

2019 SENATE HUMAN SERVICES COMMITTEE

SCR 4002

2019 SENATE STANDING COMMITTEE MINUTES

Human Services Committee
Red River Room, State Capitol

SCR 4002
2/6/2019
Job # 32254

☐ Subcommittee
☐ Conference Committee

Committee Clerk Signature: Justin Velez

Explanation or reason for introduction of bill/resolution:

A concurrent resolution directing the Legislative Management to consider studying diabetes, including the forms and costs of treatment, avenues of payment, and impact of the federal Affordable Care Act.

Minutes:

Attachments #1-6

Madam Chair Lee: Opens the hearing on SCR 4002

Senator Tim Mathern, District 11. Introduces SCR 4002 and gives a brief description. Please see Attachment #1 for testimony.

(02:39) Senator Hogan: do you know if we have ever studied this before?

Senator Mathern: I'm not aware of any study with this disease through the legislator. I would suggest the department of health to do an interim study to educate the legislators on what is going on.

Senator Clemens: Was there some specific things that they were concerned about?

Senator Mathern: I would say the main concern was the dramatic increase on diabetic care and the concern on the part of families that some children have this level of care and others have a higher level of care and are all in the same school and have different technologies for treatment, some cheap, some expensive. The children have raised issue to why this child gets lower level care and another child gets higher level care. Is covering pre-existing conditions going to continue or not?

Madam Chair Lee: What could you see the state being able to do as far as the cost of insulin and what treatments are involved. What would see the goal for us at the end of this study.

Senator Marthern: One goal would be how to assure coverage for pre-existing conditions. I think the other possibility is we do sometimes through DHS have different coverage and further assistance for certain types of diseases. What are the costs for this and should there

be more assistance with this disease? There are studies in the resolution themselves but they are not substantiated by any testimony.

(09:07-17:12) Lisa Rask and her son Griffin Rask, Bismarck citizen. Testifying in support of SCR 4002. Please see **Attachment #2** for testimony.

Senator K. Roers: Can I ask griffin a question. Can you tell us about what your day is like being a diabetic?

Griffin Rask: In elementary school I had people reminding all the time and now there is no one reminding me.

Lisa Rask: I now have him keep his phone on him so that I can remind him to take the dose.

Senator Anderson: Not everyone wears a pump and not everyone is familiar with the device. How long have you been on the pump?

Griffin Rask: 4.5 years.

Senator Anderson: You were diagnosed at age 4

Griffin Rask: at age 4

Senator Anderson: And you perceive the goal of the study is what?

Lisa Rask: For lawmakers the understand the emotional, monetary costs of this disease. How much time parents of children who have this disease have to be away from work? We have to ensure that these protections are there.

Madam Chair Lee: CHIP is a safety net. There would never have been a danger that any child was not having the ability to have coverage for a broad range of conditions. I don't want you to think we disregarded you.

Senator Clemens: My oldest daughter is type 1 and has had a pump for many years and she gets along fine with it. I guess I'm a little unclear if the study was done, then would you look for better care in the schools. What do you want from this study?

Lisa Rask: If it were up to me certainly, I think we need to get more nursing time in the schools. They are incredible people who are absurdly overworked. There just isn't enough time, they don't have enough time. When Griffin was diagnosed, I told him that I just found out that my school doesn't have nurses. It is remarkable how alone they are with some of these critical situations.

Senator Clemens: I visited the schools this fall and it is very tough to have enough nurses to go around so I think it is going to be difficult to get more coverage from the nurses than we have now. To have a full time nurse at a school to give needed attention would be a difficult thing to accomplish.

Madam Chair Lee: That would be a local school board budget decision as well. It is a challenge for them, in West Fargo we have 15 elementary school and the workforce we don't have. The problem is not having enough staff to go around and money. I'm glad the schools have worked with you as much as they have but logistically there aren't enough professionals to go around.

Senator Hogan: Griffin you are lucky to have a mommy lion.

Madam Chair Lee: I think so.

(27:10-32:24) Petrea Klein, Bismarck citizen. Testifying in support for SCR 4002. Please see **Attachment #3** for testimony.

Senator K. Roers: My struggle with this is, increasing the legislator's knowledge is one thing but it doesn't move the needle. I'm trying to figure out what tangible thing we can do that will actually change the outcome rather than another study to put on the shelf.

Petrea Klein: What frustrates me is the cost of health insurance in general and these specific medications. Insulin was invented almost 100 years ago, the inventor sold it for 3 dollars to the University of Toronto so that everyone could have affordable medication and look what has happened. I haven't studied why it is so expensive. I want to understand those things and I think the state should care too because the more we can give affordable access to these technologies the better results we will have. I don't know the solution to this problem and that is why we are here. How do we understand where these pricings come from?

Senator K. Roers: I think the challenge is we know that these are at the federal level. I'm trying to figure out what we as a state can do at the federal level. Are we better off focusing your incredible stories to the federal government. While this is a noble goal I don't want to spend 2 years on something and not be further than where we were.

Senator O. Larsen: Do you know the price of what the insulin is in Mexico or Canada?

Petrea Klein: I do not know.

Madam Chair Lee: I have a problem with the pedigree on some of that stuff, that probably started in China, then went to turkey, then maybe to France, and who knows what's in it at that point and I don't want children and adults getting that stuff either.

Petrea Klein: We do have excellent coverage through the state but what happens when you turn 26 and you aren't covered as a child anymore.

Senator Anderson: As drugs advance it takes a lot of money, we used to get the old insulin from pig pancreases. There is a lot of difference now in the drugs and everyone wants the newest and expensive one obviously and that pushes the cost up because we all gravitate to the newest and most expensive one. We can go through a lot of differences in Insulin, the original one you had to take shots three or four times a day, and of course the needles are a lot sharper, smaller, and have a lot of changes which all cost money. That contributes significantly to the costs that we have today as compared to what that was before.

Madam Chair Lee: There are so many considering factors that contribute to the price hike of insulin but we don't have control over that. I understand why you want us to know as much as you do about this, we are sensitive to that and help where we can. We have to figure out where that is.

Petrea Klein: I would also like to pass out additional testimony from Gina Stanford (**Attachment #4**), Danelle R. Johnson (**Attachment #5**), and Angela Kritzberger (**Attachment #6**).

Madam Chair Lee ends the discussion on SCR 4002

2019 SENATE STANDING COMMITTEE MINUTES

Human Services Committee Red River Room, State Capitol

SCR 4002
2/11/2019
Job # 32512

- ☐ Subcommittee
☐ Conference Committee

Committee Clerk: Justin Velez / Florence Mayer
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Explanation or reason for introduction of bill/resolution:

A concurrent resolution directing the Legislative Management to consider studying diabetes, including the forms and costs of treatment, avenues of payment, and impact of the federal Affordable Care Act.

Minutes:

Attachment 1: Proposed Amendments to SCR 4002

Chair Lee: Opened the discussion on SCR 4002 and went over the proposed amendments that she provided to the committee. Please see Attachment #1 for proposed amendments.

(3:22) Senator K. Roers: I follow Secretary Azar on Twitter, and they have had a lot of focus on prescription drug costs recently. Would it have any benefit to send it to him?

Chair Lee: He is Health and Human services. That would be a good thought. I read some interesting articles in the Wall Street Journal. They talked about how complicated drug pricing is, part of that is a lack of transparency in some areas about where the rebates go. When you look at rack rates, that is not the price that everybody pays. There is a sales price tag depending if PBM is determining it or whoever. It is a complex issue. We can't fix it on a state level. This is a federal issue. I am not suggesting drug price controls. Research and development is important and expensive, but there needs to be some way to assist these families.

(5:32) Senator O. Larsen: I think we are at a crossroads now with the Medicaid expansion, we could take it over ourselves as a state. We could administer our own policy, but I don't think anyone wants to take it on and move forward.

Senator K. Roers: I do believe that conversation has occurred.

Chair Lee: I don't think that is over either.

Senator O. Larsen: It would be nice to not have the 10 essential benefits and be able to afford some of this stuff. There is nothing really that will have movement on it. That is all I have to say about it.

Chair Lee: All insurance carriers, they need to remain in business, there needs to be competition, there needs to be major medical policy availability for people. I have a really hard time buying into the fact that a married couple in their 60s have to have maternity coverage, just so we don't discriminate on the basis of gender or age. That is bizarre. I can't fix all that stuff. My goal is to focus on what the costs are. Maybe we need to put something in about insurance coverage, but I'm not going to be specific to private providers or the ACA in that regard. I am throwing it out for your input. Should we do this study? Tell me what you want to do.

(8:02) Senator Anderson: The resolution seems to be focused on keeping the 10 essential benefits that were mentioned in the ACA. If we are going to have general insurance, then what do we do with laws like the affordable care act. When it comes to drug prices, it is a complicated business. We have tried to address that with some bills with the PBM legislation these past few years. We may remember the controversy about the epi-pen business and the \$650-700 price tag you had to take out the \$250 that was going directly to the insurance or PBM. That is 40% of the drug. Drug companies try to get the highest prices they can and then they negotiate with the carriers. The amount they actually get goes down considerably, but the guy who pays the full price pays the highest price. That is often a consumer who comes to us complaining how much they had to pay. The important thing is we try to get as much transparency as we can, so the payer knows who's paying what. I don't know if this moves us any closer to that answer. I agree with Senator Lee, certainly I don't see anything wrong with the amendments. I would say if we pass the resolution as is, it probably won't be selected by legislative management. If we amend it and pass it, it probably won't be selected by legislative management as a study. Either way, it is fine with me.

Chair Lee: Do we want to add something about the transparency in here?

Senator Anderson: I don't think this is really the place. I don't think that would be productive in this case.

(11:24) Senator O. Larsen: On this issue I was looking up "Health Action International", which is an independent group that looks at drug pricing. The cheapest insulin was \$1.55 in Iran, to \$53 in the U.S. for 10mm. In Nepal it is \$3.70, maybe a guy could move there.

Senator K. Roers: I think part of the challenge is the quality of the product and the other challenge is the U.S. tends to bear the cost of R&D. If you look at many other countries, they don't have pharmaceutical companies. They will only manufacture something that has already been created, rather than creating new things. I'm not sure I want to live in a world where we say what we got right now is good enough for forever. There has to be a middle ground.

(13:03) Senator Anderson: When you're looking at those manufacturers, it's probably the same product made somewhere else. But also we bear a lot of the costs for the R&D, then we end up paying for the research. Also in Nepal, no one is going to sue a company and end up owning it. It does happen here.

Chair Lee: Pedigree is a big deal as well. We had info presented a couple years ago about stuff that is made in China. They have pill painting machines, so they take an aspirin and

paint it so it looks like the familiar medication. Let's just get rid of this thing one way or the other.

Senator Clemens: I move that we ADOPT THE AMENDMENT including sending it to Secretary Azar at the national level.

Senator Anderson: SECONDED

A Roll Call Vote Was Taken: 5 yeas, 1 nay, 0 absent.

Motion Carried.

(16:00) Chair Lee: We have the amended resolution before us, which is the 19.3073.01001 with the addition of Mr. Azar. Any further discussion?

Senator K. Roers: Moved a Do Pass as Amended.

Senator Larsen: Seconded.

A Roll Call Vote Was Taken: 6 yeas, 0 nays, 0 absent.

Motion Carried.

Senator Clemens Will Carry the Bill.

Chair Lee: Closed the discussion of SCR 4002.

February 7, 2019

8/6
1301

PROPOSED AMENDMENTS TO SENATE CONCURRENT RESOLUTION NO. 4002

Page 1, line 1, remove "directing the Legislative Management to consider studying diabetes,"

Page 1, remove line 2

Page 1, line 3, replace "Affordable Care Act" with "urging Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs"

Page 1, line 9, remove "health insurance coverage is important for"

Page 1, line 9, remove "who"

Page 1, line 10, after "medications" insert "and North Dakota is concerned about the increasing costs and availability of medications and health care and coverage for those costs"

Page 1, line 10, remove the second "and"

Page 1, remove lines 11 and 12

Page 1, replace lines 15 and 16 with:

"That the Sixty-sixth Legislative Assembly urges the Congress of the United States to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs;"

Page 1, line 17, remove "Legislative Management report its findings and"

Page 1, replace lines 18 and 19 with "Secretary of State forward copies of this resolution to the Speaker of the United States House of Representatives, the President Pro Tempore of the United States Senate, and each member of the North Dakota Congressional Delegation."

Renumber accordingly

Date: 2/11/19
Roll Call Vote #: 1

2019 SENATE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 4002

Senate Human Services Committee

☐ Subcommittee

Amendment LC# or Description: 19. 3073 .01001

Recommendation: ☒ Adopt Amendment

☐ Do Pass

☐ Do Not Pass

☐ Without Committee Recommendation

☐ As Amended

☐ Rerefer to Appropriations

☐ Place on Consent Calendar

Other Actions:

☐ Reconsider

☐

Motion Made By Sen. Clemens Seconded By Sen. Anderson

Senators	Yes	No	Senators	Yes	No
Chair Lee	X		Senator Hogan	X	
Vice Chair Larsen		X			
Senator Anderson	X				
Senator Clemens	X				
Senator Roers	X				

Total (Yes) 5 No 1

Absent 0

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 2/11/19
Roll Call Vote #: 2

**2019 SENATE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 4002**

Senate Human Services Committee

☐ Subcommittee

Amendment LC# or Description: 19.3073.01001

Recommendation: ☐ Adopt Amendment
☒ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation
☒ As Amended ☐ Rerefer to Appropriations
☐ Place on Consent Calendar
Other Actions: ☐ Reconsider ☐

Motion Made By Sen. K. Roers Seconded By Sen. O. Larsen

Senators	Yes	No	Senators	Yes	No
Chair Lee	<u>X</u>		Senator Hogan	<u>X</u>	
Vice Chair Larsen	<u>X</u>				
Senator Anderson	<u>X</u>				
Senator Clemens	<u>X</u>				
Senator Roers	<u>X</u>				

Total (Yes) 6 No 0

Absent 0

Floor Assignment Sen. Clemens

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SCR 4002: Human Services Committee (Sen. J. Lee, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SCR 4002 was placed on the Sixth order on the calendar.

Page 1, line 1, remove "directing the Legislative Management to consider studying diabetes,"

Page 1, remove line 2

Page 1, line 3, replace "Affordable Care Act" with "urging Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs"

Page 1, line 9, remove "health insurance coverage is important for"

Page 1, line 9, remove "who"

Page 1, line 10, after "medications" insert "and North Dakota is concerned about the increasing costs and availability of medications and health care and coverage for those costs"

Page 1, line 10, remove the second "and"

Page 1, remove lines 11 and 12

Page 1, replace lines 15 and 16 with:

"That the Sixty-sixth Legislative Assembly urges the Congress of the United States to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs;"

Page 1, line 17, remove "Legislative Management report its findings and"

Page 1, replace lines 18 and 19 with "Secretary of State forward copies of this resolution to the Speaker of the United States House of Representatives, the President Pro Tempore of the United States Senate, and each member of the North Dakota Congressional Delegation."

Renumber accordingly

2019 HOUSE HUMAN SERVICES

SCR 4002

2019 HOUSE STANDING COMMITTEE MINUTES

Human Services Committee Fort Union Room, State Capitol

SCR 4002
3/19/2019
33956

☐ Subcommittee
☐ Conference Committee

Committee Clerk: Nicole Klamann

By: Elaine Stromme

Explanation or reason for introduction of bill/resolution:

A concurrent resolution urging Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs

Attachments: 1, 2

Minutes:

Chairman Weisz: Opened the Hearing on SCR 4002.

