

STEPP-UP Instructors Manual

SESSION 5: IS THE INSULIN PEN RIGHT FOR ME?

Objectives

Goals of Class:

The purpose of this class is to provide information to patients with type 1 diabetes that will help them to learn how an insulin pen works. Specifically, the classes will address the differences of a reusable pen and a disposable pen. The pros and cons of pens verses vial and syringe injections. Patients' understanding of the knowledge will translate into specific skills. Patients will be frequently assessed to determine their comprehension of knowledge and acquisition of skills.

After this session, participants will be able to:

- Explain the difference between a reusable pen and a disposable pen
- Identify the parts of a pen
- Identify the benefits of using an insulin pen versus a vial and syringe injection

Materials Needed

- Sign-in sheet
- Pens, pencils, markers
- Name tags
- Flip chart - to keep track of “parking lot items” or questions, participant responses
- Sample reusable and disposable insulin pens
- Alcohol pads
- Sharps container
- Samples of insulin pen needles
- Sample kits for every day use, emergencies, and exercise
- Copy of guide: Is The Insulin Pen Right For Me?
- Handouts in English and Spanish:
 1. *Agenda*

Before the Session

- Give all participants a reminder call the day prior to class.
 - Ask them to bring water, a snack in case of low blood sugar, and bring a pen or something to write with. Instruct them on class logistics (parking, location, floor, etc.).
- Set up the classroom with enough tables and chairs. Try to arrange it in a formation that facilitates group participation (such as a circle or U shape).
 - Prior to class set up the sample insulin pens and needles as well as alcohol pads and sharps container.

STEPP-UP Instructors Manual

Agenda	Estimated Time
I. Welcome	3 minutes
II. Introduction a. Icebreaker	10 minutes
III. Insulin Pen Session a. What is an insulin pen? b. What kind of insulin pens are there? c. Is the insulin pen more helpful than shots? d. What are some drawbacks of the pen versus shots? e. What are the pros and cons of disposable pens? f. What are the pros and cons of reusable pens? g. Will my medial insurance cover the cost of the insulin pen? h. What do I need to know about pen safety and care? i. How do I use and insulin pen? j. What should I take into account when I choose a pen with my team? k. What are the parts of an insulin pen? l. What do I need to give myself an injection with an insulin pen? m. How do I check my insulin in the pen? n. How do I choose my pen needle? o. How do I get my needle ready and put in on the pen? p. How do I get ready to inject insulin with my pen? q. How do I dial in my insulin dose? r. How do I choose where I put on my body if I am going to use the pen? s. Site rotation t. How do I inject the insulin? u. How do I prepare the insulin pen so it is ready to use next time? v. Conclusion	60 minutes
IV. Closing	2 minutes

STEPP-UP Instructors Manual

I. WELCOME (3 MINUTES)

- A. Greet participants as they arrive, give them a nametag to fill out.
- B. Give each participant a participant notebook with handouts

II. INTRODUCTION (10 MINUTES)

[If the space allows, set up tables and chairs in a U shape so everyone can see each other. Make the nutrition session as interactive as possible; ask questions frequently and get everyone involved.]

- A. *Welcome everyone to the program. Begin* by introducing the staff and any volunteers. We are here to learn about insulin pens.
- B. By the end of this class, our goal is that you will be able to:
 - Understand the difference between a disposable pen and reusable pen.
 - Identify the pros and cons of using an insulin pen vs. shots.
 - Identify the different parts of an insulin pen.
 - Understand how to use an insulin pen.
 - Identify places on the body of where to use the pen and the importance of rotating the site.
 - Identify how to prepare the insulin pen for future use.

Are there any questions?

- C. *Set some initial ground “rules.” [Have these already written out on the flipchart, with space to add additional rules. These can be referred to throughout the program if necessary. If there are no new people, just remind everyone about the rules.]*
 1. Everyone is to respect each other.
 2. One person talks at a time.
 3. Please refrain from using your cell phone and texting. If you need to make or receive a call, please step out of the room.
 4. Confidentiality—everyone should respect each other’s privacy by not talking about one another outside of the program.
 5. Note that some people prefer to say blood glucose and others blood sugar. Have your audience decide which terminology they prefer.

Ask the group if there are any other rules they would like to suggest.

Finally, we encourage all questions. NO question is a stupid question. Sometimes you might ask a question that we do not know the answer to right away. When this happens, we will write it down on this flip chart to remind us to find out the answer.

