

# Improving Support Services for Students with Diabetes in Chicago Public Schools – an Evaluation of the Delegated Care Aide Program



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## Diabetes Management at CPS

Chicago Public Schools (CPS) adopted a comprehensive Diabetes Management Policy in January 2012. <sup>(1)</sup>

The CPS Diabetes Management Policy requires schools to: <sup>(1)</sup>

- Annually identify students with diabetes
- Refer students with diabetes for a 504 Evaluation to ensure they receive a Diabetes Care Plan
- Designate a Delegated a Care Aide (DCA) to assist students with diabetes management during the school day
- Comply with all policy training requirements

Diabetes Management Training Requirements <sup>(1)</sup>

- Annual basic training for ALL school staff (webinar)
- One-time initial training for DCAs (in person)
- Annual update training for DCAs (in person)
- Annual Bloodborne Pathogens training for staff with increased risk of exposure (webinar)

The CPS Office of Student Health and Wellness, must provide training opportunities for school staff and DCAs. <sup>(1)</sup>

## Delegated Care Aide Program

DCA is a full-time school staff member who volunteers to assist a student with diabetes in implementing his/her Diabetes Care Plan and receives training on how to do so. <sup>(2)</sup>

DCA does not replace School Nurse; DCA assists students when Nurse is not in the building or is otherwise unavailable. <sup>(2)</sup>

DCA Responsibilities <sup>(3)</sup>

- Checking and recording blood glucose
- Recognizing and responding to low/high blood glucose
- Estimating number of carbohydrates in a meal
- Administering insulin according to Diabetes Care Plan and recording amounts
- Responding in an emergency (glucagon/911)

## Evaluation Plan

Evaluation Questions

1. Does DCA training increase confidence in assisting students with diabetes?
2. Does DCA training improve knowledge of key concepts of diabetes management?
3. Are DCAs satisfied with the training provided?

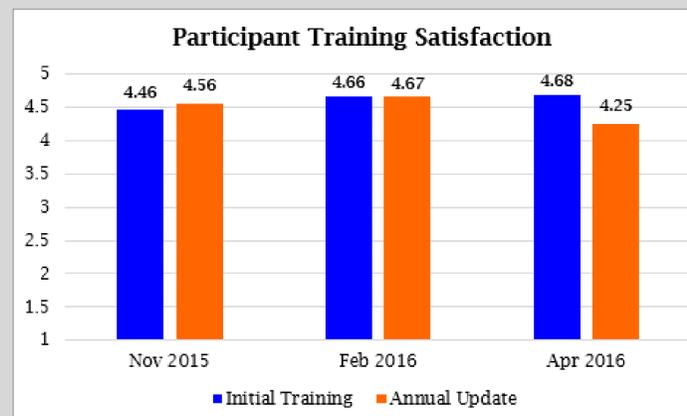
Methods

- Training was available to staff on professional development days
- Participants attending DCA Initial Training sessions completed anonymous pre- and post-tests
- Participants attending DCA Annual Update sessions completed anonymous post-tests only
- Descriptive statistics were calculated for DCA confidence, knowledge, and training satisfaction
- Independent samples t-tests were performed for DCA confidence and knowledge
- Analysis was done using IBM SPSS 23 statistical software

## Evaluation Results

DCA Initial Training - Confidence and Knowledge				
	Pre (Mean)	Post (Mean)	Increase (Mean)	p-value
<b>November 2015 (n = 64)</b>				
Management Confidence	3.30	4.15	0.85	0.00
Emergency Response Confidence	2.84	4.10	1.26	0.00
Knowledge	0.71	0.76	0.05	0.15
<b>February 2016 (n = 31)</b>				
Management Confidence	3.07	4.13	1.06	0.00
Emergency Response Confidence	2.86	4.03	1.18	0.00
Knowledge	0.73	0.76	0.04	0.44
<b>April 2016 (n = 30)</b>				
Management Confidence	3.48	4.17	0.68	0.02
Emergency Response Confidence	3.10	4.23	1.13	0.00
Knowledge	0.67	0.78	0.11	0.02

DCA Annual Update - Confidence and Knowledge		
	Mean	Standard Deviation
<b>November 2015 (n = 40)</b>		
Management Confidence	4.22	0.73
Emergency Response Confidence	4.10	0.98
Knowledge	0.88	0.15
<b>February 2016 (n = 9)</b>		
Management Confidence	4.11	0.78
Emergency Response Confidence	4.22	0.44
Knowledge	0.73	0.11
<b>April 2016 (n = 15)</b>		
Management Confidence	4.13	0.64
Emergency Response Confidence	3.20	1.78
Knowledge	0.82	0.14



## Implications of Findings & Future Directions

Implications of Findings

- Initial Training – management and emergency response confidence increased significantly from pre- to post-test
- Initial Training – total knowledge of content did not increase significantly from pre- to post test
- Annual Update – participants more confident, but not necessarily more knowledgeable
- It is predicted that participants came to the training with content knowledge and training further increased their confidence in implementing existing skills
- Satisfaction – both Initial Training and Annual Update participants reported a great deal of training satisfaction

Future Directions

- Share evaluation results with key internal stakeholders to show program value and increase capacity
- Continue to evaluate training sessions and share findings with presenters
- Develop evaluation tool with capacity to collect data to run paired t-test and longitudinal analyses

## Limitations

- Limitations of DCA Program Evaluation
- Anonymous survey did not allow for paired t-test analysis
  - Self-reported data collection
  - No tracking or follow-up with training attendees to determine post-training needs

## References

1. Chicago Public Schools. (2012). *Diabetes Management Policy*. Retrieved from <http://policy.cps.edu/Policies.aspx>.
2. Chicago Public Schools. (2015). *Diabetes Management Guidelines*. Internal document.
3. Illinois General Assembly. (2010). *Public Act 096-1485*. Retrieved from [http://www.isbe.net/pdf/PA\\_096-1485.pdf](http://www.isbe.net/pdf/PA_096-1485.pdf).