

ANZ FITTER Forum

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www.westernsydneydiabetes.com.au



What is FITTER?

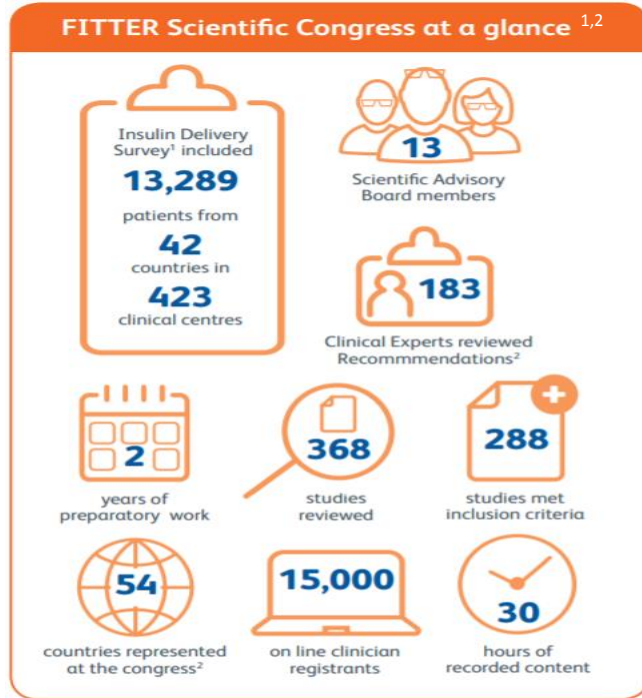


Forum for **I**njection **T**echnique and
Therapy:
Expert **R**ecommendations¹

For all clinicians in Diabetes Care
Optimise insulin delivery to help
improve your patients' lives and
reduce the burden of care

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.

MY JOURNEY



All
Roads Lead
To **Rome**

A stylized purple line drawing of the Colosseum in Rome, positioned to the left of the text 'All Roads Lead To Rome'.



Image source: <http://www.ramascreeen.com> (accessed April 2017)

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.
2. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9): 1224-1230.

ONGOING JOURNEY

2015 ATTENDED FITTER CONGRESS IN ROME

2016 AUSTRALIAN DIABETES EDUCATORS ASSOCIATION
REVISING INJECTION TECHNIQUE GUIDELINES
ADVISING AUSTRALIAN DIABETES SOCIETY OF THIS REVIEW

2016 WESTERN SYDNEY DIABETES PHARMACY FORUM

2017 AUSTRALIA NEW ZEALAND FITTER FORUM

NEXT STEPS

What is the ITQ?



Self-administered questionnaire

with healthcare professional evaluation
(physical exam, device and needle use
and questionnaire)³