- Ask if there are any other rules they would like to add.*
- Ask if everyone in the group can agree to all of the rules.*

STEPP-UP Instructors Manual

D. **Icebreaker:** *Form a circle and have each person introduce him or herself and tell the group their favorite movie. You can use a ball to facilitate the process. For example: Sylvia has the ball and states: "My name is Sylvia, and I liked the movie Forest Gump." Sylvia would then toss the ball to someone else, and it is then that person's turn. Repeat until everyone has had a chance to introduce him or herself and state an activity they enjoy.*

III. INSULIN PEN SESSION (45 MINUTES)

A. What is an insulin pen?

(Fast paced, keep this to 3 minutes or less)

[Show insulin pens and supplies as you discuss the items]

When people have Type 1 Diabetes they need to take insulin. There are a few ways to get insulin into the body:

- With a vial and syringe
- With an insulin pen
- With an insulin pump [If you would like to find out more about insulin pumps, check out our guide, "Is the Insulin Pump Right for Me?"]

An insulin pen might be right for you if:

- ✓ You have trouble using a vial and syringe
- ✓ You want a more simple way to give insulin
- ✓ You feel you are not managing your diabetes well
- ✓ You have trouble seeing the markings on a syringe

Pens are not new and have been around for a while. The companies that make insulin also make pens. In Europe, people use pens much more than syringes and vials. People have used them in the United States for many years; however, insulin pens cost more than vials and syringes. The cost will depend on your insurance. Even though they may cost more, people often find pens simpler to use because they are already filled with insulin. So, you do not have to deal with a syringe and a vial to draw up the insulin. This can make it easier to give a shot when you are at work or out with family or friends. You can keep the pen in a pocket or purse at room temperature.

There are different types of pens. They all look a lot like a large pen that you would write with.

STEPP-UP Instructors Manual

The pen uses a needle to get the insulin in to your body. But the needle is shorter than the shot needle. You have to attach a new needle onto the pen with each shot. Then you have to remove the needle after you have used it once.

Your doctor has to write a prescription for the pen needles as well as the insulin pen.

1. What kind of insulin pens are there?

(Fast paced, keep this to 3 minutes or less)

[Show sample disposable and reusable pens.]

There are two types:

- ✓ **Disposable pens** that come filled with insulin. You throw the pen away when it is empty or expired.
- ✓ **Reusable pens** where you replace the cartridge of insulin. You replace the cartridge when the insulin is empty or expired.

Not all pens are the same. Whether you choose disposable or reusable some may be easier to use than others. Also some of the newer insulins only come in pens and since insulin companies make their own pens you may have to choose the pen type based on the insulin that is best for you. You will need to work with your diabetes team to choose a pen that is right for you.

2. Is the insulin pen more helpful than shots?

(Fast paced, keep this to 2 minutes or less)

Yes. It is more helpful because:

- It is simpler to use than shots.
- It is less painful since the needle is shorter and thinner.
- It is easier to give more exact doses.
- It is easy to carry.
- It gives you more insulin choices since some types of insulin only come in pens.
- It can be less obvious in public since you do not have to draw insulin with a syringe from a vial.

STEPP-UP Instructors Manual

3. What are some drawbacks of the pen versus shots?

(Fast paced, keep this to 2 minutes or less)

Here are some reasons you may not want to use a pen:

- They cost more than shots.
- Some insulin is wasted. When you prime the pen before you inject, you lose one to two units of insulin. Also, there is often some insulin left in the pen.
- You cannot mix different kinds of insulin together on your own. But some pens come with insulins already mixed in them.

4. What are the pros and cons of disposable pens?

(Fast paced, keep this to 2 minutes or less)

Pros:

- They have a large magnifying window that shows the number of units.
- They make a clicking sound. This helps people who cannot see very well because they can hear the number of units when dialing a dose.
- You do not have to change insulin cartridges like on reusable pens.
- Once the pen is empty you just throw it away in a sharps container.

Cons:

- Over time they are more expensive than reusable pens.

5. What are the pros and cons of reusable pens?

(Fast paced, keep this to 3 minutes or less)

Pros:

- They have an insulin cartridge that you put into the pen's chamber. So, if you need to change your insulin you do not have to change the pen. Just insert the new insulin cartridge.
- You can most likely buy the cartridge in 1.5 or 3 ml volumes. Small cartridges can help reduce wasting insulin due to expiration.
- They tend to be cheaper than disposable pens.

STEPP-UP Instructors Manual

Cons:

- Even though they tend to be cheaper than disposable pens, they still cost more than shots.
- These pens are sturdy and can last for several years, but they can become damaged with constant use. They can wear out over time and need to be replaced.
- The insulin type you use may not come in a reusable pen.

