

Policies for enhancing insurance coverage for diabetes care – focus on **diabetes supplies**

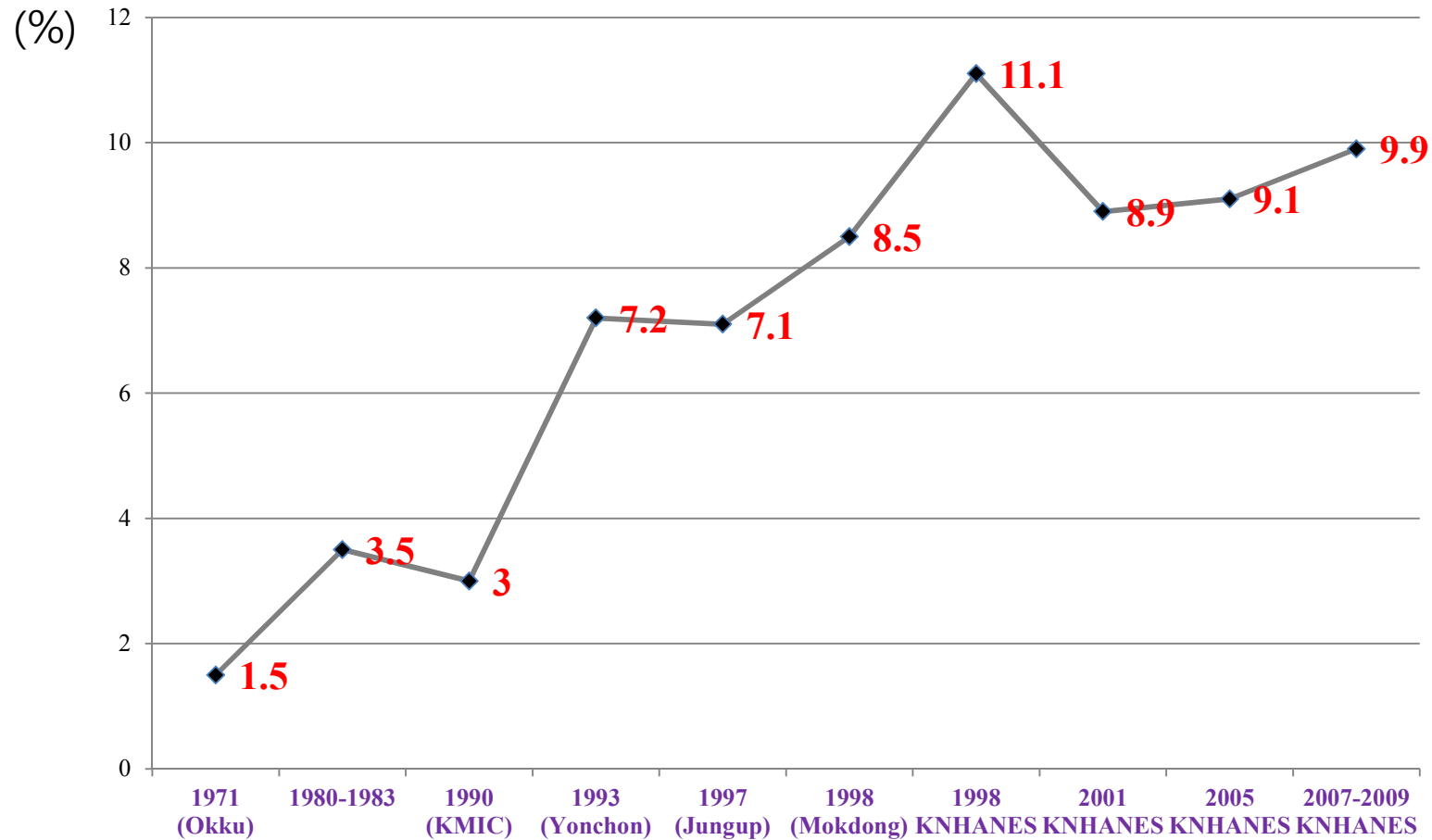
김 대 중

아주의대 내분비대사내과,
대한당뇨병학회 보험법제위원

순서

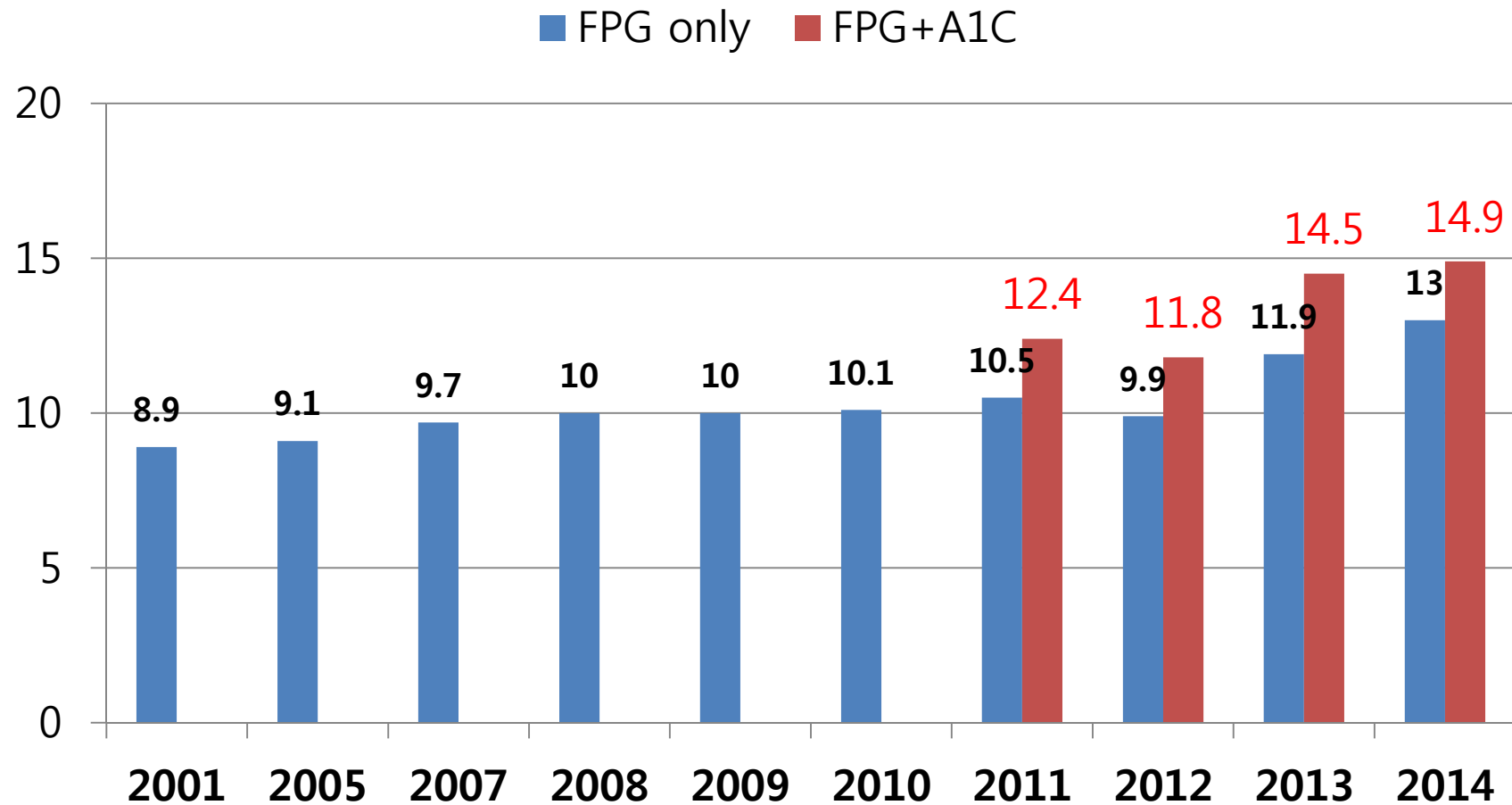
- 당뇨병의 현황
- 당뇨병교육 (자가관리)의 중요성
- 당뇨병 관련 필수소모품 지원책

Prevalence of diabetes among Korean adults, $\geq 30y$