Support

Janna Pastir, Director of the Division of Health Promotion for the ND Department of Health: (Attachment 1, 2) in support; This bill urges Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs. 6:21

Rep. Anderson: How many companies are making insulin now?

Janna Pastir: There are three major companies, I don't know if there are more.

Chairman Weisz: Janna I don't know if you are aware of this but 10 or 12 years ago the Legislature passed a bill for diabetes management program for PERS. I haven't received any reports or information about it, or if it's still going? I know it's gone from 4th to 7th in the PERS program, Are you familiar with that program?

Janna Pastir: I am aware of the program; I am not sure of how it is being conducted at this time. I do know that Diabetes self-management is still a covered benefit. Which means employees can take advantage of that service.

Rep. Rohr: Do you know what the out of pocket cost is for the type 1 diabetic?

Janna Pastir: About \$750.00 per month for an insulin dependent diabetic.

Rep. Schneider: What is the prevalent type of diabetes in Native Americans?

Janna Pastir: There are reasons for the disparity many of them are addressed through health care. The diabetes is Type 2 where you see that drastic increase in mortality rate is due to life style and inability to manage thru diet and healthcare availability.

Chairman Weisz: Any more support? Opposition?

We will close the Hearing on SCR4002

2019 HOUSE STANDING COMMITTEE MINUTES

Human Services Committee
Fort Union Room, State Capitol

SCR 4002
3/19/2019
33957

☐ Subcommittee
☐ Conference Committee

Committee Clerk: Nicole Klamann

By: Elaine Stromme

Explanation or reason for introduction of bill/resolution:

A concurrent resolution urging Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs

Minutes:

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Chairman Weisz: Opened hearing on SCR 4002

Rep. Schneider: made a motion for a Do Pass on SCR 4002

Rep. M. Ruby: Seconded

A roll call vote was taken: Yes 13 No 0 Absent 1

Do Pass carries of SCR 4002 To be placed on Consent Calendar

Rep. Dobervich will carry SCR 4002

Meeting adjourned.

**2019 HOUSE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. SCR4002**

House Human Services Committee

☐ Subcommittee

Amendment LC# or Description: _____

Recommendation: ☐ Adopt Amendment
☒ Do Pass ☐ Do Not Pass ☐ Without Committee Recommendation
☐ As Amended ☐ Rerefer to Appropriations
☒ Place on Consent Calendar

Other Actions: ☐ Reconsider ☐ _____

Motion Made By Representative Schneider Seconded By Representative M. Ruby

Representatives	Yes	No	Representatives	Yes	No
Robin Weisz - Chairman	X		Gretchen Dobervich	A	
Karen M. Rohr – Vice Chairman	X		Mary Schneider	X	
Dick Anderson	X				
Chuck Damschen	X				
Bill Devlin	X				
Clayton Fegley	X				
Dwight Kiefert	X				
Todd Porter	X				
Matthew Ruby	X				
Bill Tveit	A				
Greg Westlind	X				
Kathy Skroch	X				

Total (Yes) 13 No 0

Absent 1

Floor Assignment Representative Dobervich

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SCR 4002, as engrossed: Human Services Committee (Rep. Weisz, Chairman)
recommends **DO PASS** and **BE PLACED ON THE CONSENT CALENDAR**
(13 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed SCR 4002 was
placed on the Tenth order on the calendar.

2019 TESTIMONY

SCR 4002

Senate Human Services Committee

February 6, 2019 Senator Tim Mathern

Madam Chairman Lee and Members of the Human Services Committee;

My name is Tim Mathern. I am sponsor of Senate Concurrent Resolution 4002.

The resolution asks Legislative Management to study diabetes, including the forms and costs of treatment, avenues of payment, and impact of the changing role of the federal Affordable Care Act for families managing this health condition.

Citizens contacted me about these issues last summer and I realized the issues they were bringing to me were way more complicated than what a bill could solve this legislative session. Therefore, I introduced this study resolution. The people here to testify will share the detail in a clearer manner than I could. To assist with your time limitations, they have agreed to only a few presents and are providing written testimony of others. The stories are moving and challenging to our health care system.

Thank you for the attention you will be giving to the presenters. I ask for your Do Pass recommendation to the full Senate.

Thank you for your consideration.

SCR 4602
2/6/19
#2 pg. 1

To: Senate Health & Human Services Committee

Re: SCR 4002

Date: February 6, 2019

My name is Lisa Rask. I live in Bismarck and have a 12-year old son named Griffin who is a 6th grader in Middle School and has been an insulin-dependent type 1 diabetic since the age of 4.

Many folks say to the parents of a type 1 kid after diagnosis, "Well, thank goodness this is something you can manage." And that is true. It's the management of this disease that's at the heart of a diabetic's health report card. However, what isn't widely understood is the magnitude of that management. They don't understand that type 1 isn't type 2. That if our kids didn't have insulin, **they could be dead in 2-4 days' time.** That without constant vigilance our children could be one mistake or one missed dose or one overdose away from major sickness, coma or even death. The same injectable medicine that keeps him alive could easily kill him. The difference between the lifegiving dose and the deadly dose is relatively small. There is not much margin for error.

Since he was diagnosed at 4, Griffin has tested his blood almost 24,000 times, almost all in his sore and scarred fingertips. Sometimes when he was really little, and I'd be up in the middle of the night to follow up on a low or high blood sugar, I'd test with his little toes so he could keep sleeping. Fun fact: the retail cost of each single use test strip that Griffin uses is over \$1. Almost 24,000 times by the age of 12.

Prior to getting a pump, he received and gave himself (when his hands got big enough to be able to hold the syringe) over 4,000 individual injections of insulin into his arm and stomach. After getting his insulin pump, he has changed his pump site (a long needle that injects a plastic canula that sits under his skin for about 3 days' time and connects to the tube on his pump) almost 400 times.

He's had 30 blood draws and 30 2 to 3-hour doctor's appointments. During those appointments we study the prior two weeks of his blood sugar readings, his blood draw results, and have long, critical conversations regarding his care and our education. We adjust pump calculations and insulin ratios. We look for scar tissue in his stomach from pump sites and try to promote his good habits. These visits don't count all the visits to his educator in between, where we make insulin pump adjustments based on urgent issues that arise as he grows and changes.

He's been hospitalized 3 times and visited the ER twice in 7 years, even though we have been told several times a year since his diagnosis that he is one of the most tightly-controlled pediatric diabetics in his doctors' practices. Even with constant focus and deep understanding and a mama lion with a commitment to managing his disease, he's still constantly at risk. The amount of time I have missed at work is absurd.

It is only through affordable access to insulin and a deep understanding of proper proactive and reactive decisions to constant, changing daily situations that a type 1 individual can *survive*, let alone thrive. Depending on whether an individual with type 1 is on a pump or takes shots, each meal or snack requires a blood test, mathematic calculations, and critical thinking factoring in past,

current, and future physical activity. Illness, hormones, stress, and patient-specific issues can also impact those decisions.

I believe this study is important for two reasons: 1) The conflation between type 1 & type 2 diabetes makes it hard for the average person to understand the severity of a type 1 individual's illness and the deep, constant complexity of its management. 2) Our experience in Bismarck Public Schools with various nurses and educators and administrators shows that there is an enormous gap in the medical safety of our kids. The school nurses do not have enough critical understanding of the disease and its needs, they do not have enough time in the schools, there is often no nurse on site at all, and too much pressure is being put on part-time teachers' aides and secretaries, as well as guidance counselors. The person in charge of my son's medical plan at his new school is a first-year guidance counselor with no experience with this whatsoever. If I am not advocating constantly, my son is at risk. The school is willing and able to learn and help my son—but in many ways he is simply on his own because they have no consistent resources available to him.

Type 1 Diabetes is the only disease I know of that requires constant, 24/7/365 dosing decisions with a drug that can either kill you or save your life. Teachers' aides were expected to make dosing decisions for my 5- year old son with minimal training. They made mistakes many times, and many times they made the right decisions. And sometimes his body was totally unpredictable no matter what happened. The only reason we didn't have a potentially deadly incident is because I have been lucky enough to be able to field phone calls with school personnel or Griffin himself sometimes multiple times a day for over 7 years. Though that is our normal, I believe strongly that this is totally unacceptable and could only happen when the people who make powerful decisions about the health and well being of diabetic children don't understand the gravity and enormity of their medical situation.

Please support this study bill so that our state may be better equipped to create positive change that will be most beneficial to North Dakotans who are dealing with type 1 and type 2 diabetes. Thanks to Karen Karls and the ND Health department, I was made aware of a recent impact study done by the ND Diabetes Prevention and Control Program. This study may initially seem like a reason not to spend money or time to study it further. Some folks may say, "We already know what we need to know." But I remind you—not all diabetics are type 2, not all diabetes can be prevented, and years of anecdotal evidence proves that a majority of people don't really understand that type 1 is different and what that ultimately means. The Diabetes in ND 2018 Report to Legislative Management focuses almost solely on type 2 and prevention, and the greatest detail it provides comes from the NDPERS population, folks who aren't underinsured. Affordable insurance, medication, and medical interventions are critical for surviving and thriving with diabetes.

I went to a funeral a few weeks ago for a boy who died from complications of the disease. His Mama was no different from me. This isn't drama and it isn't exaggeration. It's life and death, and it's critical that the folks who make our laws understand the impacts of this family of diseases.

Please feel free to share my testimony far and wide and invite any legislator to reach out to me for follow-up questions. I appreciate each one of you for listening.

My name is Petrea Klein and I live in Bismarck with my family. My daughter Annelise was diagnosed just before her 6th birthday. She is now 14 and I was hoping that she could join me today as she is a most impressive diabetes advocate. But she is home sick.

For most families this means chicken noodle soup, rest and TLC. For us, it means checking Annelise's blood every 2 hours – even through the night. It means constant vigilance. If she can't keep fluids down her blood will quickly thicken with too much sugar creating a nightmare scenario where you need to give your diabetic child insulin to bring down her blood glucose levels but not too much because her glucose level could plummet and she may not be able to keep food down to bring it back up. It is a tight rope and just another cold in the Klein household.

She has had the flu ^{5x} ~~twice~~ since diagnosis and been hospitalized both times because we could not manage at home. Last year we realized on a weekend evening that we needed help so we had to go to the Emergency Room. We knew she just needed IV fluids but that was the only place to get help. Our bill was over \$5,000. Diabetes has the worst timing.

And now it is the beginning of the year. For families like mine, that means starting at \$0 copay again. That means the pharmacist will take a breath when I stop by to pick up prescriptions and say something like "just so you know...the bill is pretty big this time." And yes, I know it will be big. I picked up Novolog (insulin) for Annelise's pump about a week ago. This time the pharmacist said "Are you sure you want to pay this one?" I know he was trying to crack a joke so I smiled and said "Yep, I'm sure!"

But inside, I wanted to ask him if he had a child and what he would be willing to pay to keep her alive for the next 6 weeks. What is that price? For me it was set at \$833.35. For my friend Tammy – she got a 3 month refill and it was \$3,151. I majored in mathematics and I cannot figure out who has to pay what for the same liquid.

A quick side note: did you know that insulin is the 6th most expensive liquid in the world? It costs approximately \$9,400 per gallon. It ranks behind Scorpion venom at \$39,000,000 per gallon but above our nemesis – black printer ink which ranks 8th at \$2,700 per gallon. Is there anyone in here who has not complained about buying ink? Do you need it to keep your child alive?

I thought about going through everything Annelise needs and how much it costs. Can we just agree that it's a lot? I pulled last year's insurance record for Annelise's expenses alone. Total expenses paid for medical care – this includes our copay/deductible and what my insurance company paid to providers – was \$18,385.34. Most, if not all of that, was diabetes related.

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Put into dollars from my pocket— between her deductible and my insurance premium I spent \$15,181.16 in 2018. Every day I am grateful for the coverage we have and each year I look at this number – more than I pay for my mortgage - and wish I could use this money elsewhere. I wish that I could invest these dollars toward the college expenses of my three children.

I will always pay what I need to keep Annelise alive but I urge you to think about and study how this money is used. Diabetes is an extraordinarily complicated disease. It is manageable but it takes mental energy all the time, it takes expensive medicine and medical equipment, and it takes a well-oiled medical team to keep North Dakota's type 1 diabetics healthy. And if you think that this is expensive, you haven't even begun to dig into what happens when T1Ds are not well managed. Think more ER visits, heart disease and stroke.

In my house, we focus on keeping Annelise healthy so she has a chance to avoid these ugly complications and only focus on fulfilling her goals & dreams. As I mentioned at the start, she is an advocate. She has represented North Dakota's diabetics in Washington DC. She recently wrote a Scholastic gold-key winning essay about life with diabetes and she is working on a podcast about pre-existing conditions.

You, the representatives that the grown ups in North Dakota elected, are being watched very carefully by the next generation. I urge you to support SCR 4002 and educate yourselves and your colleagues about diabetes.

Thank you for your attention today. I am happy to discuss this matter further with any of you at your convenience. And I'm sure Annelise would be thrilled to provide input as well.

Petrea Klein
Bismarck ND
petrea.klein@me.com

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Dear Legislators of North Dakota,

My name is Gina Stanford and I'm the mom to Noah who's 13. Noah was diagnosed with T1 Diabetes when he was just 5 years old. We didn't have any family history of the disease, he was a normal active, little boy, so we had no idea why he would be showing some unusual symptoms. Noah lost weight, was frequently using the bathroom, and was very thirsty. Noah had to be hospitalized because his blood sugar was over 5 times what it should be and our lives changed forever.