Aimed to go beyond the physical process of injection

to the psychology,
challenges and benefits³



13,264 patients from 42 countries

who had been injecting
insulin for ≥ 6 months³

**Conducted by BD, the ITQ was one of the largest
international diabetes surveys to date.¹**

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255

3. Frid AH, Hirsch LJ, Menchior AR, et al. *Mayo Clin Proc.* 2016;91(9):1212–1223.

Countries 2014-5 ITQ

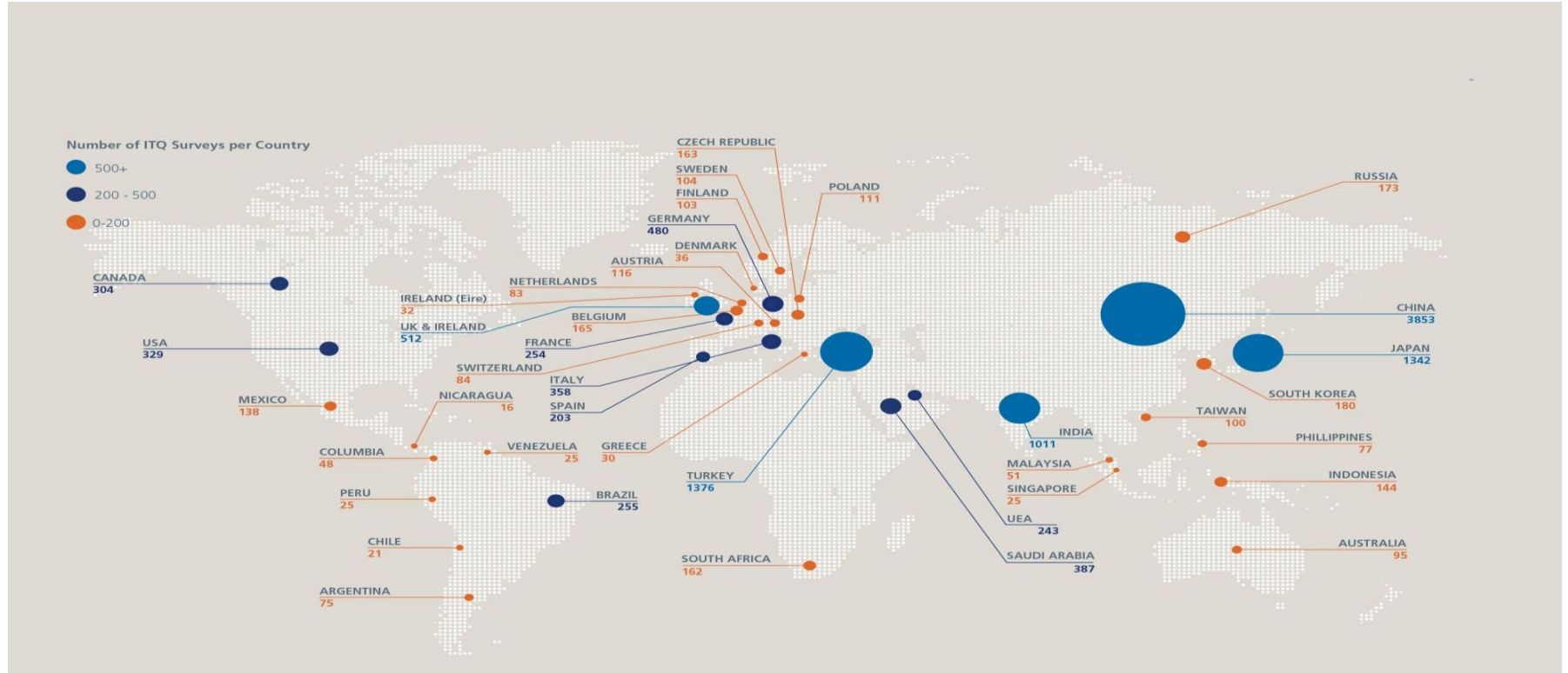


Image source : <http://www.fitter4diabetes.com/pages/research> (accessed April 2017)

