

| Brand Name | generic | Unit Format | Price/unit | expiry | Price/day | teststrips | total price/day | Incl. savings | incl. savings | incl. savings | incl. savings | incl. savings |
|-----------------------------------|----------|-----------------------------------------|------------|--------|-----------|------------|------------------|------------------|---------------|---------------|---------------------|--------------------|
| | name | | | (days) | | per day | incl. teststrips | fewer teststrips | fewer hypo | fewer DKAs | reduced absenteeism | fewer late complcs |
| Freestyle Libre sensor | flash | sensor + smartphone | \$ 96.00 | 14 | \$6.86 | 1 | \$7.59 | \$2.71 | \$0.64 | -\$0.68 | -\$2.11 | -\$6.43 |
| Freestyle Libre + reader | flash | sensor + reader | \$ 96.00 | 14 | \$6.93 | 1 | \$7.66 | \$2.78 | \$0.71 | -\$0.61 | -\$2.04 | -\$6.36 |
| MiaoMiao/Blucon | ansmitte | transmitter | \$ 199.00 | 365 | \$0.55 | | \$0.55 | | | | | |
| Freestyle Libre + MiaoMiao/Blucon | CGM | sensor/transmitter+smartphone | | | \$7.40 | 1 | \$8.13 | \$3.25 | \$1.18 | -\$0.13 | -\$1.56 | -\$5.88 |
| Dexcom G6 no subscription | CGM | sensor/transmitter+smartphone | | | \$12.53 | 1 | \$13.26 | \$8.38 | \$6.31 | \$4.99 | \$3.56 | -\$0.76 |
| Dexcom G6 annual subscription | CGM | sensor/transmitter+smartphone | | | \$9.83 | 1 | \$10.56 | \$5.68 | \$3.61 | \$2.29 | \$0.87 | -\$3.45 |
| Dexcom system Spike or xDrip+ | CGM | assumes 200 day/transmit, 16 day/sensor | | | \$7.63 | 0.4 | \$7.92 | \$3.04 | \$0.97 | -\$0.34 | -\$1.77 | -\$6.09 |
| Medtronic Guardian Connect | CGM | Sensor + transmitter + Smartphone | | 7 | \$12.25 | 2 | \$13.71 | \$8.83 | \$6.76 | \$5.44 | \$4.02 | -\$0.30 |
| Medtronic Guardian Sensor MMT7 | CGM | Sensor/transmit 670G pump subscription | \$ 71.82 | 7 | \$10.26 | 2 | \$11.72 | \$6.84 | \$4.77 | \$3.45 | \$2.03 | -\$2.29 |
| Freestyle mini test-strips | nger-pok | old paradigm finger-poking only | \$ 0.73 | | \$4.38 | 6 | \$4.88 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

short URL=<http://bit.ly/2ZruLbL>

[Freestyle Libre pricing UK NHS](http://bit.ly/2ZruLbL)

GBP32.47=CAD\$53.30

SAVINGS FROM REDUCED DIABETES MORBIDITY (see Table 2 row 45 for details)

Severe hypoglycemia reduction

| | | | | | |
|-----------------------------------|-----------|-------------------------|-----------------------------------------------------------|-------------------|-------------------|
| reduct days hospitaliz/patient/yr | 0.260 | based on Charleer 2018 | http://bit.ly/2XLbc5K | see table 2 below | see table 2 below |
| cost per hospitaliz for hypo | \$2,910.0 | based on O' Reilly 2018 | http://bit.ly/2XJ66XS | | |
| cost reduction/patient/year | \$756.60 | | | | |
| cost reduction/patient/day | \$2.07 | | | | |

DKA reduction

| | | | | | |
|-----------------------------------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------|-------------------|
| reduct days hospitaliz/patient/yr | 0.096 | based on Charleer 2018 | http://bit.ly/2XLbc5K | see table 2 below | see table 2 below |
| cost per hospitaliz for DKA/day | \$5,000.0 | assuming high acuity hospitalization at \$5000/day based on Tom Elliott experience | | | |
| cost reduction/patient/year | \$480.00 | | | | |
| cost reduction/patient/day | \$1.31 | | | | |

Work absenteeism

| | | | | | |
|------------------------------------|----------|--------------------------------|-----------------------------------------------------------|-------------------|-------------------|
| reduct days absenteeism/patient/yr | 2.607 | based on Charleer 2018 | http://bit.ly/2XLbc5K | see table 2 below | see table 2 below |
| cost absenteeism/day | \$200.00 | based on BCDiabetes experience | | | |
| cost reduction/patient/year | \$521.40 | | | | |
| cost reduction/patient/day | \$1.43 | | | | |