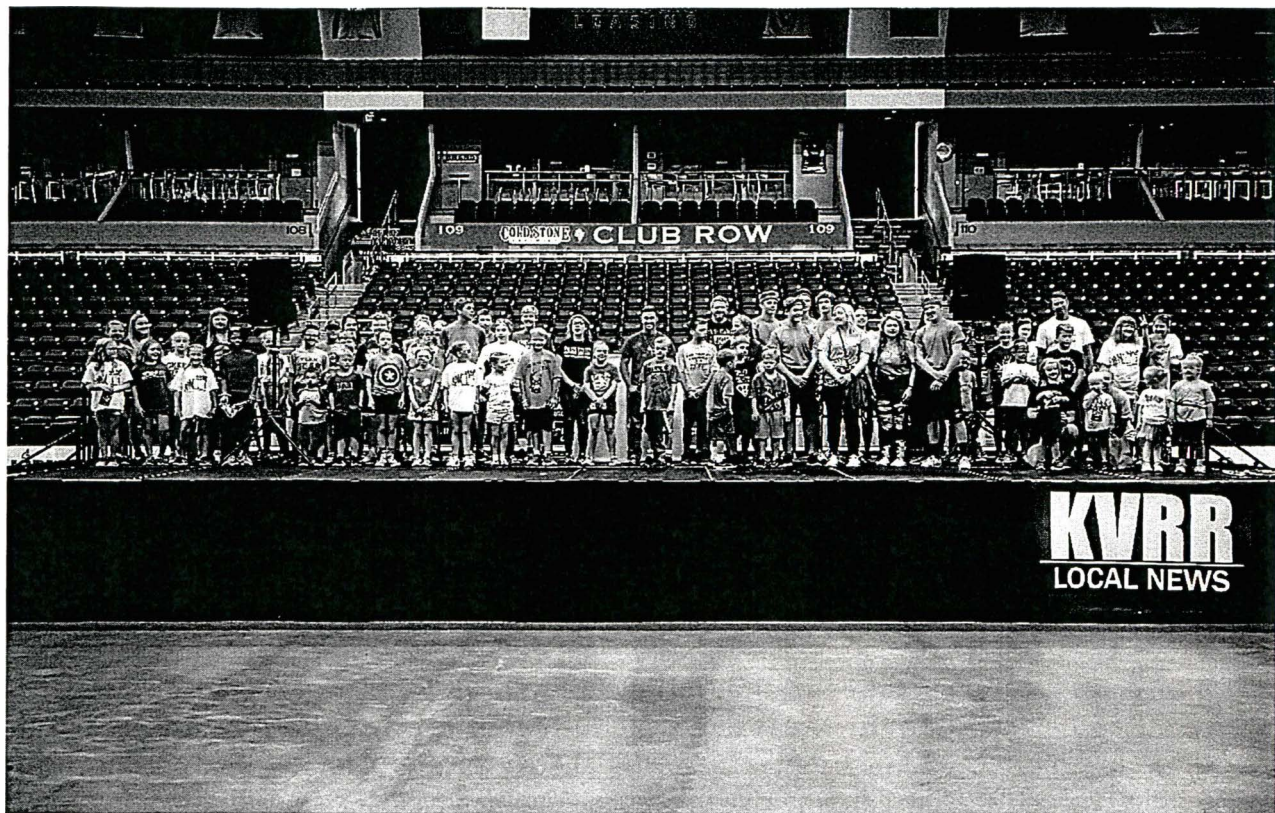
Noah needs insulin all day and night given to him either through an insulin pump or syringes. He needs this to live. Every time he wants to eat a cracker we need to give him insulin. His immune system kills the cells that make this insulin. We do the best we can keeping Noah's life as normal as any other 13 year old boy. This comes at a cost, a high cost. We pay hundreds of dollars each month just to have health insurance. We pay extremely high deductibles before our insurance starts to help, and we pay roughly 500 dollars monthly for his diabetes supplies. We haven't even gotten to insulin yet, insulin is what he needs to stay alive, and we pay hundreds of dollars each month just for the insulin. When he was first diagnosed in 2011 insulin was about \$100 a vial, now it's over \$300! Noah needs 3-4 vials a month.

We need you to realize these costs are astronomical. We can't buy new cars, we can't get a bigger house, and we can't go on vacations because we have medical supplies and insulin to buy each and every month with no end in sight. These are sacrifices we make daily to make sure Noah has what he needs to live a long and healthy life. We need your help.

Sincerely,

Gina Stanford

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#5 pg.1



What can we do?

I AM ALL IN, EVEN IF, I COULD ONLY IMAGINE A WORLD WITHOUT TYPE 1 DIABETES
PHOTO: INDIVIDUALS WITH TYPE 1 DIABETES - 2018 JDRF ONE WALK - FARGO

Danelle R. Johnson | Type 1 Diabetes Advocacy | February 2019
7335 60th Ave S, Horace, ND 58047
daryldanelle@msn.com 701-261-1687

Dear North Dakota Legislators,

I want to extend my sincere gratitude for the opportunity to share information related to Type 1 Diabetes with you today. Having had surgery last week, I am unable to travel at this time, which marks not only the start of bipartisan discussions on this very important topic affecting North Dakota citizens, but also marks my Type 1 Diabetic daughter Danika's 17th birthday. In addition to typical birthday milestones, we celebrate the ability to have survived another 24/7/365 days of living with a disease that is physically, emotionally and financially exhausting.

My Qualifications, Knowledge & Experience related to Type 1 Diabetes before August 11, 2015.
None, Zero & Zilch other than I had heard the term and knew 3 people who had the disease.

Over the last three and a half years, I continued to work full time at my regular job as a Senior Software Quality Analyst for a Crop Insurance Company in Fargo, continue to be a wife, mother, sister, daughter, aunt, neighbor, co-worker, friend, volunteer for non-profits. AND I have researched, read, listened, questioned and collaborated with various people to **increase my qualifications, knowledge and**

experience exponentially to help drive change for all individuals, families, communities, states and our nation fighting this disease.

Here are some national facts about diabetes (all types):

- Currently, 1 out of every 5 U.S. healthcare dollars are spent on individuals with diabetes.
- Additionally, 1 out of every 3 Medicare dollars are spend on individuals with diabetes.
- The financial impact of diabetes is not one just felt by the U.S. healthcare system, but also by the pocketbooks of those individuals and families living with the disease every day.
- For those living with type 1 diabetes this financial struggle is more real today than ever.
- With the rising cost of insulin, many individuals find themselves barely able to afford the medicine and supplies they need to stay alive.

The Special Diabetes Program of the Federal Government Produces Fact Sheets about each state. In that document, it states the financial burden of diabetes on North Dakota's health system is staggering - in **2013**, the direct and indirect cost of diabetes in North Dakota was approximately \$832 million. Since that was over 5 years ago and the extreme rise in costs of insulin have been since that point in time, I can't even imagine what the costs would be today. Just think what we could do with all that extra money in our families, communities and state budgets.

Our family story is one of planning, preparing, protecting and being diligent in balancing life's opportunities but also planning for the future ahead. My spouse and I work full time at our careers to take care of ourselves and raise two happy, healthy, hardworking daughters' in our community. We even had Kendra registered for daycare before our families knew we were expecting because we wanted to have a **choice** on the best possible environment for our child. We had life insurance on ourselves and our children from the time they were born to not burden anyone with expenses should something happen. When we built our house, we thankfully picked a price point well under what the banks "say" you can afford. We meet yearly with our financial planner and insurance agents to ensure we are properly balanced in protection of our assests\retirement funds\risk etc. and that we are keeping current in our coverage as it relates to costs of liabilities etc.

Then the UNEXPECTED DDAY happened. One summer day, our daughter didn't look sick, she didn't act sick, she just kept drinking water and going to the bathroom excessively. But here is why it seemed to be ALL OF A SUDDEN. She was so physically active in sports that she had been sweating out all the excess sugar instead of having to go to the bathroom. When summer sports had their two-week break before fall season started, BAM our lives changed. No more choices, no more planning, no more control, no more sleep, no more normal. Our lives revolve around 24/7/365 monitoring of our daughter by us or herself to ensure she is able to live a happy, healthy life. However, it is more like a game of mouse trap, where everything effects, everything else and we are constantly re-adjusting to manage this disease. Money flies out of our budget faster than any expense we have ever had in our lives, with **no choice** on our part, and it will continue to increase the cost of health care premiums to the point that is unsustainable. **In America we are diagnosing 110 people every day with Type 1 Diabetes, that is 770 a week and 40,150 people every year.** They depend on insulin to live and to be able to administer insulin, they need a variety of other prescriptions to monitor blood sugar level many times throughout the day and night. One wrong dose can be deadly, one missed dose can be deadly, rationing insulin can be deadly and guessing at care instead of being able to utilize today's medical technology available is moving

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backwards from what our medical community is capable of because insurance companies are refusing to cover insulin, pumps, continuous glucose monitors etc. because of the cost. **Where did choice go?** And is it morally acceptable to allow our citizens to die because they can't afford financially devastating costs the medicine keeping them alive.

I will depict the costs of Danika's most recent prescriptions which in our case, since most companies are now incenting and/or requiring employees to select High Deductible Health Care Plans, we pay \$3000 before insurance assistance kicks in, then pay another \$3000 until we have met our IN-NETWORK out of pocket max. Hopefully when we need any of her lifesaving prescriptions, they are IN NETWORK or we would have a \$10,000 out of pocket max to meet first. And this happens EVERY YEAR until a cure is found, or she becomes deceased. People sometimes joke about January being the most depressing month because of paying off debt from Christmas gifts, parties or trips. Which in reality are still **choices**, we are entering our 5th year of getting a \$3000 bill for medical devices, medical appts, lab tests and prescriptions such as insulin etc. the beginning of every new insurance year. And as far as planning, the insurance companies can change our coverage out from under us anytime throughout the year, but we can't change our insurance coverage unless we experience a life changing event.

Danika Johnson's Prescription Coverage Costs

Item	Retail Cost as of 1/1/19	Coverage Length
FIASP Insulin Flextouch Pens	\$3,946.99	90 Day Supply
Glucagon Emergency Kit	\$334.99	One time use for a severe hypoglycemia event. If not used expires yearly.
B & D Ultra Fine Pen Needles	\$25.96 per 100 pen needles	Used for backup when pump doesn't work properly.
One Touch Delica Lancing Device	\$20.99	One every 2 years. Note: I can buy on store shelf for \$10 right next to pharmacy, but pharmacy still charged my insurance full price. If I buy it outright, it doesn't apply to my out of pocket costs then.
One Touch Delica Lancets	\$67.45	90 day supply
Freestyle Glucose Test Strips	\$245.85	90 day supply
Dexcom G6 CGM (Continuous Glucose Monitor) Transmitter	\$545	90 day supply
Dexcom G6 CGM (Continuous Glucose Monitor) Sensors	\$1047	90 day supply
Dexcom G6 CGM (Continuous Glucose Monitor) Receiver	\$750	One per 4 year warranty period.
Omnipod Pump System (PDM)	\$800	One PDM per 4 year warranty period.
Omnipod Pods	\$900	90 day supply
TegaDerm	\$300	90 day supply - use as needed
KetoStix	\$14.99	Use only as needed. Expires yearly.

I would like to stress that when talking to people about their costs related to diabetes care, it is extremely dependent upon their current insurance plan, their prescription coverage plan, and their portion of the costs. IF they were to lose their insurance coverage, the retail price of care will quickly drain rainy day funds for many families. And even when people feel they are only paying a portion of it, their employer insurance plan is paying for it, which in turn leads to higher premiums year after year after year.

It is even more expensive (personally, and to the U.S. Healthcare system) if the disease is not managed effectively. For example, a visit to the E. R. for a hypoglycemic event by an individual currently enrolled in Medicare costs roughly \$17,500. But we know from long-term studies that by using the available technologies on the market to manage this disease, we can minimize the number of hypo events an individual is likely to experience.

Complications of unmanaged diabetes of any type can lead to: **Kidney Disease, Eye Disease, Cardiovascular Disease and Nerve Disease.** With Type 1 Diabetes being an auto-immune disease, a high percentage of individuals will very likely be diagnosed with at least one if not more auto-immune diseases. The day our daughter was diagnosed with Type 1 Diabetes, she was also diagnosed with Hashimoto's disease which is an auto-immune disease that affects the thyroid. Not to mention the scientific studies showing a significantly higher level of anxiety and depression of having a chronic disease to manage like this. Mental Health Care costs are not even covered in this discussion.

In closing, I would like to genuinely Thank each of the Bill Co-sponsors:

Senators: Tim Mathern, Robert Erbele, Erin Oban

Representatives Ruth Buffalo, Ben Koppelman and Mike Nathe

for helping us bring this topic to discussion in our legislature. It personally affects my daughter, our family, our community, our state and our nation. With so many people being diagnosed yearly in our region, we need to understand what is happening and how we can prevent the financial ruin of people just trying to care for their loved ones.

Please feel free to share my story with anyone and everyone you feel would like to learn more about this topic. I am available for questions at any time using any option you prefer from page 1.

Sincerely,

Danelle R. Johnson

Thank you members present at this Human Services Committee Hearing for SCR 4002. My name is Angela Kritzberger from Hillsboro, North Dakota. I am writing today on behalf of not only our family's firsthand experience with diabetes, but for the many who are also fighting this chronic, serious, life-threatening disease.

June 13, 2017 is a day that we will never forget in our family. It was the day our hometown physician made an unexpected house call to go over the results of a blood test that was drawn from our daughter Nina, seven years young at the time, because she had been sick – very sick—and was not getting better. Nina had lost 20 pounds in one month and my mother's intuition drove me to make yet another clinic appointment to see what could possibly explain why she was so lethargic, could not eat, and no longer had the energy to simply exist. The final diagnosis delivered to our doorstep – Type 1 Diabetes, (T1D) formally known as Juvenile Diabetes.

According to the Juvenile Diabetes Research Foundation in 2017, 1.25 million Americans have Type 1 Diabetes with an estimation that 5 million will suffer from this disease by 2050. From 2001-2009 the number of youths with T1D saw a 21% increase and by 2050 it will have a threefold growth in youth to nearly 600,000. T1D is a chronic autoimmune disease in which the immune system attacks the insulin-producing beta cells in the pancreas. It cannot be prevented, and currently there is no cure. Without good insurance and insulin affordability, too many people aren't able to afford this life-sustaining drug which without it can lead to hospitalizations and high rates of costly complications such as kidney failure, heart attacks and strokes.

Born at 36 weeks gestation, Nina was born a fighter. We knew that we would have another fight on our hands, but nothing can prepare you emotionally or financially for this devastating diagnosis. The only option that we knew we had was to fight this disease with everything we had in us because if we did not – she would die. There are days where we feel like we are teetering between life and death. If we dose too much or too little insulin, it can have life-threatening effects. Hypo is low blood sugar, which can cause confusion, loss of consciousness, seizures or death. Hyper is high blood sugar, which can require urgent medical care or cause a coma. During one hypo glycemic event, Nina's blood sugar dropped dangerously low. While I held her in my arms, she whispered to me "momma am I going to die?" Nothing prepares you as a parent to explain to your child that there is nothing that they have done wrong that has caused them to have this awful disease.

We are one of your average, born and raised in North Dakota and educated at a state university, get to work farm families. Being self-employed, we are limited with options that are available for health insurance coverage for our family. Our high-deductible, annual premium with out-of-pocket maximum that we will pay this year for our health insurance policy will be over \$39,000. Our insurance plan dictates what supply companies we use to purchase our diabetic supplies from because pharmacies do not carry these supplies. The first device that has enabled us to help in this fight is a continuous glucose monitoring system (CGM). A CGM is an electronic device that is implanted under the skin which checks glucose readings every five minutes and sends the reading to a receiver or a phone. We have chosen to invest in an iPhone for her to wear because the readings can be shared from her phone to our iPhones that are programmed to alert us if her

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blood glucose falls out of range. Living in a rural community and having her in a school which does not have a nurse on staff, it is comforting to know that we have continued access to her blood glucose levels at all times. Because our insurance company would not cover a CGM in the first 90 days after diagnosis, I was forced to sleep beside my daughter at night and prick her finger every three hours, 24 hours a day to determine her blood glucose levels. Without insurance, we would be forced to pay close to \$5,500 a year for this technology. But because of this technology, we are better able to manage the number of events that our daughter experiences with hypoglycemia and hyperglycemia.

Six months into her diagnosis, Nina wrote to Santa Claus asking if she could please have an insulin pump. This would help her to better control her diabetes by allowing her to wear a device that would hold a reservoir of insulin to dose her through a control without having to take the usual 6-10 shots a day to manage her blood glucose. After the final approval and determination of which pump she would qualify to wear, her wish was granted. Every three days, Nina has to fill her pump which injects a plastic needle called a canula to deliver insulin into her body 24 hours a day on demand and programmed for her needs. Without insurance, we would be forced to pay \$4,000 a year for this technology. We are grateful for this technology but also fearful for the direction that we are seeing with some of the nation's largest insurers because we strongly believe that every person should have the freedom to decide which types of insulin, insulin pumps, continuous glucose monitors, and many other supplies that are needed to fight this disease are available to each person based on their individual's needs.