Countries 2014-5 ITQ

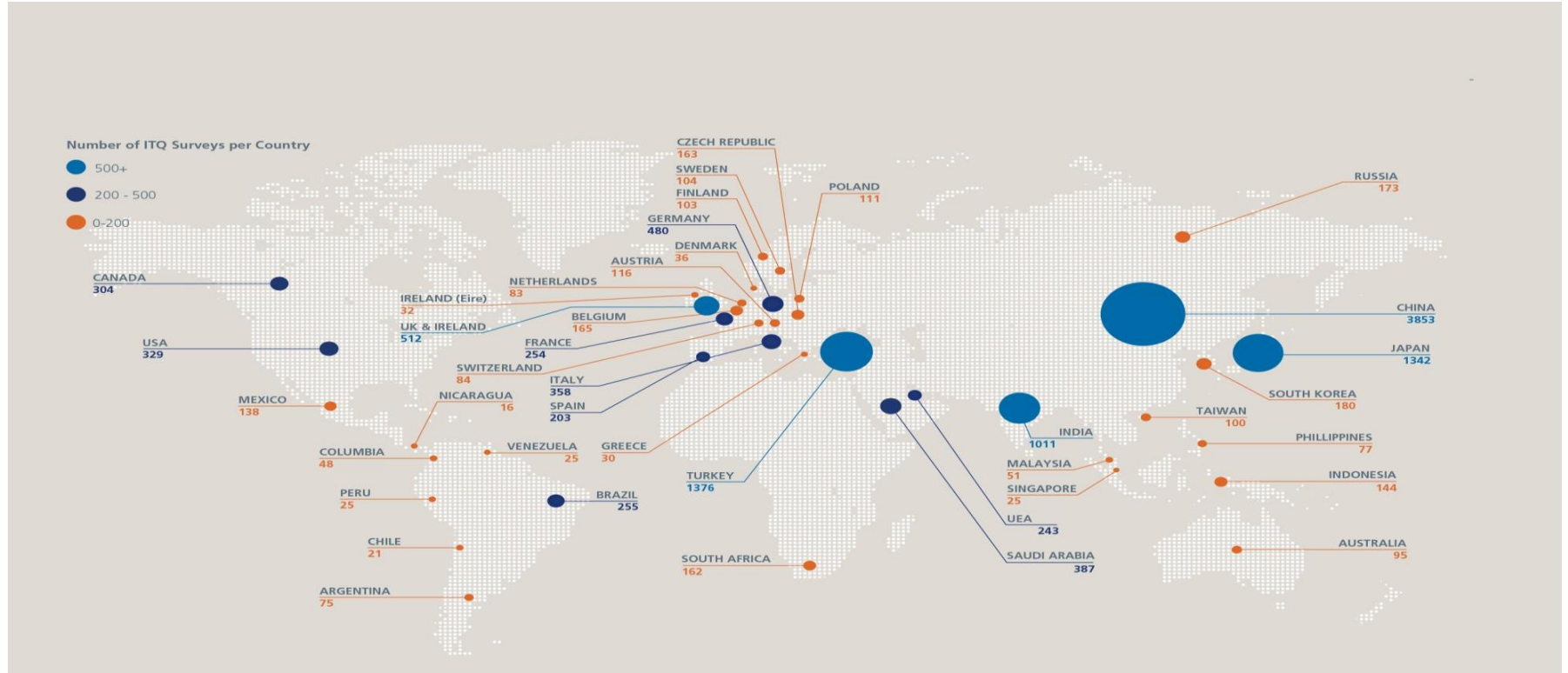


Image source : <http://www.fitter4diabetes.com/pages/research> (accessed April 2017)

ITQ findings: Incorrect injection technique can contribute to lipohypertrophy (lipo)

- 30.8% of patients had lipo, and 44% of these patients said they were injecting into lipo.²
- Three independent risk factors significantly associated with lipo were: *
 - **Re-use of pen needles** ($p=0.02$)
 - **Incorrect injection site rotation** ($p<0.001$)
 - **Longer duration of insulin therapy** ($p<0.001$)



Lipo is a rubbery lump of fat located near insulin injection sites.⁴

* by logistic regression analysis.

Image sourced : <https://myglu.org/articles/lipohypertrophy-what-lies-beneath> (accessed April 2017)