Long-term hyperglycemic complications

| | | | | | |
|------------------------------------|-----------|----------------------|-----------------------------------------------------------|--|--|
| cost savings for A1c reduction 1% | \$ 817.0 | based on Wagner 2001 | http://bit.ly/2UUV9Ky | | |
| (per patient per year 2001 US\$) | | | | | |
| assume inflation rate 2% for 18 yr | | | | | |
| (2019 = 2001 *1.43) = USD | \$1,166.8 | | | | |
| 2019 CAD\$ (/0.74) = CAD | \$1,576.8 | | | | |
| assuming 1% A1c reduction | | | | | |
| \$ savings per patient/yr = | \$ 4.32 | | | | |

Table 2. Evolution of Diabetes-Related Hospital Admissions and Work Absenteeism

| | Before Reimbursement (n = 496) | 12 Months of Reimbursement (n = 379) | P Value |
|----------------------------------------------------------|-----------------------------------|-----------------------------------------|---------|
| Patients with | | | |
| Hospitalizations due to hypoglycemia and/or ketoacidosis | 77 (16%) | 14 (4%) | <0.0005 |
| Hospitalizations due to hypoglycemia | 59 (11%) | 12 (3%) | <0.0005 |
| Hospitalizations due to ketoacidosis | 23 (5%) | 4 (1%) | 0.092 |
| Work absenteeism* | 123 (25%) | 36 (9%) | <0.0005 |
| Days (per 100 patient years) of | | | |
| Hospitalizations due to hypoglycemia and/or ketoacidosis | 53.5 | 17.8 | <0.0005 |
| Hospitalizations due to hypoglycemia | 38.5 | 12.5 | 0.001 |
| Hospitalizations due to ketoacidosis | 14.9 | 5.3 | 0.220 |
| Work absenteeism | 494.5 | 233.8 | 0.001 |

Data are n (%).

*Work absenteeism of at least half a day. Patient-reported hospital admissions were validated by clinicians.

From Table 2 Charleer 2018 see immediately above

| | before reimbursement | after reimbursement | difference |
|---------------------------------|----------------------|---------------------|------------|
| Days (per 100 patient years) of | | | |
| Hospitalization due to hypo | 38.50 | 12.50 | 26.00 |
| Hospitalization due to DKA | 14.90 | 5.30 | 9.60 |
| Work absenteeism | 494.50 | 233.80 | 260.70 |
| Work "presenteeism" | | | 0.00 |

on label \$ 47.44

transmitt 289.000

sensors 299.000

| Brand Name | generic name | Unit Format | Price* | Price Per Unit insulin | Pharmacare subsidy |
|-------------------------------------|-----------------------|--------------------|---------------|-------------------------------|---------------------------|
| Novolin N | NPH | vial | 25.10 | 0.025 | 70.00% |
| Novolin 30/70 | 30/70 | vial | 25.22 | 0.025 | 69.67% |
| Humulin N/R/30-70 | 30/70 | vial | 25.58 | 0.026 | 68.69% |
| Lantus | glargine U100 | vial | 62.00 | 0.062 | 28.34% |
| Basaglar | glargine U100 | disposable pen | 70.50 | 0.047 | 37.38% |
| Lantus Solostar | glargine U100 | disposable pen | 93.00 | 0.062 | 28.34% |
| Levemir FlexTouch | detemir | disposable pen | 116.45 | 0.078 | 22.63% |
| Novolin 30/70 | 30/70 | cartridge | 48.78 | 0.033 | 54.03% |
| Novolin 50/50 or 40/60 | 50/50, 40/70 | cartridge | 49.12 | 0.033 | 53.65% |
| Novolin N | NPH | cartridge | 49.34 | 0.033 | 53.42% |
| Humulin N/R/30-70 cartridge/Kwikpen | 30/70 | cartridge | 50.19 | 0.033 | 52.51% |
| NovoMix 30 | NPL/aspart | cartridge | 59.80 | 0.040 | 44.07% |
| Humalog Mix 25/50 cartridge/Kwikpen | NPL/lispro | cartridge | 61.16 | 0.041 | 43.09% |
| Lantus | glargine U100 | cartridge | 93.00 | 0.062 | 28.34% |
| Toujeo | glargine U300 | cartridge | 66.63 | 0.067 | n/a |
| Levemir | detemir | cartridge | 113.91 | 0.076 | 23.14% |
| Tresiba U100 | degludec U100 | cartridge | 113.91 | 0.076 | n/a |
| Tresiba U200 | degludec U200 | cartridge | 113.91 | 0.076 | n/a |
| Soliqua 100/33 | glargine/lixisenatide | cartridge | 270.00 | 0.180 | n/a |
| Xultophy 100/3.6 | degludec/liraglutide | cartridge | 350.00 | 0.233 | n/a |