Prevalence of diabetes

KNHANES, $\geq 30y$



From KCDC



**DIABETES
FACT SHEET
IN KOREA
2013**

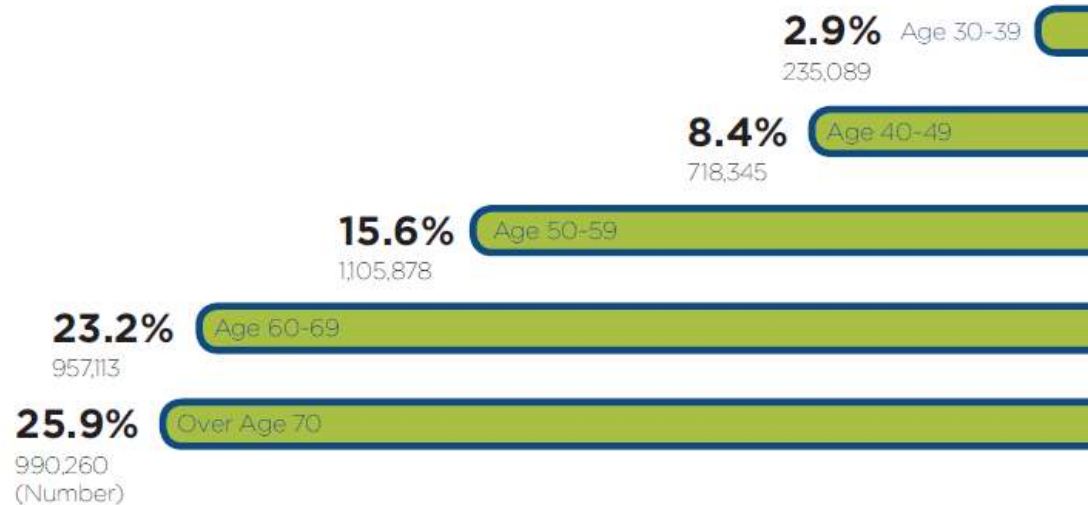


PREVALENCE OF DIABETES 2011 (≥ 30 YRS OLD)

- › The prevalence of diabetes in adults 30 years and older is 12.4%.
- › As of 2011, an estimated 4.0 million people (about 1 every 8 adults) had diabetes.