6. Will my medical insurance cover the cost of the insulin pen?

(Fast paced, keep this to 3 minutes or less)

Not all insurance plans cover the cost of the pen. Some do and some do not.

There are many ways to find out if your healthcare plan will pay for a pen:

- ✓ Ask someone from your diabetes team.
- ✓ Ask your pharmacy to check for you. Your pharmacy can also tell you how much you will have to pay for a pen. Sometimes there is something called a “co-pay”. That is the extra money you pay when you pick up the pen.
- ✓ Call your health plan to see if the pen is covered.

Even if a pen is not on your healthcare plan, your diabetes team may still be able to help. They can write a letter to your healthcare plan telling them why you need an insulin pen. Often it helps for them to say that you have Type 1 Diabetes and then give the reasons why a pen would be best for you. This can convince your health plan to pay for your pen.

Also, many health plans now have a brand of insulin they prefer. This means one brand of insulin will cost you much less than another.

Your diabetes team will know if it is right for you to use a certain brand of insulin. But in most cases the different brands of the same type of insulin work the same way. For instance, there are three brands of rapid acting insulin: Novolog, Humalog and Apidra. All work in the same way. So, if you have not had a bad reaction to one of them, you can switch from one to the other without a problem.

If your insurance does not cover insulin pens, you can pay out of pocket. Disposable pens can cost between \$490 and \$570 for a box of 5. Reusable pens can cost between \$450 and \$550 for a box of 5.

7. What do I need to know about pen safety and care?

STEPP-UP Instructors Manual

(Fast paced, keep this to 3 minutes or less)

Here is what you need to know:

- Insulin pens are for just one person to use. Never share a pen, even if you change the needle. Blood can get into the insulin cartridge after a shot. This can expose others to infection if you share the pen.
- Once you start using a pen you can keep it in your pocket or purse at room temperature for about a month or two. Check your insulin package insert to find out how long that insulin can stay at room temperature. The amount of time can vary based on the insulin type.
- Store the insulin pen cartridges or disposable pens you are not using in the fridge.
- Do not let the insulin get hot or be exposed to direct sunlight. Do not freeze the insulin either.
- When you travel by plane, take insulin onboard with you. Do not put insulin into luggage that will be stored away from you.

B. How do I use an insulin pen?

(Fast paced, keep this to 1 minute or less)

You and your diabetes team will have to determine which pen to order. Your doctor will have to write prescriptions for the pen and the pen needles.

1. What should I take into account when choosing a pen with my team?

(Fast paced, keep this to 2 minutes or less)

Here are things to think about when you choose a pen:

- Can I get the insulin I use for the pen brand I like?
- How easy or hard would it be for me to use the pen?
- How many units of insulin does the pen hold when it is full?
- What is the largest size dose that I could inject with the pen?
- How finely or what is the smallest dose of insulin can I adjust to with the pen?
- How does the pen signal if there is or is not enough insulin left in it for my entire dose?

STEPP-UP Instructors Manual

2. What are the parts of an insulin pen?

(Fast paced, keep this to 2 minutes or less)

Once you have your pen, you will want to become familiar with its different parts. All pens will have very similar parts - this is true of the disposable and reusable pens. Refer participants to page 9 in their manual “Is the Insulin Pen Right for Me?” Guide and point out the different part on page 9. “Rubber seal, insulin reservoir, cartridge, dose window, injection dose knob, and injection button-pen cap and outer needle cap, inner needle cap and needle.”

3. What do I need to give myself an injection with an insulin pen?

(Fast paced, keep this to 2 minutes or less)

Once you have made the decision on what pen to get, receive your pen and pen needles and are familiar with its parts you will be ready. Before you give yourself a pen shot you should gather the following items:

- An insulin pen
- An alcohol swab, or a cotton ball with alcohol on it
- A pen needle
- A container to put the pen needle in after you use it. This can be a hard plastic or metal container with a screw-on lid, or one that secures on tightly.
- Clean hands, so wash your hands before you prepare your pen

4. How do I check my insulin in the pen?

(Fast paced, keep this to 5 minutes or less)

You can see the insulin in the pen. You will see the level going down as you use the pen. Disposable pens come in a box. The box has the expiration date for the pens. Cartridges for reusable pens come in a box. That box has an expiration date too. That date is for the pens or cartridges left in the fridge and that have not been opened.

Once you start using the disposable pen or put a cartridge in your reusable pen, the insulin will expire after one or two months. The insulin can become less strong after one month. So be sure to throw the disposable pen or cartridge for the reusable pen away after one month of using it.

If you use short or rapid-acting insulin, it should look clear. Do not use clear insulin if it has crystals or discoloration.