As I previously stated, without insulin – Nina and millions of others with Type 1 Diabetes would die. T1D is an auto-immune disease. Without insurance, we would be forced to pay \$1,000 a month for this life-saving drug. There is no cure. Stories are being shared nationally and locally about young adults who are coming off of their parents insurance who are rationing their insulin because they cannot afford it and are dying. People who are willing to cross borders to buy insulin from neighboring countries whose prices are a fraction of what our insulin costs are in the United States. I do not want my child to become one of those statistics. We need to do something and the time is now.

Thank you for your time.

Angela Kritzberger,
Hillsboro, North Dakota

February 7, 2019

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2/11/19
#1 PS.1

PROPOSED AMENDMENTS TO SENATE CONCURRENT RESOLUTION NO. 4002

Page 1, line 1, remove "directing the Legislative Management to consider studying diabetes,"

Page 1, remove line 2

Page 1, line 3, replace "Affordable Care Act" with "urging Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs"

Page 1, line 9, remove "health insurance coverage is important for"

Page 1, line 9, remove "who"

Page 1, line 10, after "medications" insert "and North Dakota is concerned about the increasing costs and availability of medications and health care and coverage for those costs"

Page 1, line 10, remove the second "and"

Page 1, remove lines 11 and 12

Page 1, replace lines 15 and 16 with:

"That the Sixty-sixth Legislative Assembly urges the Congress of the United States to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs; and"

Page 1, line 17, remove "Legislative Management report its findings and"

Page 1, replace lines 18 and 19 with "Secretary of State forward copies of this resolution to the Speaker of the United States House of Representatives, the President Pro Tempore of the United States Senate, and each member of the North Dakota Congressional Delegation."

Renumber accordingly

Good morning Chairman Weisz and members of the House Human Services Committee. My name is Janna Pastir, and I am the Director of the Division of Health Promotion for the North Dakota Department of Health. I am here to provide testimony in support of Concurrent Resolution 4002, which urges Congress to address the rising costs and availability of medications and health care for individuals with diabetes and coverage of those costs.

There are two types of diabetes, Type I and Type II. Type I diabetes occurs when a person's body cannot make enough insulin. It can develop at any age and there are no known ways to prevent it. Type II diabetes is when a body cannot use insulin properly. This type can also occur at any age, although nearly all cases can be prevented through lifestyle modification. Type II diabetes accounts for over 95 percent of all diabetes diagnosis. The prevalence of Type 2 diabetes is rising rapidly, with a shift towards increasingly younger populations.

Diabetes prevention and control efforts in North Dakota focus on guidance provided by the Centers for Disease Control and Prevention (CDC) *National Diabetes Prevention Program and Diabetes Self-Management Education* (Best Practices). Best Practices provides evidence-based interventions to prevent Type II diabetes and management of the disease upon diagnosis through lifestyle modification. The work of the Diabetes Prevention and Control Program is mainly focused on Type II diabetes due to the federal funding requirements of the grant awarded to the North Dakota Department of Health.

In response to North Dakota Century Code 23-01-40, established in 2013, the North Dakota Department of Health, in collaboration with the North Dakota Department of Human Services, Indian Affairs Commission and Public Employee Retirement System, develops a *Diabetes in North Dakota* report every two years. This report provides the following information: prevalence of diabetes, financial impact of diabetes as compared to other chronic diseases, status and benefits of current programs, funding sources for current programs, action plans, recommendations to improve diabetes related health outcomes in North Dakota, and collaborative efforts among agencies.

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Diabetes in North Dakota 2018 can be accessed at:

[http://www.diabetesnd.org/image/cache/2018 Diabetes Burden Report Final 5-25-2018.pdf](http://www.diabetesnd.org/image/cache/2018%20Diabetes%20Burden%20Report%20Final%205-25-2018.pdf).

Diabetes is the seventh leading cause of death in the United States and in North Dakota, with American Indian mortality being five times that of their white counterparts. This concurrent resolution would positively impact the longevity and quality of life for all North Dakotans with Type I and Type II diabetes and the nearly 200,000 North Dakota adults living with pre-diabetes.

For these reasons, we ask you to support passage of Concurrent Resolution 4002. This concludes my testimony. I am happy to answer any questions you may have.

#2
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Diabetes in North Dakota 2018

Report to the Legislative Management North Dakota Century Code 23-01-40

Compiled by the North Dakota Diabetes Prevention and Control Program on behalf of the
North Dakota Department of Health
North Dakota Department of Human Services
North Dakota Indian Affairs Commission
North Dakota Public Employee Retirement System

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3/19/19

Report to the Legislative Management

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Executive Summary

This document is the third report generated to comply with the statute, North Dakota Century Code (NDCC) 23-01-40, established in 2013. This report provides the following information: the prevalence of diabetes, financial impact of diabetes as compared to other chronic diseases, status and benefits of current programs, funding sources for current programs, action plans, recommendations to improve diabetes related health outcomes in North Dakota and collaborative efforts among agencies. Additional collaboration, action planning and budget information is expected at the conclusion of the Diabetes Prevention State Engagement Meeting that will be held in June 2018.

Recommendations to Legislative Management

1. Support coverage of the National Diabetes Prevention Program (DPP) for North Dakota Public Employees Retirement System (NDPERS) Health Plan beneficiaries.

Medicare began coverage of this service April 1, 2018 after estimating a savings of \$2,650 for each enrollee (7). Health plans across the nation are beginning to follow this lead. The NDPERS Board recently implemented a DPP pilot for NDPERS Health Plan subscribers which will continue through June 30, 2021. The Board will be evaluating the results of the pilot to determine whether this program should be added as a covered benefit in the NDPERS Health Plan.

2. Support healthy, vibrant communities

Population health contributes to the vibrancy of a region. North Dakota communities are completing health needs assessments and planning for the future. Chronic disease prevention and management are commonly among their priorities.

Legislators can help communities implement strategies to prevent and manage chronic disease and are urged to fund community health promotion grants.

Suggested funding level: \$500,000 per biennium.

3. Support policies that improve outcomes for persons with and at risk for diabetes and other chronic diseases.

Policy makers can support policies or initiatives:

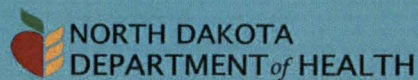
- for Medicaid, NDPERS, and other insurers to provide reimbursement for evidence based programs that prevent chronic diseases such as the National DPP.
- that increase physical activity in schools and early childhood centers.
- that make the healthy choice the easy choice, related to being active and choosing healthy nutrition.

Infographic

The *Diabetes in North Dakota* infographic shown on pages three through four describes data and information related to diabetes in a visual format using images and charts.

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Diabetes in North Dakota



DIABETES

54
THOUSAND

Nearly 54 thousand North Dakota adults have diabetes



That's about 1 out of every 10 people

About 17 thousand adults with diabetes are **undiagnosed** that's



never having been told they have diabetes

PREDIABETES

198
THOUSAND



About 198 thousand North Dakota adults 20 years and older - or 4 out of 10 have prediabetes



ONLY 1 OUT OF 10

→ North Dakota adults 20 years and older with prediabetes have been told they have it



Without weight loss and moderate physical activity

15-30% OF PEOPLE WITH PREDIABETES will develop type 2 diabetes within 5 years *

ESTIMATED ND COST OF DIABETES*



\$902
MILLION



Risk of death for adults with diabetes is

50%
HIGHER



than for adults without diabetes *



Medical costs for people with diabetes are
TWICE AS HIGH



as for people without diabetes *

People who have diabetes are at higher risk of serious health complications:



BLINDNESS



KIDNEY DISEASE



HEART DISEASE



STROKE



LOSS OF TOES, FEET OR LEGS*

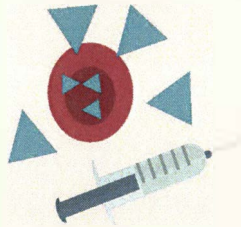
*U.S. National Data/Statistics was used to present this information

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The Information Presented Below is Based on U.S. National Data/Statistics

TYPES OF DIABETES

TYPE 1



BODY DOES NOT
MAKE ENOUGH
INSULIN

- ▶ Can develop at any age
- ▶ No known way to prevent it

MORE THAN 18,000 YOUTH
DIAGNOSED each year in
2011 and 2012

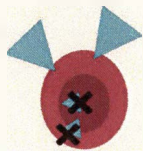


In adults, type 1
diabetes accounts for
approximately

5%

OF ALL DIAGNOSED CASES
OF DIABETES

TYPE 2



BODY CANNOT USE
INSULIN PROPERLY

- ▶ Can develop at any age
- ▶ Most cases can be prevented

In adults, type 2
diabetes accounts for
approximately

95%

of all diagnosed cases of
diabetes



More than 5,000 youth
diagnosed each year
in 2011 and 2012

RISK FACTORS FOR TYPE 2 DIABETES



BEING
OVERWEIGHT



HAVING A
FAMILY HISTORY



BEING 45 AND
OLDER



PHYSICAL
INACTIVITY



TAKE THE TEST:
<https://doihaveprediabetes.org/prediabetes-risk-test.html>

WHAT CAN YOU DO?

You can PREVENT or DELAY type 2 diabetes



LOSE
WEIGHT



EAT
HEALTHY



BE MORE
ACTIVE



WORK WITH A
HEALTH CARE
PROFESSIONAL



EAT
HEALTHY



STAY
ACTIVE

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U.S. Census Bureau. 2015 American community survey 1-year estimates.
Yang W., Dall T., Halder P., Gallo P., Kowal S., Hogan P. Economic costs of diabetes in the U.S. in 2017. Diabetes Care 2018; 41:917-928 [https://doi.org/10.2337/dcl18-0007].
Infographic developed using the Piktochart infographic maker, www.piktochart.com.

LEARN MORE AT: <http://www.diabetesnd.org/>

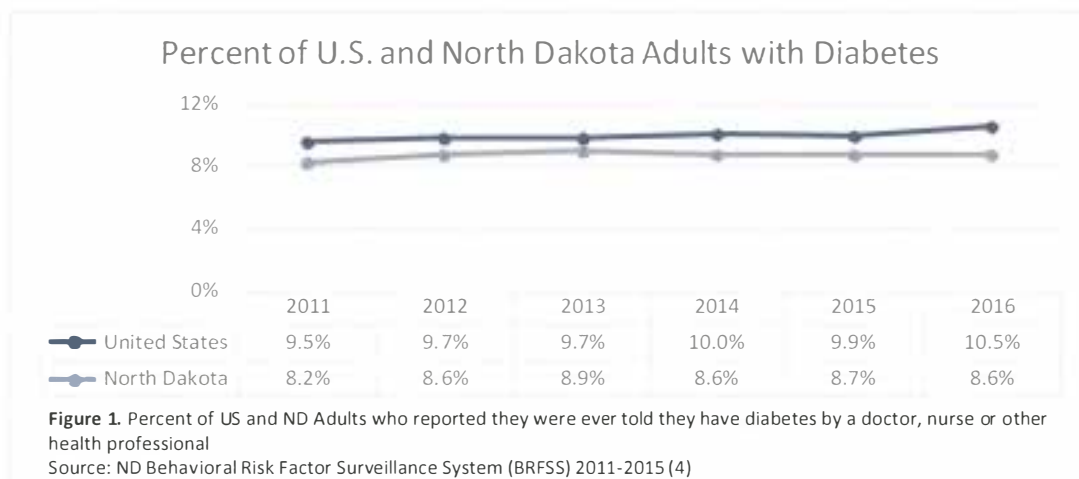
Diabetes Prevalence in North Dakota

The prevalence of diagnosed diabetes among adults (18 and older) in North Dakota (ND) has increased over the past six years, from **8.2 percent in 2011 to 8.6 percent in 2016** as shown in Figure 1 below. ND's rising prevalence has paralleled the national trend for diabetes.

In 2015 (Most current data available)

- An estimated 53,862 adults in ND were living with diagnosed diabetes (4,16).
- An additional 16,861 adults had undiagnosed diabetes (5,16).
- An estimated 34 percent of the total population has prediabetes which translates to 197,637 people in ND (5,16).

The total ND population affected by elevated glucose (diagnosed and undiagnosed diabetes + estimated prediabetes) = 268,360 people (5, 16).



Diabetes in North Dakota American Indians

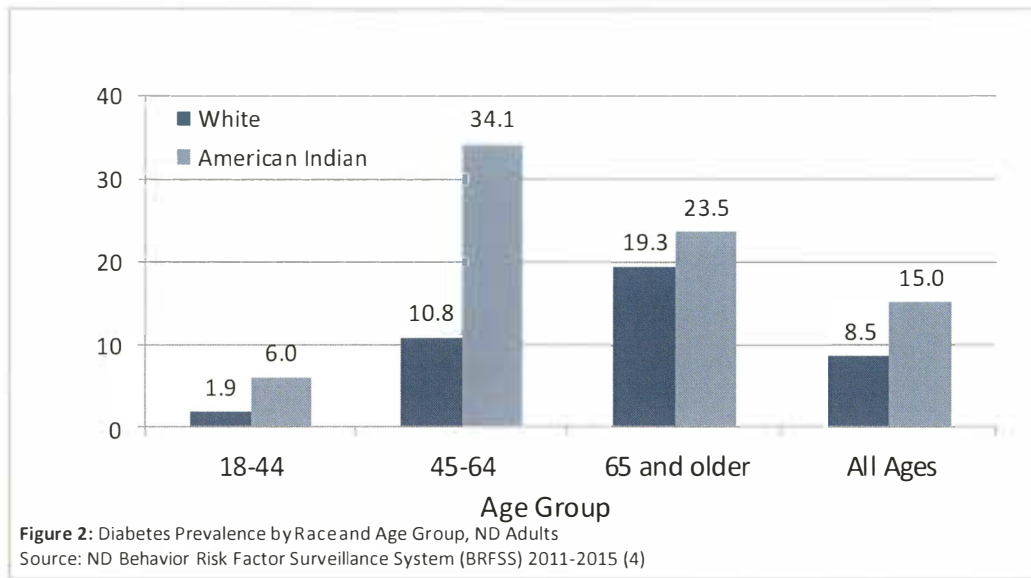
American Indians and Alaska Native people are:

- **2.3 times more likely** to have diabetes than non-Hispanic whites
- **9 times more likely** to be diagnosed with type 2 diabetes compared to non-Hispanic whites as youth aged 10-19
- **1.9 times more likely** to experience kidney failure due to diabetes compared with the general US population (8).

American Indians/Alaska Natives had the highest prevalence of diagnosed diabetes for both men (14.9%) and women (15.3%) (5). For information on ND diabetes prevalence by race and age group, please see Figure 2 on page 6.

Diabetes Prevalence by Race and Age Group

ND Adults, 2011-2015



Diabetes Complications are Preventable

Established care practices for people with diabetes can prevent or delay the development of serious and costly health complications, such as lower limb amputation, blindness, kidney failure and cardiovascular disease. These care practices are defined in *The Standards of Medical Care in Diabetes 2018* (2).