<Recent Survey>
Primary care unit-based Study
Drug Naïve T2DM : 1,314 Pts
(mean) Age : 55.5y
BMI (kg/m²) : 25.2 kg/m²



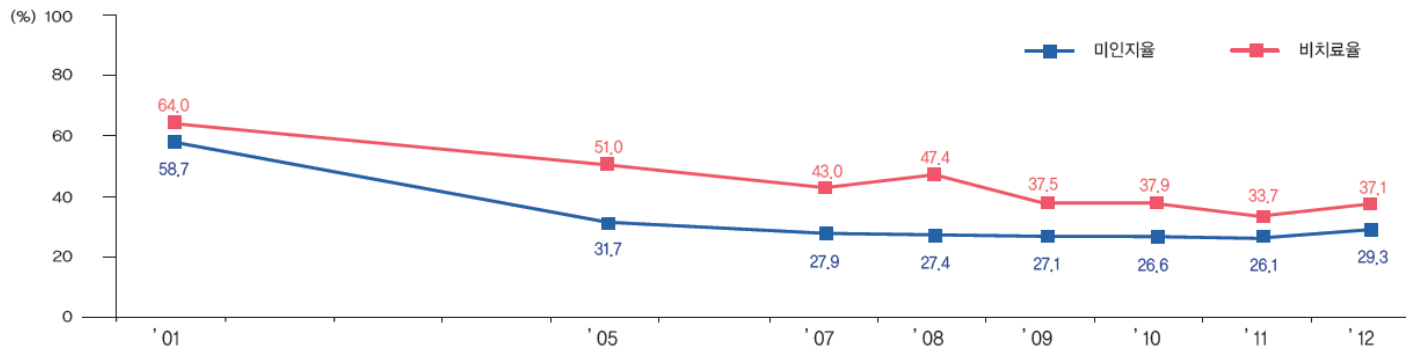
당뇨병의 관리 세계당뇨병연맹 (IDF) 2014

Table CD1 – A summary of the assessments to be performed at Annual Review (or annually) for each person with type 2 diabetes

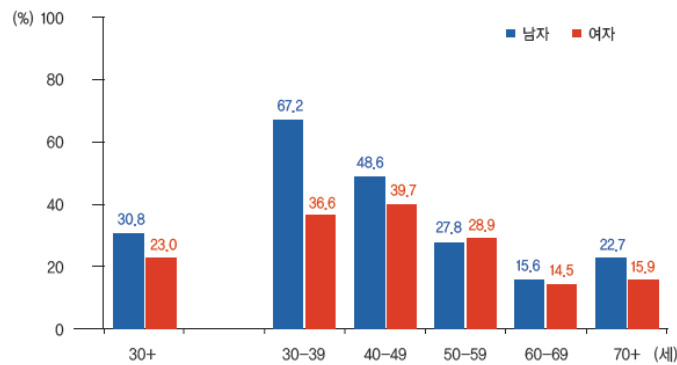
<i>Assessment topic</i>	<i>Guideline section</i>
Self-care knowledge and beliefs	<i>Education</i>
Lifestyle adaptation and wishes (including nutrition, physical activity, smoking)	<i>Lifestyle management</i>
Psychological status	<i>Psychological care</i>
Self-monitoring skills and equipment	<i>Self-monitoring</i>
Body weight trends	<i>Lifestyle management</i>
Blood glucose control	<i>Glucose control levels; Clinical monitoring; Glucose control therapy</i>
Blood pressure control	<i>Blood pressure control</i>
Blood lipid control	<i>Cardiovascular risk protection</i>
Cardiovascular risk	<i>Cardiovascular risk protection</i>
Erectile dysfunction, neuropathy	<i>Nerve damage</i>
Foot condition	<i>Foot care</i>
Eyes	<i>Eye screening</i>
Kidneys	<i>Kidney damage</i>
Medication review	–