2. Frid AH, Hirsch LJ, Menchior AR, et al. *Mayo Clin Proc.* 2016;91(9):1224–1230.

4. Blanco M, Hernández MT, Strauss KW, Amaya M. *Diabetes Metab.* 2013;39(5):445–53.

ITQ findings: Lipo can lead to poor glycaemic control

Patients with lipo had:²



- 0.55% higher mean HbA1c



- 10.1 IU higher insulin use



- Higher rates of unexplained hypoglycaemia and glycaemic variability



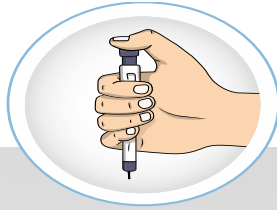
- More frequent diabetic ketoacidosis

Most diabetes experts agree that
a 0.5% difference in HbA1c is significant²

2. Frid AH, Hirsch LJ, Menchior AR, et al. *Mayo Clin Proc.* 2016;91(9):1224–1230.

4. Blanco M, Hernández MT, Strauss KW, Amaya M. *Diabetes Metab.* 2013;39(5):445–53.

ITQ conclusions: Proper injection technique and patient education are critical to achieving better outcomes



- **Proper injection technique** is critical to achieving better clinical outcomes, including:¹
 - Reduction of HbA1c and glycaemic variability
 - Better glycaemic control
- **Proper injection technique** may be as important as the dose of insulin, as insulin does not work effectively unless injected properly.²



- **Healthcare professionals have a crucial role in providing education on the proper use of these therapies.²**

<40% of patients claim to have gotten such instructions in the last 6 months.²

10% say they have never received training on how to inject correctly despite injecting for a mean of nearly 9 years.²

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.

2. Frid AH, Hirsch LJ, Menchior AR, et al *Mayo Clin Proc.* 2016;91(9):1224–1230.

Three new *Mayo Clinic Proceedings* (MCP) publications focus on insulin injection and infusion



1. Frid AH, Kreugel G, Grassi G *et al.* *Mayo Clin Proc.* September 2016;91(9):1231-1255.
2. Frid AH, Hirsch LJ, Menchior AR *et al.* *Mayo Clin Proc.* September 2016;91(9):1224-1230.
3. Frid AH, Hirsch LJ, Menchior AR *et al.* *Mayo Clin Proc.* September 2016;91(9):1212-1223.

Proper injection technique and patient education are critical to achieving better outcomes

Proper technique is essential to:¹

- Achieving better clinical outcomes, including reduction of HbA1c and glycaemic variability, and better glycaemic control.
- Avoiding common complications such as lipohypertrophy.

Until the *Mayo Clinic Proceedings* (MCP) publication, few formal guidelines provided practical recommendations on best practice in insulin delivery.¹

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.

New insulin delivery recommendations in *Mayo Clinic Proceedings (MCP)* deliver a simple set of Golden Rules

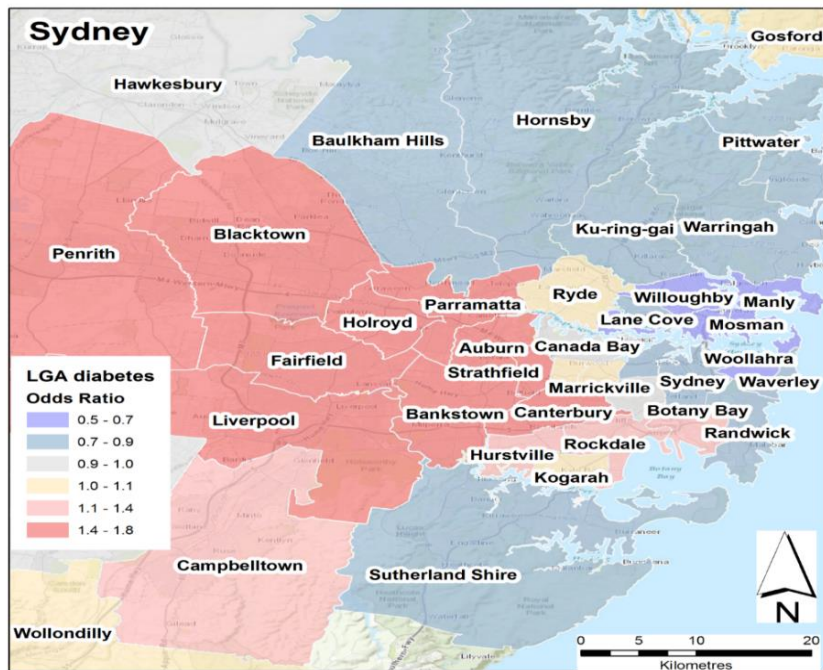


Follow these Golden Rules to help improve insulin delivery and patient outcomes:¹