“Persons with diagnosed diabetes, undiagnosed diabetes and prediabetes are at a significantly elevated risk of hospitalization compared with those without diabetes.” The excess rates of hospitalizations may be preventable with improved diabetes care (13).

Diabetes Self-Management Education and Support (DSMES) as defined in the *National Standards for Diabetes Self-Management Education and Support* (9) has been shown to improve clinical outcomes and quality of life while reducing hospitalizations and healthcare costs. DSMES helps improve hemoglobin A1c, a measure of overall blood glucose control for people with diabetes (12).

“Each 1 percent reduction in hemoglobin A1c was associated with a 37 percent decrease in the risk for microvascular complications and a 21 percent decrease in the risk of any end point or death related to diabetes related to diabetes.” (14)

Diabetes Mortality

Diabetes was the seventh leading cause of death in the US in 2015 based on the 79,535 death certificates in which diabetes was listed as the underlying cause of death (crude rate, 24.7 per 100,000 persons) (5). In ND, 164 deaths were attributed to diabetes in 2016 which made it the seventh leading cause of death (crude rate, 24.4 per 100,000 persons) (11). The combined 2006-2015 diabetes mortality data shows that in ND, **American Indian mortality rate from diabetes is more than five times that of Whites** (11).

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Risk Factors for Type 2 Diabetes

The following risk factors increase the likelihood of developing prediabetes and type 2 diabetes.

Non-modifiable	Modifiable
Age Risk increases with age	Overweight or Obese
Race American Indian, African American, Latino, Asian American or Pacific Islander descent increases risk	Low High Density Lipoprotein (HDL)
Family History Those with a history of gestational diabetes or polycystic ovary syndrome, or a parent or sibling with diabetes are at an increased risk	High Blood Pressure
	Physical Inactivity
	High Triglycerides
	Cardiovascular Disease (2)

Prevalence of Obese and Overweight Adults in ND and in the US

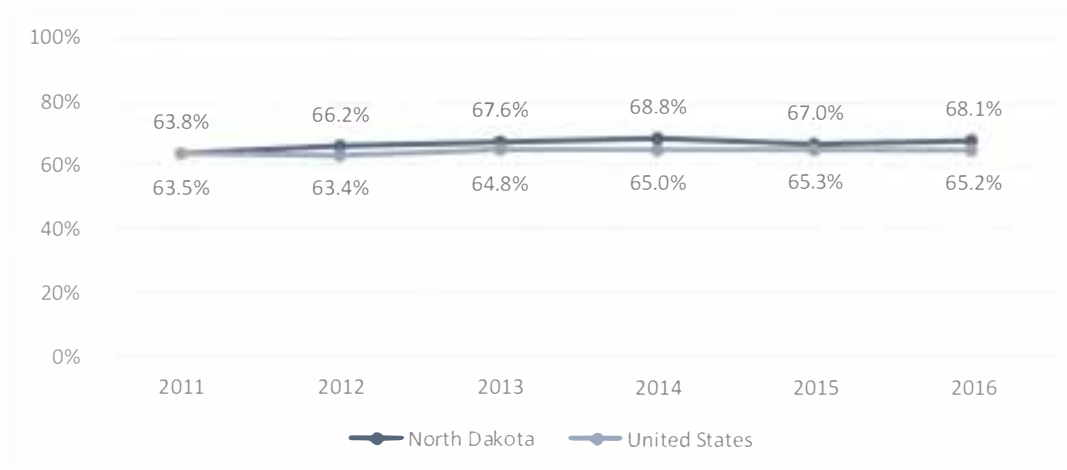


Figure 3. Percent of US and ND Adults who were overweight or obese
Source: ND Behavioral Risk Factor Surveillance System (BRFSS) 2011-2016 (4)

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Modifiable Risk Factors Associated with Diabetes in ND Adults

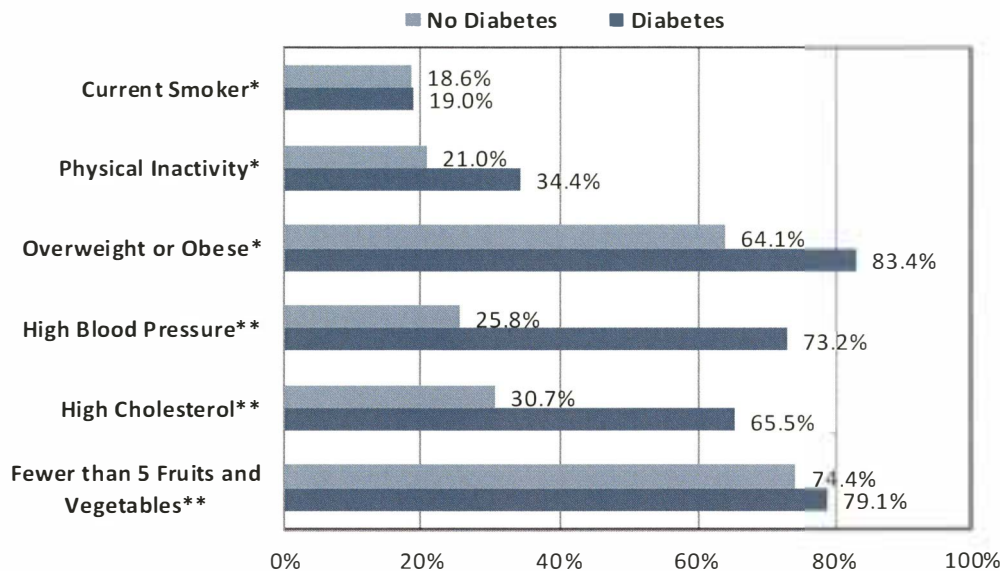


Figure 4. Percent of ND adults who smoke, are physically inactive, are overweight or obese, have high blood pressure, have high cholesterol and/or eat fewer than 5 fruits and vegetables for those with diabetes and those without diabetes
Source: ND Behavioral Risk Factor Surveillance System (BRFSS) **2015 *2016 (4)

Prediabetes

Prediabetes is diagnosed when the blood glucose level is higher than normal, but not high enough to be type 2 diabetes. Risk factors for prediabetes are the same as for type 2 diabetes. See page seven for a modifiable and non-modifiable risk factors (2).

There are an estimated 197,637 cases of prediabetes in ND (1, 5 and 16). **Fifteen to 30 percent of people with prediabetes will develop type 2 diabetes within five years.** Significant factors associated with progression of prediabetes to diabetes are being overweight or obese and physically inactive (3).

Early Detection and Treatment of Prediabetes Prevents Diabetes

Studies of the National Diabetes Prevention Program (DPP) found that small steps such as moderate weight loss (five to seven percent of body weight) and increased physical activity (30 minutes five times per week) produced the following results:

- Reduced the incidence of type 2 diabetes by 58 percent during a three-year period
- Reduced the incidence of type 2 diabetes by 71 percent among older subjects (those age 60+) (3)

Example: For a 225 pound person, this would mean losing and maintaining approximately 16 pounds of weight loss.

Economic Impact of Diabetes

Diabetes is Costly

Estimates of the cost of diabetes have been studied by the American Diabetes Association in 2002, 2007 and 2012 and 2017 using consistent methodology, as reported in *Economic Costs of Diabetes in the US in 2017* (18).

The total estimated cost of diagnosed diabetes in 2017 in the US was **\$327 billion, including \$237 billion in direct medical costs and \$90 billion in indirect cost** related to absenteeism, presenteeism, inability to work, reduced productivity for those not in the workforce and premature mortality (18).

Medications constitute the largest portion (43%) of excess cost associated the total direct medical burden:

- \$15 billion for insulin
- \$15.9 billion for other anti-diabetes agents
- \$71.2 billion in excess use of other prescription medications for conditions associated with diabetes

People with diagnosed diabetes:

- Incur average medical expenditures of approximately **\$16,750 per year**
- Have medical expenditures **approximately 2.3 times higher** than those without diabetes (18).

The average price of insulin nearly tripled between 2002 and 2013 (1).

Care for people with diagnosed diabetes accounts for more than **1 in 4 health care dollars** in the US (18).

An estimate of the annual cost of diabetes in our state for 2015 was approximately \$902 million:

53,862 (Estimate of ND residents with diabetes in 2015) x \$16,750 = \$902,188,500

Diabetes imposes a significant cost to society and families. Intangibles from pain and suffering, resources from care provided by nonpaid caregivers, and the burden associated with undiagnosed diabetes are not included in the estimate above. The number of undiagnosed people with diabetes in ND has been estimated at 16,861 (5, 16).

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Diabetes Among North Dakota Public Employees Retirement System Members

Diabetes Prevalence

For the reporting period January 1, 2017 to October 31, 2017 paid through January 31, 2018, the number of North Dakota Public Employees Retirement System (NDPERS) members with diabetes claims was 3,170 or 5.05 percent of all NDPERS members.

Cost Associated with Diabetes

- Members identified with diabetes incurred a total of \$46.1 million in paid medical expenses. This amount includes all medical claims paid for these members, whether or not related to diabetes.
- Claims paid for diabetes as the primary diagnosis was \$3.03 million.

NDPERS Cost of Claims by Disease State in Descending Order

Disease	Total Members	Total Paid	Average Paid Member
Back Pain	14,631	\$96,713,405.95	\$6,610.17
Neck Pain	9,832	\$58,454,022.31	\$5,945.28
Hypertension	8,460	\$90,333,530.88	\$10,677.72
Hyperlipidemia	8,024	\$76,626,893.43	\$9,549.71
Major Depression	3,406	\$44,085,396.53	\$12,943.45
Osteoarthritis	3,298	\$44,925,017.60	\$13,621.90
Diabetes	3,170	\$46,103,780.85	\$14,543.78
Headache	3,035	\$31,593,440.68	10,409.70
Asthma	2,419	\$22,282,185.30	\$9,211.32

Figure 5. Cost of claims filed among NDPERS members by disease diagnosis.
Source: Sanford Health Plan.

Among NDPERS members, diabetes has moved from the fourth to the seventh most costly disease since 2015.

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NDPERS Diabetes in Youth

According to the American Diabetes Association (ADA), about 193,000 Americans under the age of 20 (0.25%) are estimated to have diagnosed diabetes: <http://www.diabetes.org/diabetes-basics/statistics/?loc=db-slabnav>. In comparison, based on October 2017 data, there are 60 NDPERS members with diabetes claims.

Number of NDPERS Youth with Diabetes Episodes by Gender Incurred 1-2017 to 10-2017 and paid through 1-1-2018

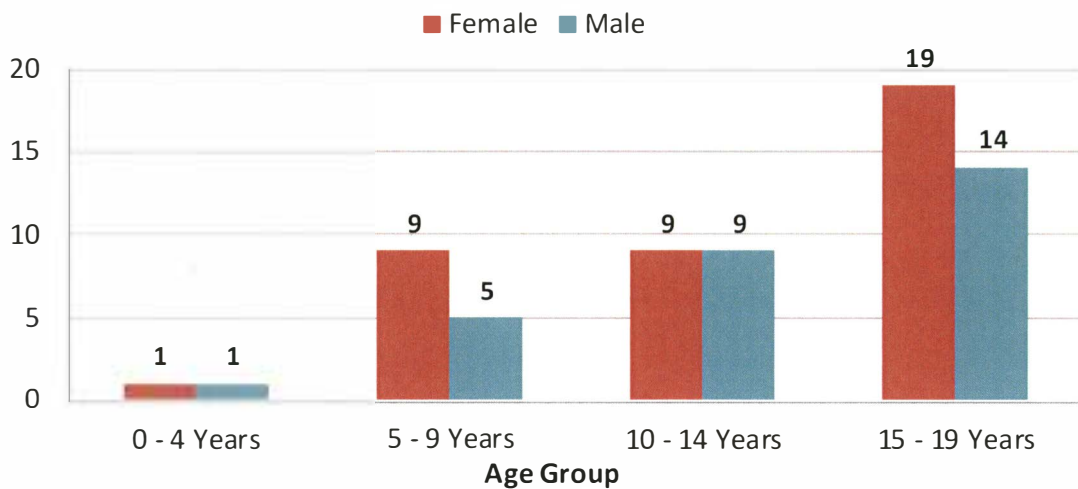


Figure 6. Number of female and male youth ages zero to 19 years old with diabetes episode accounting for 0.15 percent of the NDPERS population under age 20.
Source: Sanford Health Plan

Number of NDPERS Youth Diabetes Disease Payments Gender Incurred 1-2017 to 10-2017 and paid through 1-1-2018

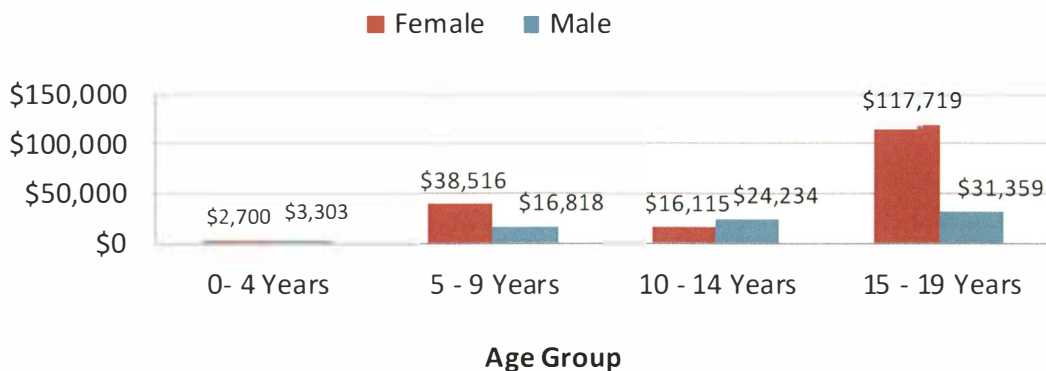


Figure 7. Youth ages zero through 19 with diabetes payments by gender and age accounting for 0.15 percent of the NDPERS population under age 20.
Source: Sanford Health Plan

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Diabetes and Complications

Diabetes increases the risk for many health conditions including heart disease, blindness, end stage kidney disease and amputations. By managing diabetes with routine testing and medical visits, members can prevent and delay the onset of complications. Figure 8 shows ten months of incurred claims data related to diabetes and its complications.

NDPERS January 2017 to October 2017 Diabetes Payments through January 31, 2018				
Diabetes with:	Inpatient	Outpatient	Professional	Total Allowed
No complications	4,425	\$ 201,094	\$1,257,043	\$1,462,562
Hyper/hypoglycemia	\$62,556	\$76,791	\$517,526	\$656,872
Other diabetes complications	\$212,149	\$29,106	\$237,442	\$478,697
Retinopathy		\$24,023	\$327,595	\$351,618
Maternal/pregnancy	\$155,780	\$21,375	\$96,723	\$273,879
Ketoacidosis	\$209,371	\$18,154	\$22,632	\$250,157
Peripheral circulatory disorder	\$90,442	\$6,877	\$93,085	\$190,404
Renal manifestations	\$9,000	\$98,782	\$67,573	\$175,354
Neurological manifestations	\$8,687	\$11,823	\$76,634	\$97,145
Ophthalmic manifestations		\$,13,430	\$16,909	\$30,339
With other complications			\$2,391	\$2,391
Other manifestations			\$13	\$13
Grand Total	\$752,409	\$501,456	\$2,715,565	\$3,969,431

Figure 8. Cost of claims data related to diabetes and its complications, January 2017 to October 2017 paid through January 31, 2018
Source: Sanford Health Plan

Diabetes and North Dakota Medicaid

Medicaid was authorized in 1966 for the purpose of providing an effective base to provide comprehensive and uniform medical services that enable persons previously limited by their circumstances to receive medical care. It is within this broad concept that the Medicaid Program in ND participates with the medical community in attempting to strengthen existing medical services in the state.