당뇨병 관리 현황

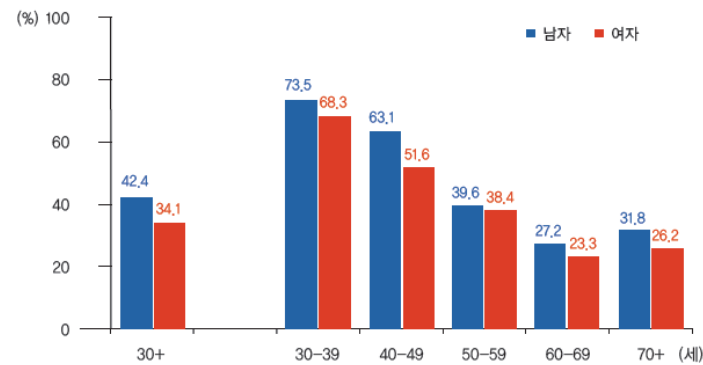
연도별



성별 · 연령별 미인지율



성별 · 연령별 비치료율

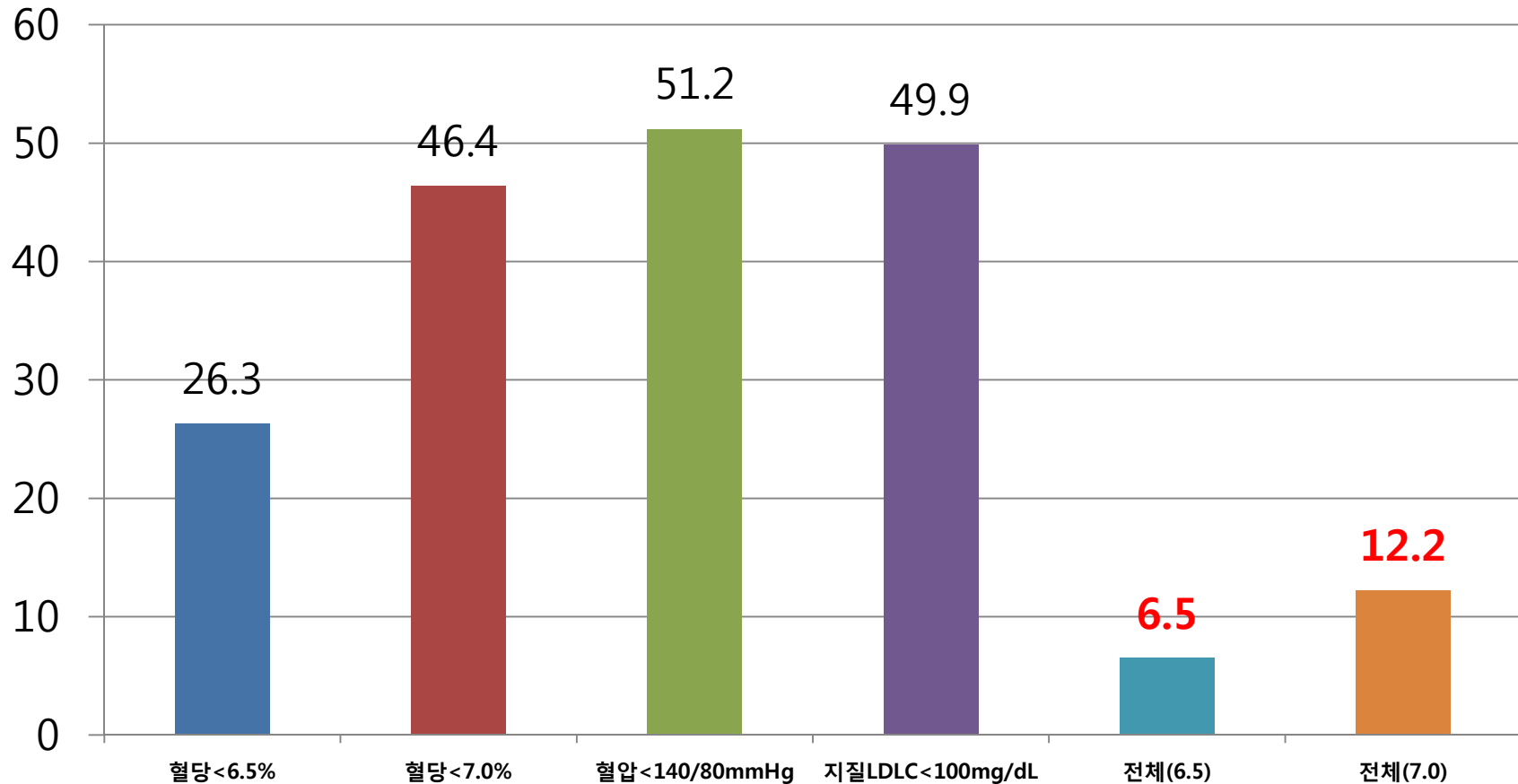


국민건강영양조사 제5기 3차년도(2012) 및 제8차(2012) 청소년건강행태온라인조사

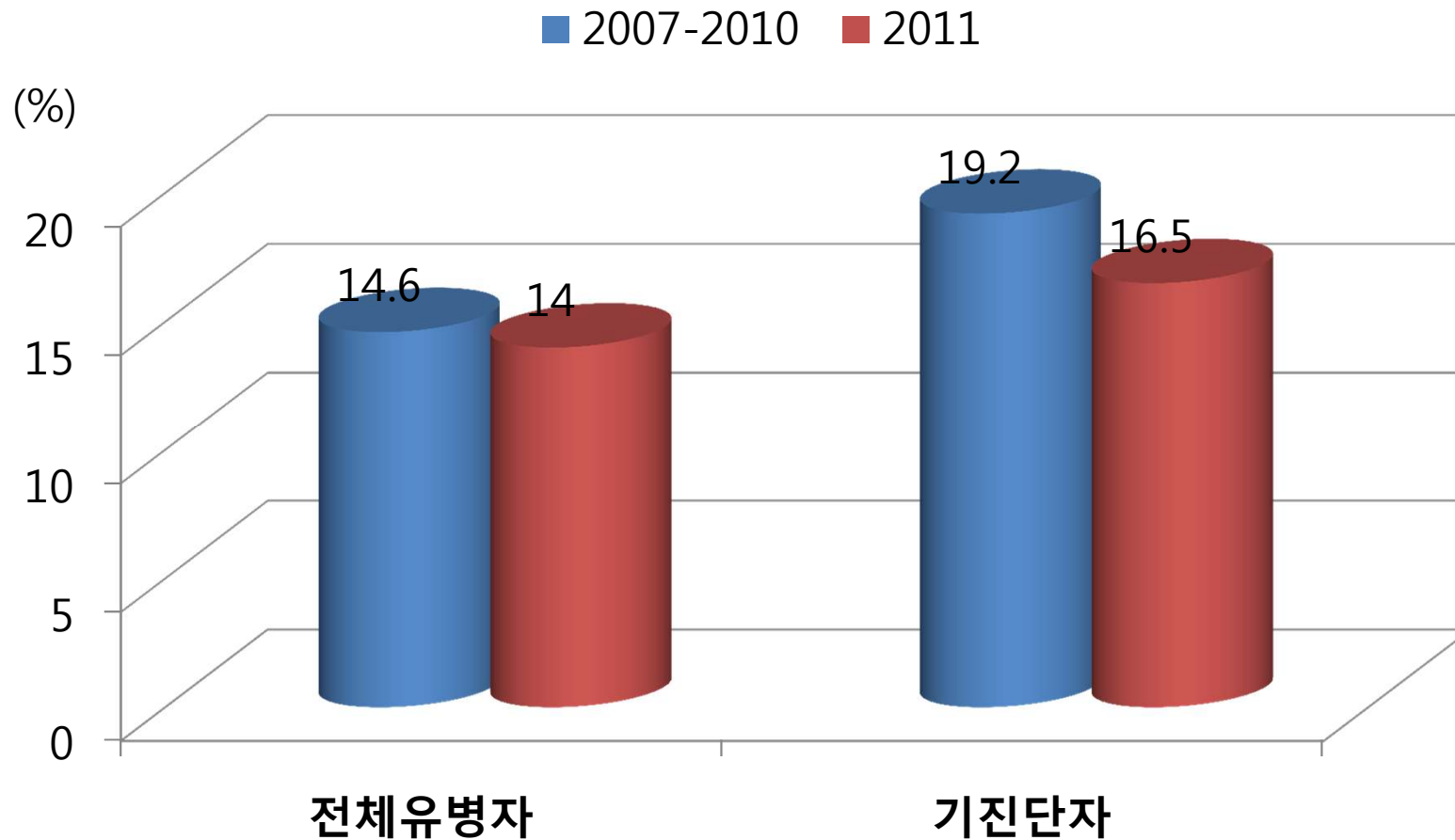
<https://knhanes.cdc.go.kr/knhanes/index.do>

당뇨병 환자 관리 현황

국민건강영양조사 2008-2012년; N=2,127



당뇨병 관리교육 시행율



국민건강영양조사, 2007-2010년 통합, 2011년
기진단자: 의사진단 또는 치료자 (인슐린주사 또는 경구약복용)

세계당뇨병연맹 가이드라인 2014