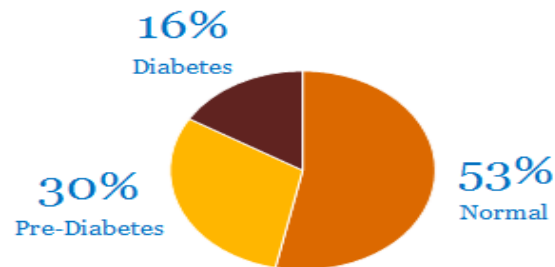
- Injection Technique In Adults
- Injection Technique in Children
- Treating and Preventing Lipohypertrophy
- Psychological Issues Regarding Insulin Delivery
- Needlestick Injuries and Sharps Disposal
- Insulin Infusion

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.

Our story



HbA1c Testing



Testing of people from Blacktown and Mt Druiitt Hospitals
N= 6870

Our program

INTERVENTIONS

Management of diabetes



Lifestyle



Enhanced diabetes management in primary care



WSD Patient Self-Management App



Enrol with integrated care coordination

Prevention of diabetes



Improving food consumption



Increasing physical activity



Building healthy environments



Government leading the way

Pharmacy Forum

PHARMACY'S CONTRIBUTION TO DIABETES CARE IN WESTERN SYDNEY



DIABETES FORUM 3RD NOVEMBER 2016

6.00pm - 8.00pm

Registration, Refreshments & Networking: 5.30pm

Western Sydney University Auditorium
Blacktown Hospital Campus
Marcel Cres, Blacktown NSW 2148



TOPICS

**Latest evidence on pen needle length
and injection technique**

Michelle Robbins, Nurse Practitioner
Credentialled Diabetes Educator, Northern Health Melbourne

**The community pharmacist role in
diabetes management**

Peter Rushton, Community Pharmacist
Kildare Road Medical Centre, Blacktown

**Update on NDSS changes and the
impact on pharmacies**

Chris Flood, Senior Pharmacist and National Manager,
PBS Operations and Strategy – The Pharmacy Guild of
Australia, National Secretariat



**The Pharmacy
Guild of Australia**
NSW Branch



Health
Western Sydney
Local Health District

GP & Specialist Case Conferences

- ❑ 1042 Patients
- ❑ 161 GPs
- ❑ 53 Medical Practices

Data collated by Western Sydney Diabetes

We discuss
FITTER
recommendations
in all our work now



New insulin delivery recommendations in *Mayo Clinic Proceedings (MCP)* deliver a simple set of Golden Rules