Funding is shared by federal and state governments, with eligibility determined at the county level. Traditional Medicaid pays for health services for qualifying families with children, pregnant women and individuals who are elderly or disabled. Medicaid Expansion, implemented in 2014, provides coverage to adults under the age of 65 up to 138 percent of the Federal Poverty Level. Coverage is provided through a managed care contract.

In 2016, there were 10,198 Medicaid recipients age 18 and older with diabetes, and 803 of them had a Medicaid claim related to their diabetes.

Action Plan for North Dakota

North Dakota Department of Health

Diabetes Prevention and Control Program

Funding Source: Centers for Disease Control and Prevention (CDC) grants
Staffing Level: One full time equivalent
Mission: To reduce the sickness, disability and death associated with diabetes and its complications, and to prevent new cases of type 2 diabetes.

Current Priority Areas:

1. Diabetes Prevention

Nearly 200,000 North Dakotans are estimated to have prediabetes and are therefore at risk for type 2 diabetes: this makes **diabetes prevention a top priority**. The North Dakota Department of Health (NDDoH) is working to engage at-risk North Dakotans and encourage their participation in the CDC's evidence-based **National Diabetes Prevention Program (DPP)**. The National DPP is being offered in more than 24 locations across our state and further expansion is anticipated, with technical assistance provided by the Diabetes Prevention and Control Program. **Studies have shown that participants who complete this program reduce their risk for developing type 2 diabetes by 58 percent (6).**

DPP Characteristics & Results

This program is designed for people with prediabetes and helps prevent the progression to type 2 through lifestyle changes that promote a five to seven percent body weight loss. This year-long, participant-centered program helps people make healthier nutrition choices, increase physical activity and cope with stress and challenges that make choosing a healthy lifestyle difficult.

Eligibility for the DPP

To be eligible for the program, participants must meet the following requirements:

- Be at least 18 years old, non-pregnant **and**
- Be overweight (body mass index ≥ 25 ; ≥ 23 if Asian) **and**
- Have no previous diagnosis of type 1 or type 2 diabetes **and**
- Have either a blood test result in the prediabetes range within the past year:
 - ◊ Hemoglobin A1c: 5.7% - 6.4% or
 - ◊ Fasting plasma glucose: 100 - 125mg/dL or
 - ◊ Two-hour plasma glucose (after a 75 gm glucose load): 140 - 199 mg/dL
 - ◊ Previously diagnosed with gestational diabetes with a blood test **or**
- Have a positive screening for prediabetes based on the CDC's Prediabetes Risk Test.

Take the Risk Test - Know Your Score

See the Risk Test in [Appendix C on page 24](#). A diagnosis of prediabetes can be confirmed with a blood glucose (sugar) test and a check up at your doctor's office.

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DPP Components:

- CDC-approved curriculum with lessons, handouts and other resources
- Trained lifestyle coaches to help participants learn new skills, set goals and stay motivated to achieve them
- Support from peers with similar goals and challenges

Key Features:

- Class size of up to 15 participants
- Making healthier meals without giving up most-desired foods
- Inclusion of physical activity in lifestyle
- Coping with stress and challenges that would otherwise derail success
- Getting back on track after a slip-up
- Setting goals
- Staying motivated
- Overcoming barriers to success
- Tracking food intake and physical activity

One-Year Time Commitment:

- Sixteen one-hour sessions in the first six months
- Monthly one-hour sessions in months seven through 12

Participants who complete this program can reduce their risk of developing type 2 diabetes by 58 percent (6). The impact of this program can last for years to come. Research has shown that **even after 10 years, people who completed a diabetes prevention lifestyle change program were one third less likely to develop type 2 diabetes** (3).

2. Diabetes Self-Management Education and Support (DSMES)

The NDDoH is helping people with diabetes by promoting evidence-based DSMES education by:

- Developing qualified DSMES programs in underserved areas. There are currently 42 DSMES sites in ND.
- Facilitating health care provider referrals of patients with diabetes to DSMES programs.
- Promoting public awareness of the benefits of diabetes self-management education and support and where to find DSMES programs.

DSMES has been shown to be cost-effective by **reducing hospital admissions and readmissions, as well as estimated lifetime healthcare costs related to a lower risk for complications**. DSMES improves hemoglobin A1c, a measure of blood glucose control, by as much as 1 percent in type 2 diabetes (12).

“Each 1 percent reduction in hemoglobin A1c was associated with a 37 percent decrease in the risk for microvascular complications and a 21 percent decrease in the risk of any end point or death related to diabetes. (14).

Please see Appendix D on page 25 for a map of DPP and DSME programs in ND.

3. Public Awareness Efforts

The NDDoH Diabetes Prevention and Control Program works to educate the public and promote healthy choices through press releases, an informational website (www.diabetesnd.org) and media campaigns. Messages promote:

- Self-assessment of the risk factors for prediabetes and diabetes
- Self-help diabetes prevention information
- Diabetes self-management strategies and resources
- Awareness of recommended care options including North Dakota's evidence-based programs like the National DPP and DSMES programs

4. Education for Diabetes Care Professionals

Resources are directed toward the support of education for diabetes care health professionals in the form of:

- Webinars on diabetes care related topics
- The annual Diabetes Summit, an educational event held in collaboration with the Dakota Diabetes Coalition

5. Health System Assessment and Clinical Care Interventions

A health system assessment has been developed by the NDDoH to measure specific diabetes care parameters. Based on results of the assessment, clinical care interventions are suggested to elevate the level of diabetes care for patients.

6. Diabetes Care Network

The Diabetes Prevention and Control Program relies on a network of national, state, regional and local partners to expand the reach of diabetes prevention and control efforts. Partners include but are not limited to:

- American Association of Diabetes Educators
- American Diabetes Association
- Dakota Diabetes Coalition
- Centers for Disease Control and Prevention, Division of Diabetes Translation
- Community Health Centers of the Dakotas
- Diabetes care health professionals
- Hospitals and clinics
- Local Public Health Units
- North Dakota State University Extension
- North Dakota Universities
- National Association of Chronic Disease Directors
- National Diabetes Prevention Program sites
- Quality Health Associates
- School systems
- Third party payers

Children's Special Health Services

Children's Special Health Services (CSHS) serves children with diabetes through three programs:

1. Specialty Care Diagnostic and Treatment Program

CSHS paid \$16,810 in health care claims for 17 eligible children with Diabetes Mellitus type 1 and 2 in fiscal year 2016. Examples of services covered include:

- Medications
- Diabetes care supplies
- Insulin pumps
- Inpatient and outpatient hospital services, office visits and laboratory tests
- Dilated eye examination for children 10 and older
- Diabetes education provided by a Certified Diabetes Educator
- Care coordination services that help families access other needed services and resources provided for children who are eligible for CSHS treatment services

2. Multidisciplinary Clinics

- CSHS funds monthly pediatric diabetes clinics through the Coordinated Treatment Center at Sanford Health in Fargo, ND. Clinics provide multidisciplinary team evaluations and individualized care plans to support ongoing management for participating children and their families. There is no charge to families for the service. Families that travel more than 50 miles one way to attend the clinic are able to receive help to offset travel expenses (mileage and lodging), if needed.
- The clinic team is comprised of medical specialists (pediatric endocrinologist, pediatrician), diabetes nurse educator, social worker, nurse, reception staff, exercise physiologist, licensed registered dietitian and psychologist who see the children at one place and time. This type of service enhances coordination and supports access to care.

3. Information Resource Center

CSHS provided health resource information on topics including child growth and development, parent-support (e.g., parent-to-parent programs), well-child care, specialty clinics, programs or doctors, financial assistance and disease specific information.

Indian Affairs Commission

The Indian Affairs Commission does not administer a program that specifically targets diabetes, but collaborates with the agencies on diabetes-related activities in American Indian communities and with American Indian populations. The commission plays an important role as a liaison between the departments and the tribes.

Health and Human Services - North Dakota Medicaid

Medicaid of North Dakota offers the *Experience Health ND* program for people with diabetes. The program is voluntary, confidential and free to eligible recipients.

Participants in *Experience Health ND* can call a nurse for information or assistance 24 hours per day. A registered nurse calls or meets with enrollees to learn what their needs are and prepares an individualized care plan for them. The nurse provides information and education to help manage their health condition, and gives assistance with finding services and other supports that help them follow their doctor's treatment plan.

Experience Health ND members use the following services:

- A toll-free number enrollees can call 24 hours a day, seven days a week, to speak with a nurse about their health concerns.
- Help in finding a doctor or in coordinating with their doctor and other health care providers to get the most from their care.
- Education about choices they can make to improve their health.
- Information sources and education about how medicines, exercise, nutrition, recreation, rest and other factors affect their health and how well they feel.

North Dakota Public Employee Retirement System Diabetes Health Management Program

Sanford Health Plan offers a diabetes health management program to all members. Members are identified by claims data and are automatically enrolled in the program. Members receive the following information:

- Diabetes toolkit
- Periodic mailings regarding diabetes
- Tips on how to manage their diabetes to reduce the risk of complications

Currently, 7.39 percent of the total North Dakota Public Employees Retirement System (NDPERS) population or 4,637 members have been automatically enrolled in the diabetes health management program.

Additionally, members identified at increased risk with diabetes are contacted by a nurse case manager. The case manager helps the member develop a self-management plan to support their provider's plan of care. Support and assistance is provided to the member, including education, recommended diabetes care and suggestions on healthy lifestyle changes.

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Agency Based Wellness Program

NDPERS offers a program to encourage participating employers to develop employer-based wellness programs to encourage a healthy lifestyle. Pursuant to North Dakota Century Code (NDCC) 54-52.1-14, employers are offered incentives through their health insurance premium. Last year 198 out of 249 employers elected to participate in the wellness program. This is an employer participation rate of approximately 76 percent. However, 97 percent of employees covered on the insurance plan are working for employers that offer wellness programs and activities to their employees.

About the Patient Program

The *About the Patient** program is an opt-in program for NDPERS beneficiaries with diabetes. On a monthly basis, newly eligible patients are sent a letter explaining the program and a wellness enrollment form. The wellness enrollment form allows patients to choose one of 50 community pharmacy locations across ND for face-to-face program participation.

- Patients are eligible for three visits within the first year and two visits per year thereafter. By actively participating in the program, patients receive reimbursement of co-pays on diabetes medications, ACE inhibitors and testing supplies on a quarterly basis.
- The patient curriculum is based on the seven self-care behaviors identified by the American Association of Diabetes Educators and principles of medication therapy management as outlined by the American Pharmacist Association.
- Patients are seen by a health professional, currently a community pharmacist, who has completed additional training in diabetes management outside of their terminal degree and must document continuing education in this area on an annual basis.
- All patient clinical encounters are documented and billed using the North Dakota Pharmacy Services Corporation electronic medical record software MTM Express™.
- **Return on investment calculations demonstrated a health cost savings of \$2.34 for every \$1.00 spent for the program.**

Funding: Funding for the above programs is provided from the health premiums paid.

*See Appendix E on page 26 for more information on *About the Patient*.

Diabetes Prevention Program

The NDPERS Board approved the implementation of Diabetes Prevention Program (DPP) pilot for NDPERS subscribers who are at risk for type 2 diabetes. The pilot program began in January 2018 in the Bismarck-Mandan area and has successfully launched four cohorts to date. The NDPERS Board approved expanding the pilot into Grand Forks, Fargo, Dickinson, Minot and Jamestown and also extending the pilot into the 2019-2021 biennium. The Board will evaluate the results of the pilot program to determine whether this program should be added as a covered benefit in the NDPERS Health Plan.

Collaborative Efforts

Representatives of the NDDoH, the NDPERS, the Department of Human Services and the Indian Affairs Commission share information and identify opportunities to work together. Collaboration is occurring among the departments through epidemiology and evaluation, the Chronic Disease Coordination Team (CDCT) and through the development of a pilot program for the National DPP.

Health Department Chronic Disease Coordination Team

The NDDoH coordinates the CDCT that meets regularly to share upcoming activities and collaboration opportunities among chronic disease and risk factor related programs. The NDDoH Diabetes Prevention and Control Program Director attends these meetings and informs team members of program activities and opportunities for collaboration and integration.

Epidemiology and Evaluation Team

Epidemiology staff from NDDoH, the NDPERS and ND Medicaid each provided data for this report and other documents that promote care of people with prediabetes and diabetes. Evaluation staff assist with developing progress reports on programmatic initiatives including ND health outcomes.

National Diabetes Prevention Program (DPP) Pilot Study

NDPERS and the NDDoH have worked together to develop and implement an incentive-based pilot project to study the benefit of the National DPP for NDPERS beneficiaries. In January 2018 area lifestyle coaches began offering the National DPP to NDPERS members in the Bismarck-Mandan area and gathering data on program outcomes. NDPERS is providing reimbursement for this pilot, and a summary of the pilot results will be developed at its conclusion. The aim of the pilot program is to determine the level of effectiveness of the National DPP for NDPERS members related to reducing modifiable risk factors for type 2 diabetes (overweight, obesity, physical inactivity). Results of the pilot program will potentially influence future decisions related to offering the National DPP to NDPERS beneficiaries as a covered health plan benefit.

Overarching Collaboration Goals

1. Reduce the prevalence and cost of diabetes in ND

Objectives:

- A. Make diabetes prevention programming accessible to all ND residents who have prediabetes by developing more National DPP sites in underserved areas.
- B. Promote training of additional lifestyle coaches to support further expansion of the National DPP.
- C. Increase the number of at-risk North Dakotans who participate in the National DPP lifestyle change program.
- D. Communicate the National DPP's return on investment to health plans to promote future coverage of the National DPP for all North Dakotans.
- E. Work with health systems and other partners to identify prediabetes and refer people with prediabetes to lifestyle intervention programs such as the National DPP.
- F. Work with employers to identify prediabetes and develop wellness policies to support lifestyle intervention programs such as the National DPP.

2. Improve the quality of life for people with diabetes in ND

Objectives:

- A. Continue to promote awareness of qualified Diabetes Self-Management Education and Support (DSMES) programs to North Dakotans.
- B. Facilitate diabetes care and DSMES programming for disparate populations in ND.
- C. Continue to build awareness and adherence to the Standards of Medical Care in Diabetes to optimize medical management visits for people with diabetes.
- D. Continue to support professional development that improves diabetes care in ND health-care settings.
- E. Work with employers to identify wellness policies and practices that support optimal diabetes self-management.

3. Leverage chronic disease initiatives through partnerships and coalition building

Objectives:

- A. Promote collaboration among state agencies to optimize benefits for those with diabetes and other chronic diseases in ND.
- B. Provide information to coalitions working for the benefit of those with chronic diseases in ND.

4. CDC-Sponsored State Engagement Meeting

In June 2018 a meeting of national, state and local diabetes partners with representatives from all impacted agencies will convene in Bismarck. Key members will share current diabetes information and participate in professionally led strategic planning to develop an action plan and a budget blueprint to reduce the economic and social impact of diabetes in ND. This plan will help direct future efforts to reduce the burden of diabetes in ND.

