 2020

Country	Users	% Users
United States	2,245	55.02%
Canada	366	8.97%
France	323	7.92%
China	190	4.66%
Japan	153	1.24%
South Korea	90	2.21%
United Kingdom	73	1.79%
India	72	1.76%

Map Overlay DRDC Website Users from April 2, 2019 to April 1, 2020