ED1 Make **patient-centred, structured self-management education** an integral part of the care of all people with type 2 diabetes:

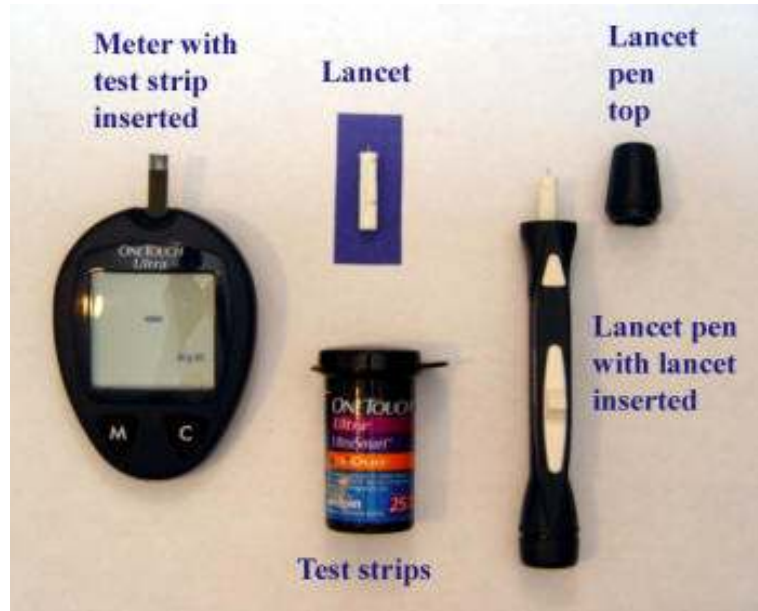
- From around the time of diagnosis.
- On an ongoing basis, based on routine assessment of need.
- On request.

ED2 Use an appropriately **trained multidisciplinary team** to provide education to groups of people with diabetes, or individually if group work is considered unsuitable. Where desired, include a **family member** or friend.