Appendices

Appendix A: North Dakota Century Code 23-01-40

Diabetes goals and plans - Report to legislative management.

1. The Department of Human Services, State Department of Health, Indian Affairs Commission, and Public Employees Retirement System shall collaborate to identify goals and benchmarks while also developing individual agency plans to reduce the incidence of diabetes in the state, improve diabetes care and control complications associated with diabetes.
2. Before June first of each even-numbered year, the Department of Human Services, State Department of Health, Indian Affairs Commission and Public Employees Retirement System shall submit a report to the legislative management on the following:
 - a. The financial impact and reach diabetes is having on the agency, the state and localities. Items included in this assessment must include the number of lives with diabetes impacted or covered by the agency, the number of lives with diabetes and family members impacted by prevention and diabetes control programs implemented by the agency, the financial toll or impact diabetes and diabetes complications places on the agency's programs, and the financial toll or impact diabetes and diabetes complications places on the agency's programs in comparison to other chronic diseases and conditions.
 - b. An assessment of the benefits of implemented programs and activities aimed at controlling diabetes and preventing the disease. This assessment must document the amount and source for any funding directed to the agency from the legislative assembly for programs and activities aimed at reaching those with diabetes.
 - c. A description of the level of coordination existing between the agencies on activities, programmatic activities, and messaging on managing, treating, or preventing diabetes and diabetes complications.
 - d. The development or revision of detailed action plans for battling diabetes with a range of actionable items for consideration by the legislative assembly. The plans must identify proposed action steps to reduce the impact of diabetes, prediabetes and related diabetes complications. The plan must identify expected outcomes of the action steps proposed in the following biennium while also establishing benchmarks for controlling and preventing relevant forms of diabetes.
 - e. The development of a detailed budget blueprint identifying needs, costs and resources required to implement the plan identified in subdivision d. This blue print must include a budget range for all options presented in the plan identified in subdivision d for consideration by the legislative assembly.

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Appendix B: Glossary of Terms

Crude rate: A crude rate is the number of new cases occurring in a specified population per year, usually expressed as the number of cases per 100,000 population at risk.

Diabetes: Diabetes is a disease in which the body either doesn't produce enough insulin or can't use its insulin as well as it should, resulting in above-normal levels of blood sugar. This build-up of blood sugar can lead to many complications including heart disease, blindness, kidney failure and lower-limb amputation.

Diabetes Episode (Figure 6 on page 11): A member having a claim with an ICD-10 diagnosis code in the ranges of E08.0 through E13.99 or O24.0 and O24.93, related to diabetes with or without complications.

Hemoglobin A1c Level: Hemoglobin A1c is a measure of a person's average blood sugar level over the previous two to three months and is usually expressed as a percentage. A common targeted Hemoglobin A1c for people with diabetes is less than 7 percent.

Gestational Diabetes: Gestational diabetes is a type of diabetes that develops only during pregnancy. Untreated or uncontrolled gestational diabetes can cause problems for the baby, such as a larger than normal birth size, low blood sugar right after birth, breathing problems (respiratory distress syndrome) and an increased chance of dying before or soon after birth. Women with gestational diabetes are at higher risk for developing type 2 diabetes later in life.

Obesity and Overweight: Obesity is having a high amount of extra body fat. Overweight is having extra body weight from muscle, bone, fat, and/or water. Body mass index or BMI, is a surrogate measure of body fat. For adults 20 years of age and older, BMI 25-29.9 is considered overweight; BMI of 30 and above is considered obese.

Prediabetes: Prediabetes is a health condition characterized by blood sugar levels that are higher than normal, but not high enough to be diagnosed as diabetes. Lifestyle change programs, such as those offered through the CDC's National DPP can help people with prediabetes reduce their risk of developing type 2 diabetes by as much as 58 percent.

Presenteeism: Presenteeism means working while sick which can cause productivity loss, poor health, exhaustion and the spread of workplace illness.

Prevalence: Prevalence is the proportion of a population found to have a condition, like diabetes.

Type 1 Diabetes: Type 1 diabetes is an autoimmune disorder characterized by high blood glucose levels as a result of the loss of insulin production, requiring insulin administration for sustainment of life and blood glucose control.

Type 2 Diabetes: Type 2 diabetes is a condition characterized by high blood glucose levels that result from a deficiency of or a resistance to insulin that develops gradually over time. A sedentary lifestyle, obesity and genetic factors contribute to the risk for type 2 diabetes.

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Appendix C: Prediabetes Risk Test

CDC Prediabetes Screening Test



COULD YOU HAVE PREDIABETES?

Prediabetes means your blood glucose (sugar) is higher than normal, but not yet diabetes. Diabetes is a serious disease that can cause heart attack, stroke, blindness, kidney failure, or loss of feet or legs. Type 2 diabetes can be delayed or prevented in people with prediabetes through effective lifestyle programs. Take the first step. Find out your risk for prediabetes.

TAKE THE TEST—KNOW YOUR SCORE!

Answer these seven simple questions. For each "Yes" answer, add the number of points listed. All "No" answers are 0 points.

Yes	No
1	0
1	0
1	0
5	0
5	0
5	0
9	0

Are you a woman who has had a baby weighing more than 9 pounds at birth?

Do you have a sister or brother with diabetes?

Do you have a parent with diabetes?

Find your height on the chart. Do you weigh as much as or more than the weight listed for your height?

Are you younger than 65 years of age and get little or no exercise in a typical day?

Are you between 45 and 64 years of age?

Are you 65 years of age or older?

Add your score and check the back of this page to see what it means.

AT-RISK WEIGHT CHART

Height	Weight <small>Pounds</small>	Height	Weight <small>Pounds</small>
4'10"	129	5'7"	172
4'11"	133	5'8"	177
5'0"	138	5'9"	182
5'1"	143	5'10"	188
5'2"	147	5'11"	193
5'3"	152	6'0"	199
5'4"	157	6'1"	204
5'5"	162	6'2"	210
5'6"	167	6'3"	216
		6'4"	221

National Center for Chronic Disease Prevention and Health Promotion
Division of Diabetes Translation



IF YOUR SCORE IS 3 TO 8 POINTS

This means your risk is probably low for having prediabetes now. Keep your risk low. If you're overweight, lose weight. Be active most days, and don't use tobacco. Eat low-fat meals with fruits, vegetables, and whole-grain foods. If you have high cholesterol or high blood pressure, talk to your health care provider about your risk for type 2 diabetes.

IF YOUR SCORE IS 9 OR MORE POINTS

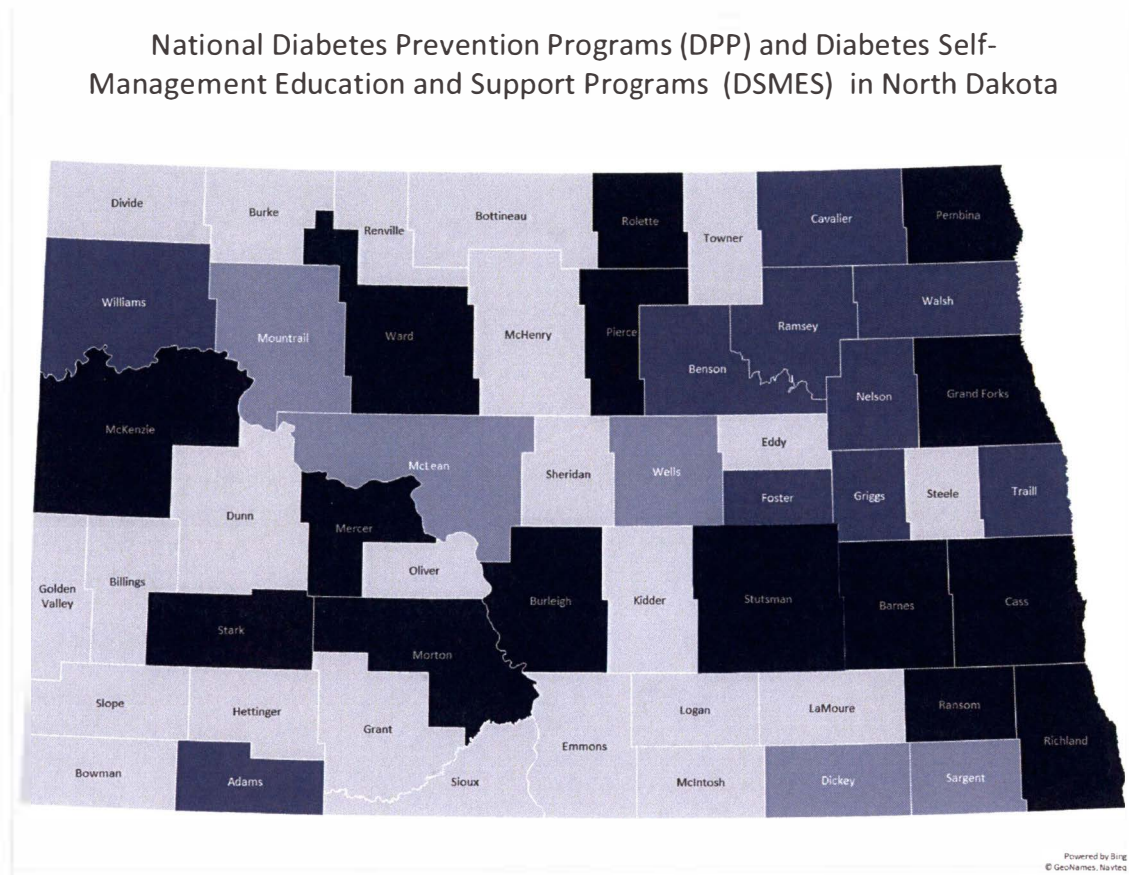
This means your risk is high for having prediabetes now. Please make an appointment with your health care provider soon.

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Appendix D: Diabetes Self-Management Education and Support and National Diabetes Prevention Program Sites in North Dakota



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Appendix E: North Dakota Public Employees Retirement System "About the Patient" Program



Collaborative Drug Therapy Program Annual Report

December 2017

About The Patient—1641 Capital Way Bismarck, ND 58501

T: 1.888.326.4657 W: www.aboutthepatient.net

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Executive Summary

The Uniform Group Insurance Program - Collaborative Drug Therapy Program in accordance with section 54-52.1-17 of the North Dakota Century code purpose is to improve the health of individuals with diabetes in order to manage health care expenditures through face-to-face collaborative drug therapy services by pharmacists and certified diabetes educators. For covered individuals waived or reduced co-payment for diabetes treatment drugs and supplies are provided as an incentive for program participation. The North Dakota Pharmacist Association or specified delegate facilitates the About the Patient program, patient curriculum based on national standards for diabetes care, provider network, enrollment procedures, documentation of clinical encounters, and assessment of outcomes. Funding of program is through the uniform group insurance program and if necessary an additional charge on the policy premium for medical and hospital benefits coverage may be added up to two dollars per month.

The About the Patient Program has been administering the Diabetes Management Program since July of 2008. A cost analysis of the Diabetes Management Program was conducted by the Center for Health Promotion and Prevention Research, University of North Dakota School of Medicine and Health Sciences in November of 2010. Return on investment calculation demonstrated a \$71.14 pmppm health cost savings (\$2.34 saved for every \$1.00 spent for the program). The diabetes program was included in the 2016 impact of diabetes report to state legislators as part of NDCC 23-01-40 requirement for even - numbered years reporting. Funding and program administration by About the Patient and Sanford Health Plan was extended for next biennium July 2017 - June 2019.

All data elements in this report are generated from pharmacist input of eligible patients into the North Dakota Pharmacy Services Corporation MTM Express System. The results indicate a mature & stable program with consistent outcomes in participation, interventions, and health outcomes.

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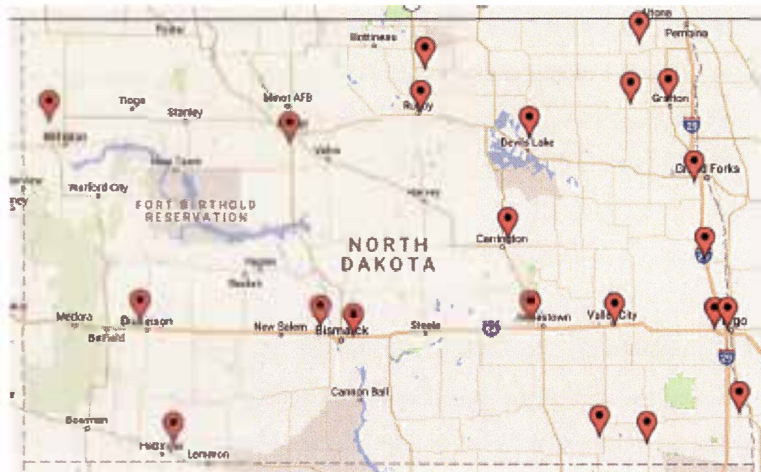
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Diabetes Management Program

The Diabetes Management Program is an opt-in program for North Dakota Public Employee Retirement System beneficiaries with diabetes. Targeted direct marketing via letters is done by the About the Patient program to inform eligible beneficiaries about the opt-in program. NDPERS also sends a letter to newly eligible patients on a month-to-month basis. The wellness enrollment form allows patients to choose one of 57 community pharmacy locations across North Dakota for face-to-face program participation and/or live secure video conferencing (Telepharmacy) in Edgeley, Glen Ullin, New Salem and all Thrifty White Drug locations in North Dakota. The Thrifty White Patient Care Center also provides teleconference visits for those patients where a barrier to participation is location.



Patients are eligible for three visits within the first year and two visits during the second year. By actively partaking in the program patients receive reimbursement of co-pays on diabetes medications and testing supplies. Patients receive copay reimbursements on a quarterly basis. The patient curriculum is based on the seven self-care behaviors identified by the American Association of Diabetes Educators and principles of medication therapy management as outlined by the American Pharmacist Association. Patients are seen by a health professional, currently a community pharmacist, who has completed additional training in diabetes management outside of their terminal degree and must document continuing education in this area on an annual basis. All patient clinical encounters are documented and billed using the North Dakota Pharmacy Services Corporation's electronic medical record software MTM Express™.