Short or rapid-acting insulin brands are:

- Apidra

STEPP-UP Instructors Manual

- Humalog
- NovoLog
- Regular

Long acting insulin should look cloudy and white. Do not use cloudy insulin if the insulin is discolored or has pieces or clumps stuck to the sides of the vial, cartridge or disposable pen.

Long acting insulin brands are:

- Basaglar
- Lantus
- Levemir
- Tresiba

Intermediate or mixed insulin should look cloudy and white. This type of insulin is NPH, 75/25, 70/30, or 50/50. If you use this insulin, gently mix it before you use it. To mix it:

1. Roll the pen between your hands for 15 seconds.
2. Then turn the pen up and down ten times.
3. Next, look at the insulin to be sure it is evenly mixed. That means it should look cloudy white with no clumping of particles. Do not use the insulin if it has clumps or chunks.

5. How do I choose my pen needle?

(Fast paced, keep this to 5 minutes or less)

Show samples of pen needles

Pen needles come in many lengths:

- Micro
- Mini
- Short
- Original

The longer the needle, the thicker it is. How thick a needle is, is called the gauge. A bigger gauge means a smaller needle. So, the Micro needle in the photo below is a 32 gauge. It is smaller than the 29 gauge Original needle.

All pen needles work for getting insulin into the body. The smaller the needle the less painful the shot. Most people want the shortest, smallest possible needle.

Sometimes people like longer needles. Or sometimes their doctor will want them to use a longer needle. This is because:

STEPP-UP Instructors Manual

- The longer needle lets people inject insulin through their clothes.
- Some people feel that a longer needle is better at getting all the insulin under the skin.
- It bothers some people that with the shorter needles there can sometimes be a little drop of insulin at the site of the shot.

Your doctor needs to write a prescription for exactly the type of needle you want to use.

If there is a drop of insulin at the site of the shot, it rarely means something is wrong. All the needles work fine.

6. How do I get my needle ready and put it on the pen?

(Fast paced, keep this to 2 minutes or less)

You will need to get out your pen needle and attach it to the pen.

These are the steps:

- Wash your hands.
- Wipe the end of the pen with alcohol where the needle will be attached.
- Pull paper tab off pen needle.
- Screw needle onto insulin end of pen.
- Remove outer needle cover and keep it nearby.
- Remove inner needle cover to expose the needle.
- Throw inner needle cover in trash.

7. How do I get ready to inject insulin with my pen? (p-13)

(Fast paced, keep this to 3 minutes or less)

Refer to page 13 in guide - Demonstrate how to prime the pen.

You will need to get the pen ready to send out the insulin. You need to clear air from needle and make sure insulin is in the tip of the needle. You need to do this so you can measure your insulin dose correctly. In other words, you will need to “prime” the pen.

To prime the pen:

1. Turn the dose knob at end of the pen to 1 or 2 units. You should see the dose markings change when you turn the knob. Hold the pen with needle pointing up.

STEPP-UP Instructors Manual

2. Press the injection button up all the way while watching for an insulin drop or stream to come out of the needle. Repeat, if needed, until you can see insulin at the needle tip. If insulin does not come out, your pen is not working right. You should change your pen needle. If it still does not work, do not use the pen and call the pen company.
3. Each time you press the injection button, your dial should be back to zero.

8. How do I dial in my insulin dose? (pg-15)

(Fast paced, keep this to 2 minutes or less)

Refer to page 15 in guide - Demonstrate how to dial a dose.

Once you prime the pen, you turn the dose knob to “dial in” your insulin dose. Do not worry if you dial in too much because you can dial the knob backward too.

The pen will allow you to receive only the amount that you dial in. Look at the dose window to make sure you dialed in the right dose.

9. How do I choose where on my body I put the shot if I am going to use the pen? (pg-16)

(Fast paced, keep this to 1 minute or less)

Refer to the diagram on page 16

There are many places on the body where you can give yourself insulin using the pen. Most people choose the abdomen. This is because it is easy to reach the fatty tissue.

Avoid the 3 to 4 inches around the navel, or bellybutton. You can also use the top of the thighs, hips and back of the upper arms. Point out and refer to page 16 - *Abdomen, thighs, back of the upper arms hips and upper thighs.*

10. Site rotation

(Fast paced, keep this to 3 minute or less)

Refer to the diagram on page 17

Site rotation means when you give yourself insulin with the pen on a different place on your body.

It is very important to rotate the site on your body where you give yourself insulin with the pen. This is because if you inject in the same place each time, the fat cells under the skin will grow and become lumpy. This can happen with any type of insulin shot - with a pen or with a vial and syringe. Some people get scar tissue there. That makes it harder for the body to absorb insulin.