당뇨병 교육 부재의 문제점

- 교육 필요성에 대한 인식 부족
 - 국민, 비용 지불 의사 포함
 - 담당의사, 체계화된 교육의 필요성
- 당뇨교육 수가의 비급여
 - 대학병원 중심, 5-10만원(?)
 - 급여화 필요성,
 - 교육 이수의 강제화 검토; 북유럽

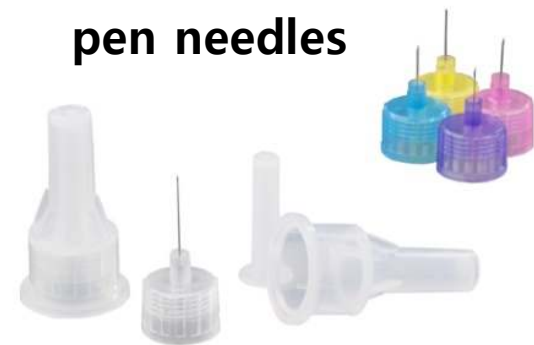
당뇨병 관련 필수소모품



Insulin syringes



Insulin pump supplies



pen needles

Third-Party Reimbursement for Diabetes Care, Self-Management Education, and Supplies

미국당뇨병학회 2014 가이드라인

- To achieve optimal glycemic control, thus achieving long-term reduction in health care costs, individuals with diabetes must have access to the integral components of diabetes care, such as **health care visits, diabetes supplies, self-management education, and diabetes medications.**
- Insurers and third-party payers **must reimburse for medications and supplies** related to the daily care of diabetes.
- A variety of **laws, regulations, and executive orders** also provide guidance on the use of such controls to oversee the purchase and use of durable medical equipment (hereafter referred to as "equipment") and single-use medical supplies (hereafter referred to as "supplies") associated with the management of diabetes.

Diabetes supplies & services, Medicare Part B, USA

Supplies

- Blood sugar (glucose) test strips
- Blood sugar testing monitors
- Insulin
- Lancet devices and lancets
- Glucose control solutions
- Therapeutic shoes or inserts

Services

- Diabetes self-management training
- Yearly eye exam
- Foot exam
- Glaucoma tests
- Nutrition therapy services (medical)

Blood glucose test strips

- **Who's eligible?**
 - All people with Medicare who have diabetes are covered.
- **Your costs in Original Medicare**
 - You pay **20% of the Medicare-approved amount.**
 - Amount a doctor that accepts assignment can be paid; may be less than the actual amount a doctor charges.

Lancet devices & lancets

- **Who's eligible?**
 - All people with Medicare who have diabetes are covered.
- **Your costs in Original Medicare**
 - You pay 20% of the Medicare-approved amount.

Utilization Limits; Medicare, USA

Product	Insulin treated patients	Non-insulin treated patients
Glucose monitoring systems	1 every 5 years	1 every 5 years
Test strips	100 per month	100 every 3 months
Multi Lancet Device	1 every 6 months	1 every 6 months
Lancets	100 per month	100 every 3 months
Control solution	1 every month	1 every month
Batteries	1-2 every year	1-2 every year

Important note: If your doctor recommends that you test more often than the guidelines allow for, he or she can authorize you to get more products that are reimbursed by Medicare. The prescription will need to authorize the number of times a day you should be testing, and the reasons why he or she recommends more testing.

Supplies used to inject insulin

- **How often is it covered?**
 - Medicare **Part B** (Medical Insurance) doesn't cover insulin (unless use of an insulin pump is medically necessary), insulin pens, syringes, needles, alcohol swabs, or gauze.
 - Medicare prescription drug coverage (**Part D**) may cover insulin and certain medical supplies used to inject insulin, like syringes, gauze, and alcohol swabs.
- **Your costs in Original Medicare**
 - You pay 100% for insulin (unless used with an insulin pump, then you pay 20% of the Medicare-approved amount, and the Part B deductible applies) and 100% for syringes and needles, unless you have Part D.

Insurance reimbursement

insulin syringe, pen needles, alcohol swabs


- Insulin syringes and pen needles are covered at the preferred copay by virtually all insurance plans, including Medicare Part D.
- If you are on Medicare, you are eligible for coverage of insulin syringes, pen needles and alcohol swabs.

FINANCIAL ASSISTANCE PROGRAMS FOR DIABETES SUPPLIES; CANADA

- The Ontario Monitoring for Health Program is designed to help people of any age, who use insulin or have gestational diabetes, with the cost of their diabetes testing supplies.
- **Blood Testing Strips and Lancets:** 75% reimbursement up to a maximum of \$820 per year
- **Blood Glucose Meters:** 75% reimbursement up to a maximum of \$75, once every 5 years
- **Talking Glucose Meters:** 75% reimbursement up to a maximum of \$300, once every 5 years

FINANCIAL ASSISTANCE PROGRAMS FOR DIABETES SUPPLIES; CANADA

- **Syringes for seniors program.** The MOHLTC Assistive Devices Program provides **up to \$175 annually** for seniors over the age of **65 years** to help cover the cost of insulin **syringes** and insulin **pen needle** tips.