| Brand Name | generic name | Unit Format | Price* | Price Per Unit insulin | Pharmacare subsidy |
|--------------------------------------|---------------------|--------------------|---------------|-------------------------------|---------------------------|
| Novolin Toronto | regular | vial | 24.55 | 0.025 | 80.79% |
| Humulin R | regular | vial | 25.58 | 0.026 | 77.54% |
| Apidra | glulisine | vial | 28.04 | 0.028 | 70.74% |
| Humalog | lispro | vial | 30.78 | 0.031 | 64.44% |
| NovoRapid | aspart | vial | 31.85 | 0.032 | 62.27% |
| Fiasp | aspart fiasp | vial | 31.85 | 0.032 | 62.27% |
| Apidra Solostar | glulisine | disposable pen | 56.11 | 0.037 | 53.02% |
| Humalog Kwikpen | lispro | disposable pen | 61.15 | 0.041 | 48.65% |
| NovoRapid FlexTouch | aspart | disposable pen | 64.00 | 0.043 | 46.49% |
| Fiasp FlexTouch | aspart fiasp | disposable pen | 64.00 | 0.043 | 46.49% |
| Fiasp | aspart fiasp | cartridge | 64.00 | 0.043 | 46.49% |
| Novolin Toronto | regular | cartridge | 48.18 | 0.032 | 61.75% |
| Humulin R | regular | cartridge | 50.19 | 0.033 | 59.28% |
| Apidra | glulisine | cartridge | 55.57 | 0.037 | 53.54% |
| NovoMix 30 Penfill® | NPL/aspart | cartridge | 59.80 | 0.040 | 49.75% |
| Humalog cartridge | lispro | cartridge | 61.15 | 0.041 | 48.65% |
| Humalog Mix 25/50 cartridges/Kwikpen | NPL/lispro | cartridge | 61.16 | 0.041 | 48.65% |
| NovoRapid Penfill | aspart | cartridge | 64.00 | 0.043 | 46.49% |
| | =reference insulin | | | | |

| Brand Name | | Unit Format | Price* | Price Per Day | Notes |
|-------------------|-------------|--------------------|----------------------------------------------------------|----------------------|-------------------------|
| Victoza | liraglutide | 3 pre-filled pens | \$192.61 | 9.172 | on full dose 1.8 mg/day |
| Saxenda | liraglutide | 3 pre-filled pens | \$192.61 | 6.420 | on full dose 1.8 mg/day |
| Trulicity | dulaglutide | 4 x 0.75 mg pens | \$147.47 | \$5.27 | on 0.75 mg once weekly |
| Trulicity | dulaglutide | 4 x 1.5 mg pens | \$147.47 | \$5.27 | on 1.5 mg once weekly |
| Ozempic | semaglutide | 2 x 2 mg pens | \$159.00 | \$5.68 | on 1.0 mg once weekly |
| | | | | | |
| | | | innovicares.ca/en | | |

| Drug | Strengths | Price |
|--------------|------------------|--------------|
| metformin | 500 mg | \$0.05 |
| metformin SR | 500 mg | \$0.64 |
| metformin SR | 1000 mg | \$1.29 |

| Drug | Strengths | Price |
|---------------|------------------|--------------|
| glyburide | 5 mg | \$0.06 |
| gliclize | 80 mg | \$0.10 |
| gliclize MR | 30 mg | \$0.10 |
| gliclazide MR | 60 mg | \$0.14 |

| Brand Name | Price | Coverage | price % of cheapest alternative |
|---------------------------------|--------------|---------------------------|----------------------------------------|
| Januvia 100 mg | \$3.27 | not covered by Pharmacare | 134.57% |
| Trajenta 5 mg | \$2.43 | covered by Pharmacare | 100.00% |
| Onglyza 5 mg | \$3.10 | covered by Pharmacare | 127.57% |
| Onglyza 2.5 mg | \$2.59 | covered by Pharmacare | |
| | | | |
| Jentaduetto 2.5/1000 X 2 | \$2.55 | covered by Pharmacare | 93.07% |
| Komboglyza 2.5/500/850/1000 X 2 | \$2.74 | covered by Pharmacare | 100.00% |
| Janumet 50/1000, 50/850, 50/500 | \$3.55 | not covered by Pharmacare | 129.56% |
| Janumet XR 50/1000 X 2 | \$3.55 | not covered by Pharmacare | 129.56% |
| | | | |
| Glumetza 500 mg x 4 | 2.57 | | |

| Brand name | generic name | Strengths | \$ Cost per Tab |
|-------------------|-------------------------|-----------------------------------------------------|------------------------|
| Invokana | canagliflozin | 100, 300 mg | \$2.94 |
| Forxiga | dapagliflozin | 5, 10 mg | \$2.83 |
| Jardiance | empagliflozin | 10, 25 mg | \$2.83 |
| Synjardy | empagliflozin/metformin | 12.5/500, 12.5/850, 12.5/1000, 5/1000 | \$1.46 |
| Invokamet | canagliflozin/metformin | 150/1000, 150/500, 150/850, 50/1000, 50/500, 50/850 | \$1.66 |