It helps to have a pattern of where to give the shots or a time of day for each body location. For instance:

STEPP-UP Instructors Manual

- In the mornings give insulin in the arms.
- At lunch give it in the legs.
- At dinner give it in the abdomen

11. How do I inject the insulin?

(Fast paced, keep this to 4 minutes or less)

Refer to page 18 in guide - Demonstrate how to inject a dose.

Make sure the skin where you plan to give the shot is clean and dry. If not, then clean the skin with alcohol or soap and water before you give the shot. Once the area is clean, you are ready to inject your insulin.

To Inject:

1. Curl your fingers tightly around the upper end of the pen. Hold your thumb in the air just above the dose knob.
2. Quickly push in the needle at a 45 to 90-degree angle. The angle depends on the length of your needle.
 - You can insert shorter needles straight up and down.
 - Longer needles need more of an angle.
 - If you are using long pen needles, you may have to pinch up your skin to avoid injecting into your muscle.
3. Use your thumb to press down on the injection button until it stops. After it stops, the dose window will be back at zero.
4. Leave the needle in place for 5 to 10 seconds. This helps prevent insulin from leaking out of the shot spot. Check your pen package insert to learn what they recommend for leaving the needle in place for your pen.
5. Pull the needle straight out of the skin. It is normal to sometimes see a small drop of blood or a bruise. You can pat the site with a tissue or cotton ball. But do not massage the area.

12. How do I prepare the insulin pen so it is ready to use next time? (pg-19)

(Fast paced, keep this to 3 minutes or less)

Refer to page 19 in guide - Demonstrate how to prepare the pen for the next use.

1. Put the outer needle cap over the needle.
2. Twist to unscrew the needle from the pen.

STEPP-UP Instructors Manual

3. Throw the used needle away in hard container. An empty pill container or sharps container are safe examples.
4. Put the pen cap back on the pen.

Some people do not want to change the pen needle every time. Each time you use the pen needle it becomes duller and may hurt or bruise a little bit more. But people have safely used the same pen needle many times in a row without changing it. If you do this, be sure to keep the pen needle clean. And do not set it down without putting the clean cap back on it.

16. Conclusion

(Fast paced, keep this to 3 minutes or less)

We hope that the information we have shared has helped you start to learn what an insulin pen is and how it works. It is up to you and your diabetes team to decide if you want to try using one. You don't have to rush into starting a pen. If you want to use one, you have choices. You can use both pens and shots with a syringe at the same time. For example, you could use a syringe and vial for your longer acting insulin that you give at home. Or you can use a pen for the shorter acting insulin during the day. You will figure out what works bests for you. You can try it out for a few months and always go back to the vial and syringe if you don't like it or it gets to expensive.

The next step can be to talk with your diabetes team to see if a pen is right for you. Ask to see a pen to hold and check out. A great way to learn about pens is from other people who use them. Your diabetes team may be able to suggest people you can talk to. Or you can look on-line to see what other people write about pens.

IV. Closing (2 MINUTES)

If patient is on injection and vial only this is the last class. If they are considering the Pump or Pen there are more classes.

Remind everyone when and where the meeting will take place. Topics for next week include: Is The Insulin Pen Right For Me or Is the Insulin Pump Right For Me. The final classes will be: "How Do I Use An Insulin Pen" or "How Do I Use an Insulin Pump".

STEPP-UP Handouts

Agenda	Estimated Time
I. Welcome	3 minutes
II. Introduction a. Icebreaker	10 minutes
III. Insulin Pen Session a. What is an insulin pen? b. What kind of insulin pens are there? c. Is the insulin pen more helpful than shots? d. What are some drawbacks of the pen versus shots? e. What are the pros and cons of disposable pens? f. What are the pros and cons of reusable pens? g. Will my medial insurance cover the cost of the insulin pen? h. What do I need to know about pen safety and care? i. How do I use and insulin pen? j. What should I take into account when I choose a pen with my team? k. What are the parts of an insulin pen? l. What do I need to give myself an injection with an insulin pen? m. How do I check my insulin in the pen? n. How do I choose my pen needle? o. How do I get my needle ready and put in on the pen? p. How do I get ready to inject insulin with my pen? q. How do I dial in my insulin dose? r. How do I choose where I put on my body if I am going to use the pen? s. Site rotation t. How do I inject the insulin? u. How do I prepare the insulin pen so it is ready to use next time? v. Conclusion	60 minutes
IV. Closing	2 minutes