Program Analysis July 2016-June 2017

Participation & Activity

The program had 175 patients with billable services during the current reporting period. These 175 patients accounted for 303 billable visits during the reporting period. The last eligibility report indicated 3,271 eligible patients for a participation rate of 5.4%. For comparison, the reporting period of July 2015 to June 2016 had 174

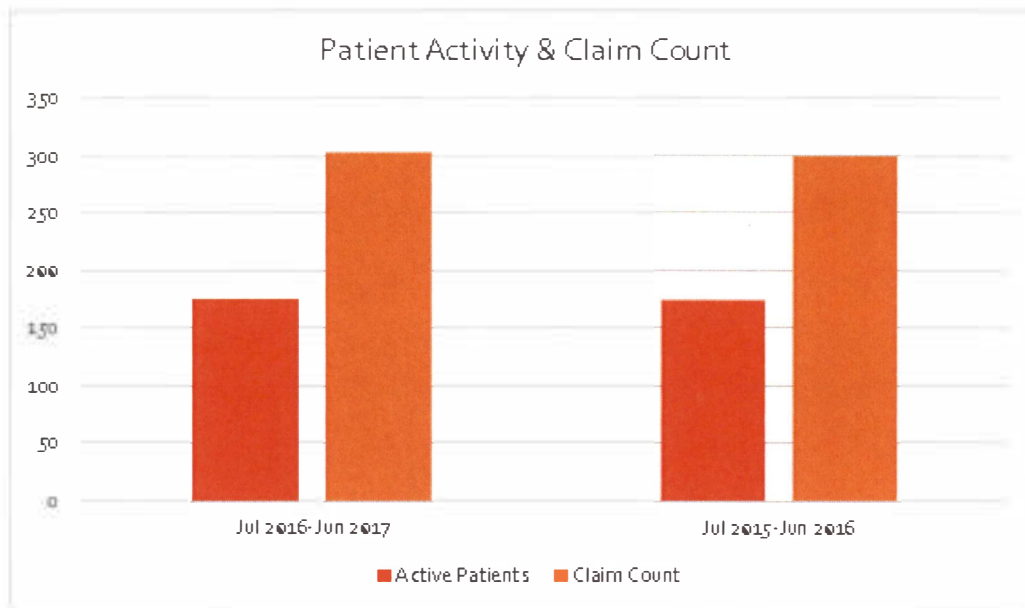
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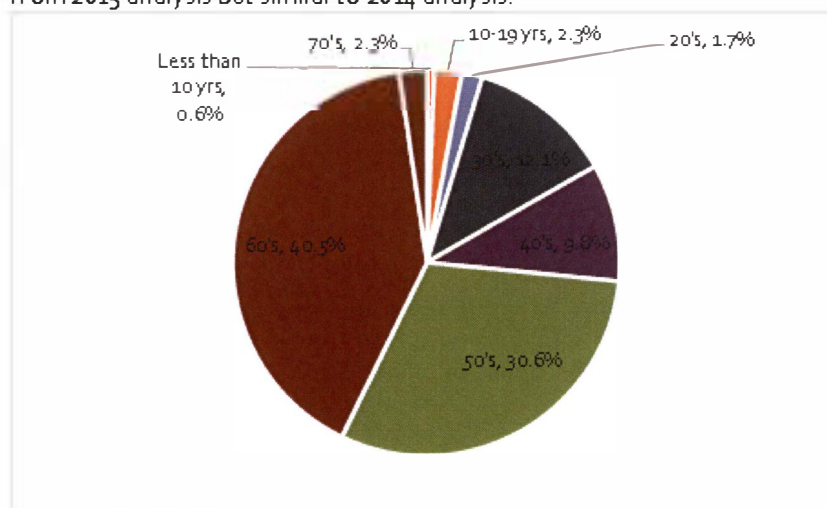
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patients with 299 billable visits from 2,920 eligible patients for a participation rate of 6.0%. These comparisons indicate stability in both patient count and claim activity. During the time period of July 2013-June 2017 patients that have participated in the program have an average of 3.04 claims during their course of participation in the program.



Demographics

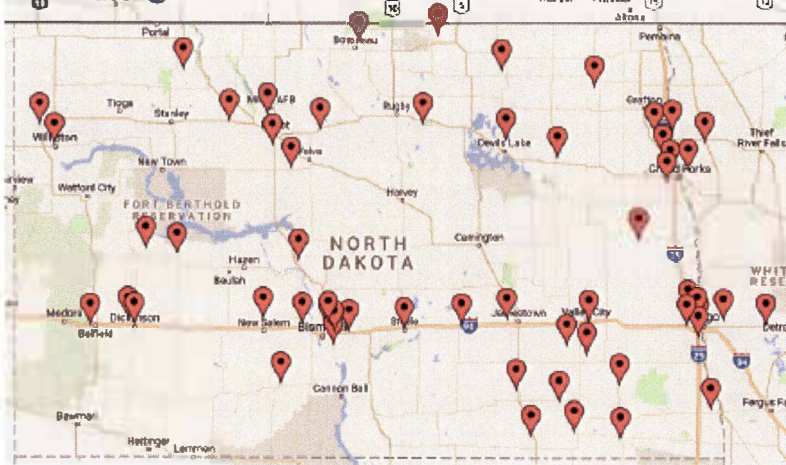
Of the patients with billable services during the reporting period, there was an even split of male and female participation. 50.3% of participants were male. Over 70% of participants were over the age of 50, an increase from 2015 analysis but similar to 2014 analysis.



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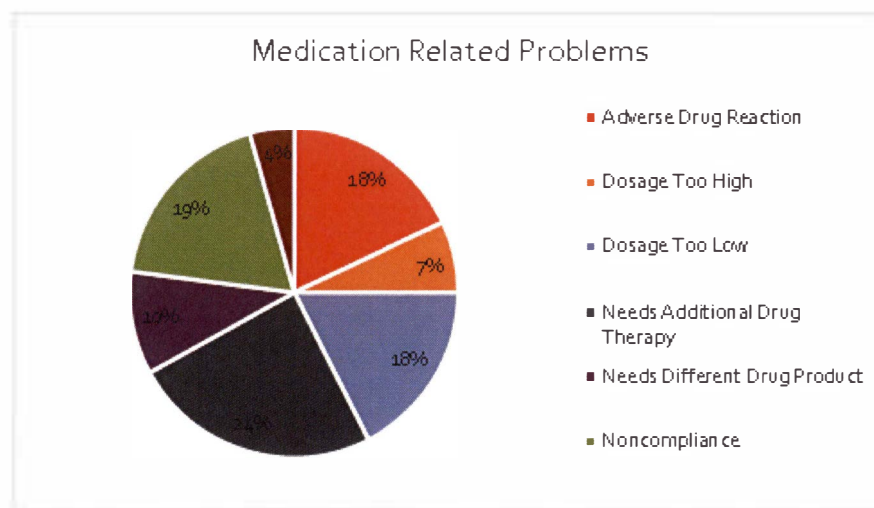
Participants were widely distributed geographically across the state. Pharmacy providers provide face to face or telepharmacy services (secure audio and video connection) to ensure all patients have access to the program.



Pharmacist Interventions

From July 2016-June 2017 there were 388 interventions made by the pharmacists in collaboration with the patient and their primary health provider in order to manage their diabetes and other medical conditions and prevent costly complications. There were 373 interventions made during the previous year, again showing consistency within the program.

Noncompliance accounted for almost 20% of identified medication problems. Dose adjustments were involved in 25% of medication related problems, while 42% were related to needing to change or discontinue a medication.



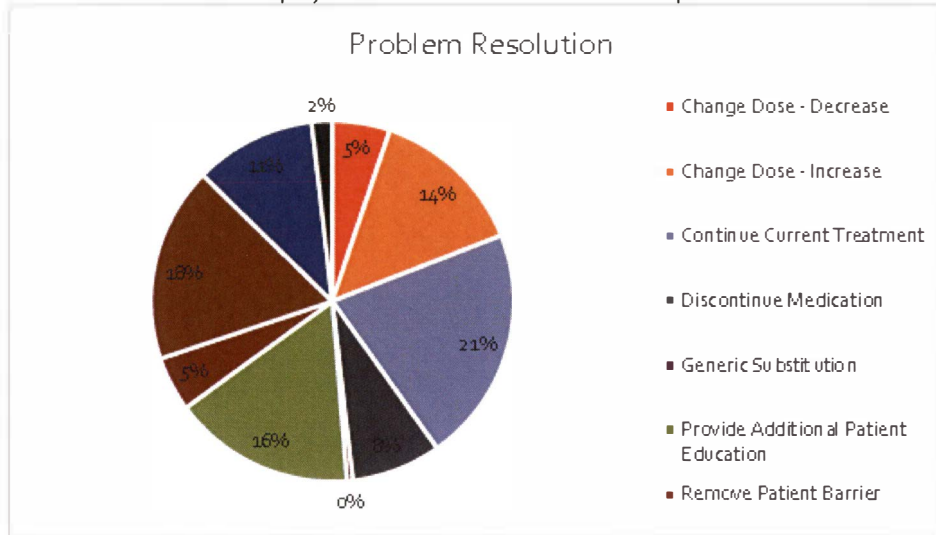
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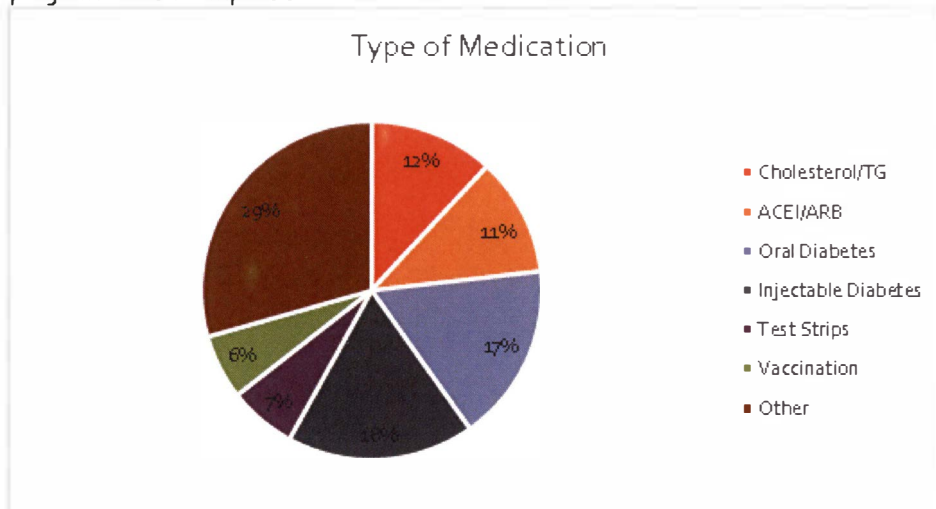
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These themes are also displayed in how the medication related problems were resolved.



Of the interventions identified over 78% were related to drug classes directly involved in treatment of diabetes and its comorbidities. This is exactly what we would expect to see in a successful program given program areas of emphasis.



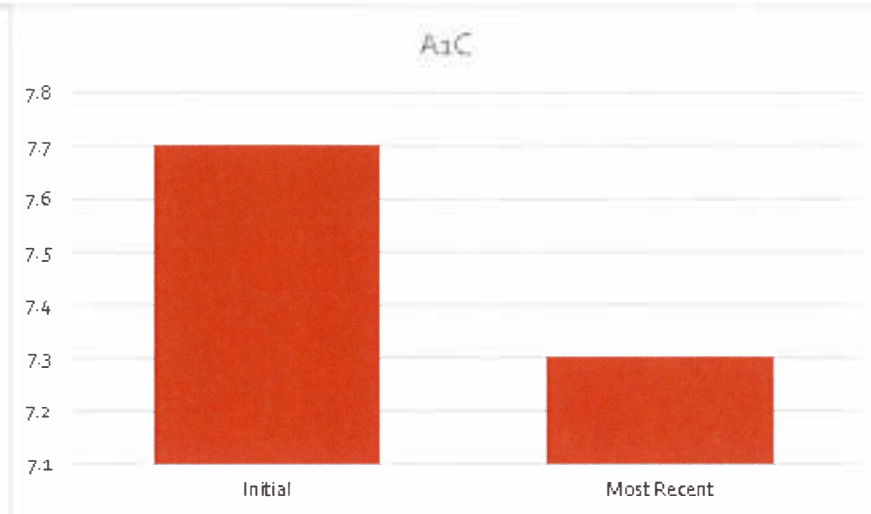
Blood Glucose Lab Results

Of the 175 patients with claims during the reporting period, 122 (69.7%) had more than one A1C level documented. This is an improvement over previous years. For all participants with more than one A1C level document, the most recent result was 0.4 lower than the initial result, indicating improvement in scores.

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55% of participants had lower A1c scores on their most recent lab compared to their initial result. Those with improvement experienced an average A1c decrease of 1.1.

The average fasting blood glucose for active participants was 130.5. American Diabetes Association (ADA) recommends controlled fasting range of 80-130mg/dL.

The average random blood glucose for active participants was 123.9. American Diabetes Association (ADA) recommends random range less than 180mg/dL.

The results above are consistent with prior reporting years and demonstrate the program's ability to help reduce complications associated with diabetes in a majority of participating patients.

Hypertension

In general, the ADA recommends systolic blood pressure less than 140 and diastolic less than 90. For those active participants during the reporting period, the average systolic pressure was 131 and average diastolic was 78. Both of these results fall within the ADA recommendations.

Cholesterol

Improvements were seen in lipid levels for active participants. For those with multiple lab reports on file, overall improvements were seen in total cholesterol, HDL, LDL, and triglycerides. The most improvement was seen in the HDL results, with over 60% of participants having improved results on their most recent labs.

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Patient Survey Results

Perception: Diabetes Awareness Survey (1=Strongly Agree to 5=Strongly Agree) 7/2016-6/2017 7/2015-6/2016

Ask my pharmacist questions I may have about diabetes	4.3	4.2
Take my medications and administer injections as instructed	4.5	4.6
Describe the long term complication of uncontrolled diabetes	4.2	4.2
Be motivated to keep up with my diabetes self-management	4.3	4.4
Voice concerns to my doctor about diabetes	4.5	4.4
Keep my doctor appointments	4.5	4.5

Patient Satisfaction Survey (1=Strongly Disagree to 5=Strongly Agree) 7/2016-6/2017 7/2015-6/2016

Professional appearance of the provider	4.9	5.0
Appearance of the meeting area	4.8	4.9
System for scheduling your appointment	4.9	4.8
The provider's interest in your health	4.9	5.0
How well the provider helps you manage your medications	4.9	5.0
How well the provider explains possible side effects	4.9	4.9
The provider's efforts to solve problems that you have with your medications	4.9	5.0
The responsibility that the provider assumes for your drug therapy	4.8	4.9
Ability of the provider to answer your questions about your medications	5.0	5.0
Ability of the provider to answer your questions about your health problems	4.9	5.0
The provider's efforts to help you improve your health or stay healthy	4.9	5.0
The program services overall	4.9	5.0
Ability of the provider to see you at your scheduled time	4.9	5.0
Courtesy and professionalism of the staff	5.0	5.0
Follow-up after the appointment	4.9	5.0
The educational materials provided	4.8	5.0

The patient surveys indicate patients are highly satisfied with the program, motivated to work with their health providers, and maintain a high level of self-efficacy with a chronic disease.

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Summary

Interpretation:

The Diabetes Management Program administered by the About the Patient Program continues to produce consistent results. The results indicate a mature & stable program with positive interventions and health outcomes.

Looking into the Future:

As we move forward into this biennium, About The Patient with the help of NDPERS and Sanford would like to increase enrollment into the program. We continue to look at adding program providers to our network as well.

At the direction of the NDPERS Board of Trustees, we would be happy to assist in having another cost analysis of the program completed.

In addition, we are ready and willing to help NDPERS look at any alternatives or changes to the current program design and requirements.

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Appendix F: Committee Members

North Dakota Department of Health

Jane Myers, Diabetes Prevention and Control Program Director

North Dakota Public Employees Retirement System

Bryan Reinhardt, Research Analyst/Benefits Planner

Rebecca Fricke, Employee Benefit Programs Manager

Sharon Schiermeister, Chief Operating Officer

North Dakota Department of Human Services

Maggie Anderson, Director, Medical Services Division

North Dakota Indian Affairs Commission

Bradley Hawk, Indian Health Systems Administrator

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