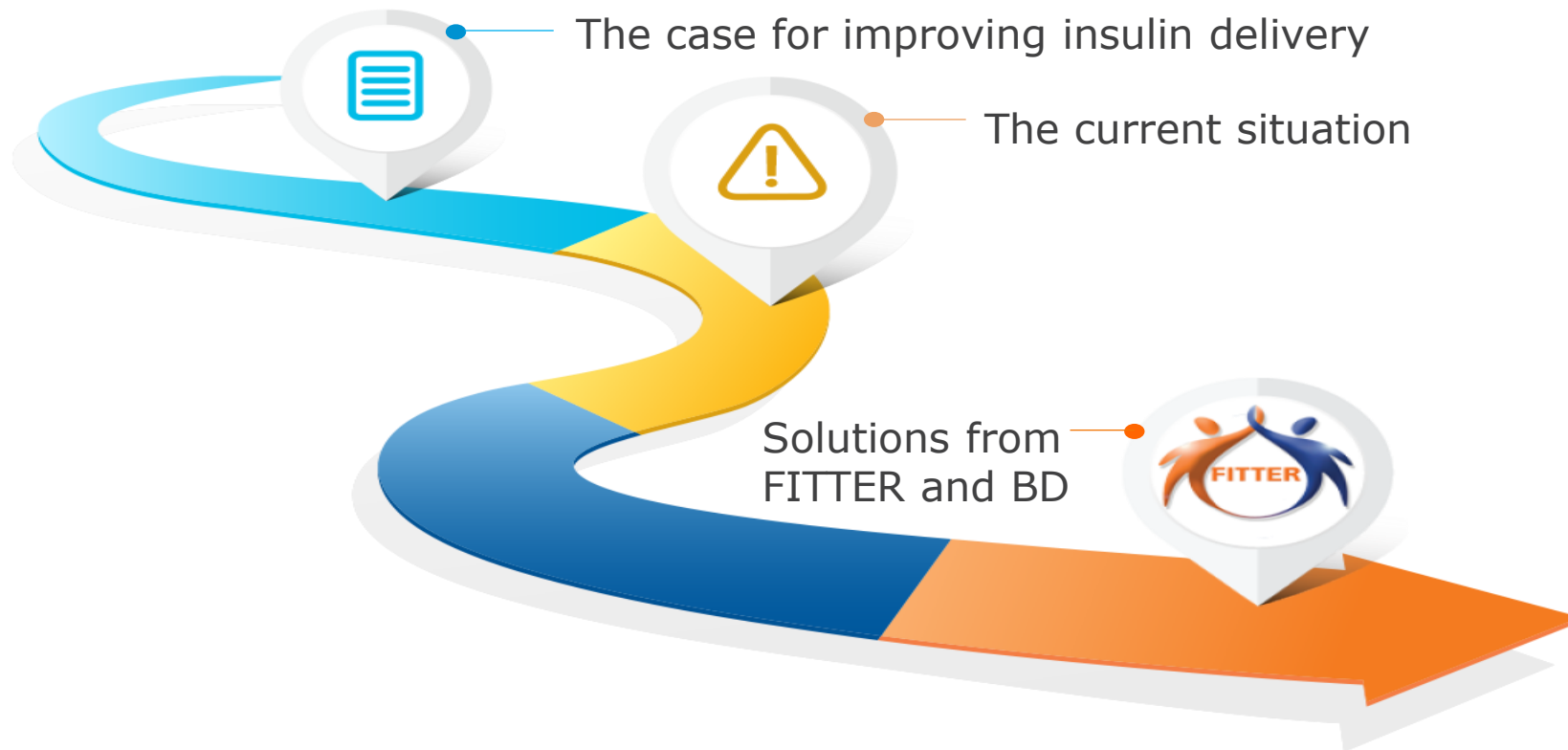
Follow these Golden Rules to help improve insulin delivery and patient outcomes:¹

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- Injection Technique in Children
- Treating and Preventing Lipohypertrophy
- Psychological Issues Regarding Insulin Delivery
- Needlestick Injuries and Sharps Disposal
- Insulin Infusion

A broader holistic approach to effectively manage diabetes.

1. Frid AH, Kreugel G, Grassi G, et al. *Mayo Clin Proc.* 2016;91(9):1231–1255.

JOURNEY



Reference List:

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2. Frid AH, Hirsch LJ, Menchior AR *et al. Mayo Clin Proc.* September 2016;91(9):1224-1230.
3. Frid AH, Hirsch LJ, Menchior AR *et al. Mayo Clin Proc.* September 2016;91(9):1212-1223.
4. Blanco M, Hernández MT, Strauss KW, Amaya M. *Diabetes Metab.* 2013;39(5):445–453.

Thank you!

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BD Medical - Diabetes Care New Zealand: Becton Dickinson Limited, 14b George Bourke Drive, Mt Wellington Auckland 1060, New Zealand, Toll Free: 0800 572 468

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