Ontario


Ministry of Health
and Long-Term Care

Assistive Devices Program (ADP)
5700 Yonge Street, 7th Floor
Toronto ON M2M 4K5

Tel: 416 327-8804
1 800 268-6021

TTY: 416 327-4282
1 800 387-5559

**Application for Funding
Insulin Syringes for Seniors**



IS1

[Clear Form](#)

Section 1 – Applicant's Biographical Information

PLEASE PRINT


Last Name		First Name		Middle Initial
Health Number (10 digits)		Version	Date of Birth (yyyy/mm/dd)	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female
Name of Long-Term Care Home (LTCH) (if applicable)				
Address				
Building Number	Street Name		Suite/Apt Number	
Lot/Concession/Rural Route	City/Town		Postal Code	
Home Telephone (include area code)		Business Telephone (include area code)		Ext

http://www.diabeteseducation.ca/index.php?p=page&page_id=community_resources_financial_assistance_program

National Diabetes Services Scheme; NDSS, **Australia**


- The NDSS gives you access to a large range of subsidised products that help you to affordably self-manage your diabetes. These products include:
 - subsidised **blood glucose testing strips**
 - subsidised **urine testing strips**
 - free **insulin syringes** and **pen needles** (if you require insulin or an approved non-insulin injectable medication)
 - subsidised **insulin pump consumables** (for approved persons with type 1 diabetes and gestational diabetes).

National Diabetes Services Scheme; NDSS, Australia



NDSS
national diabetes services scheme

National Diabetes Services Scheme
ORDER FORM - Testing Strips



Diabetes
AUSTRALIA

Section 1 - NDSS Eligibility (You *MUST* provide the following information for your order to be completed. Please print clearly).

NDSS Number Medicare Number or DVA File Number

Section 2 - Details of Person with Diabetes (Please print clearly).

Title Dr Mr Mrs Ms Other Given Name(s) Family Name

Date of Birth Daytime Phone No.

Address State Postcode

Delivery Address State Postcode

Version - August 2014

PRODUCT DESCRIPTION	Packs of	PRODUCT APPLICATION	NDSS Code	Order QTY	General	Pension DVA (B)	Health Care Card (A)	Safety Net Card CN (C)	SN (C)	AMOUNT PAYABLE
Blood Glucose Testing Strips						PRICE PER PACK				
Accu-Chek Active Blood Glucose Strips	100	Accu-Chek Active, Glucotrend, Glucotrend 2, Glucotrend Prem	22.5		15.90	1.20	2.50	1.20	FREE	
Accu-Chek Advantage Blood Glucose Strips	100	Accu-Chek Advantage, Accu-Chek Complete	17.5		15.90	1.20	2.50	1.20	FREE	
Accu-Chek Aviva Strips 50 F2	50	Accu-Chek Aviva Expert	135		7.90	0.60	1.20	0.60	FREE	
Accu-Chek Go Reagent Strips	50	Accu-Chek Go	35		7.90	0.60	1.20	0.60	FREE	
Accu-Chek Integra 3 x 17	51	Accu-Chek Integra	39		8.10	0.60	1.20	0.60	FREE	
Accu-Chek Mobile Test Strips (Insulin requiring only)	100	Accu-Chek Mobile	48		15.90	1.20	2.50	1.20	FREE	
Accu-Chek Performa Electrode Strips	100	Accu-Chek Performa	107.5		15.90	1.20	2.50	1.20	FREE	
Bayer Contour Blood Glucose Test Strips	100	Bayer Contour Link	140		15.90	1.20	2.50	1.20	FREE	
Betachek G5 Strips	50	Betachek G5	105		7.90	0.60	1.20	0.60	FREE	
Betachek Reagent Strips	50	Betachek Lynx or Visual Use	08		7.90	0.60	1.20	0.60	FREE	
BGStar Blood Glucose Test Strips	100	BGStar, iBGStar	145		15.90	1.20	2.50	1.20	FREE	
Bionime Rightest Strips	50	Bionime Rightest	47		7.90	0.60	1.20	0.60	FREE	
CareSens N Reagent Strips	50	CareSens N	119		7.90	0.60	1.20	0.60	FREE	
CareSens Reagent Strips	50	CareSens, Duo Care, CareSens POP	38		7.90	0.60	1.20	0.60	FREE	
FreeStyle Lite Blood Glucose Test Strips	100	Freestyle Lite, FreeStyle Papillon mini, Freestyle Freedom Lite	44		15.90	1.20	2.50	1.20	FREE	

<http://www.ndss.com.au/About-NDSS/Product-and-Supply/>

National Diabetes Services Scheme; NDSS, Australia

Version - August 2014					
PRODUCT DESCRIPTION	Packs of	NDSS Code	Order QTY	Price	AMOUNT PAYABLE
Pen Needles					
B-A Omnican Mini Pen Needle 30G x 8mm	100	67		FREE	n/a
B-D MicroFine + Pen Needle 29G x 12.7mm	100	87		FREE	n/a
B-D MicroFine + Pen Needle 31G x 8mm	100	92		FREE	n/a
B-D MicroFine + Pen Needle 31G x 5mm	100	97		FREE	n/a
B-D UltraFine Pentapoint Comfort Pen Needle 32G x 4mm	100	101		FREE	n/a
Mylife Clickfine Pen Needle 31G x 8mm	100	217		FREE	n/a
Mylife Clickfine Pen Needle 31G x 6mm	100	216		FREE	n/a
Mylife Clickfine Pen Needle 31G x 4.5mm	100	230		FREE	n/a
Mylife Clickfine Pen Needle 32G x 4mm	100	231		FREE	n/a
NovoFine Pen Needle 30G x 8mm	100	91		FREE	n/a
NovoFine Pen Needle Tip 32G x 6mm	100	150		FREE	n/a
NovoFine Plus Pen Needle 32G x 4mm	100	165		FREE	n/a
Unifine Pentips 29G x 12mm	100	215		FREE	n/a
Unifine Pentips 31G x 8mm	100	214		FREE	n/a
Unifine Pentips 31G x 6mm	100	213		FREE	n/a
Unifine Pentips 31G x 5mm	100	235		FREE	n/a
Syringes					
Terumo 0.3mL 29G x 13mm	100	99		FREE	n/a
Terumo 0.5mL 29G x 13mm	100	76		FREE	n/a
Terumo 1.0mL 29G x 13mm	100	77		FREE	n/a
B-D Ultra-Fine 0.3mL 29G x 12.7mm	100	88		FREE	n/a
B-D Ultra-Fine 0.5mL 29G x 12.7mm	100	89		FREE	n/a
B-D Ultra-Fine 1.0mL 29G x 12.7mm	100	90		FREE	n/a

<http://www.ndss.com.au/About-NDSS/Product-and-Supply/>

In France, diabetes is considered as a government priority.

Financial coverage

Expert committees and the National Authority for Health advise the Ministry of Health on which medicines and medical devices should be reimbursed.³ Criteria include clinical and therapeutic benefits as well as added value compared to existing technologies or medicines. Based on this assessment, and after the Ministry's decision has been made, the National Union of Health Insurance Funds decides the rate of reimbursement.^{3,4}

Under the Long-Term Illness Scheme, medicines and medical devices for diabetes are fully covered by the [mandatory health insurance](#) system and people are exempt from dispensing fees.^{1,6} However, in order to enrol on the Scheme, the prescriber must apply (on the patient's behalf) to the person's health insurance fund.⁶

Please note that the table below presents a level of reimbursement assuming that the person has registered with the Long-Term Illness Scheme.

Insulin and anti-diabetes medication	Free ¹
Medication for hypoglycaemia	Free ¹
Pens and related supplies	Free ¹
Syringes and needles	Free ¹
Pumps and related supplies	Free ^{1,9*}
Blood glucose test strips and meters	Free ¹ but limited to 200 strips per year for people treated with the oral medications that have low related risks of hypoglycaemia ⁶
Ketone test strips	Free ¹
<i>*Insulin pumps are lent free-of-charge to people with diabetes by the contractors. Please note that the information above presents only a summary of the reimbursement system and may not apply to individual cases.</i>	

<https://www.idf.org/sites/default/files/France.pdf>

http://ec.europa.eu/health/major_chronic_diseases/docs/policy_puzzle_2011.pdf

Financial coverage; **Germany**

- **Full reimbursement**
 - Injectable insulin and **pens**, insulin **pumps** and accessories
 - **Lancets**
 - Lipid testing
 - Micro/macroalbuminuria
 - Retinopathy screening
 - **Structured education**
- **Restricted reimbursement**
 - Blood glucose monitoring **strips and meters**
 - Self-monitoring blood pressure meters
 - Psychological assessment
 - **Nutritional/dietary advice**
 - Podiatry
 - Ophthalmological assessment
 - Dentistry

<https://www.idf.org/sites/default/files/GERMANY.pdf>

http://ec.europa.eu/health/major_chronic_diseases/docs/policy_puzzle_2011.pdf

UK healthcare services

- **Free healthcare services for all**
 - Insulin pumps and accessories – only about 5% of people on insulin use a pump
 - Lipid testing
 - Albuminuria
 - Retinopathy screening – annual, over the age of 12 years
 - **Structured education** – only about 30% of people with diabetes have access; there is no structured education for children
 - Psychological assessment – very limited
 - Nutritional/dietary advice
 - Podiatry
 - Ophthalmological assessment
- **Free for people on oral medications or insulin**
 - **Injectable insulin and pens**
 - Oral medication
 - Blood and urine testing
 - **Lancets**
- Blood glucose monitoring **strips and meters** are **not free to all**; if deemed by a healthcare professional to be needed, they can be accessed free

일본 혈당측정 관련 보험 개념

보험금 지급 기준 (혈당측정 가산)

- 월 20회 이상 = 400점(약 4,000엔)
- 월 40회 이상 = 580점(약 5,800엔)
- 월 60회 이상 = 860점(약 8,600엔)
- 월 80회 이상 = 1,140점(약 11,400엔)

혈당시험지, 고정화 효소전극, 천자기, 천자침 및 측정기기를 환자에게 지급 또는 대여한 경우의 비용 기타 자가혈당측정에 관한 모든 비용은 소정 점수에 포함되어 별도로 산정할 수 없다.

- 예) 月20회 이상 측정하는 환자의 경우
400점(4,000엔) **보험율 20% or 30% 적용**
4,000엔 X 0.2 = 800엔 은 본임이 부담,
나머지 공단 부담

▶ 血糖自己測定器加算

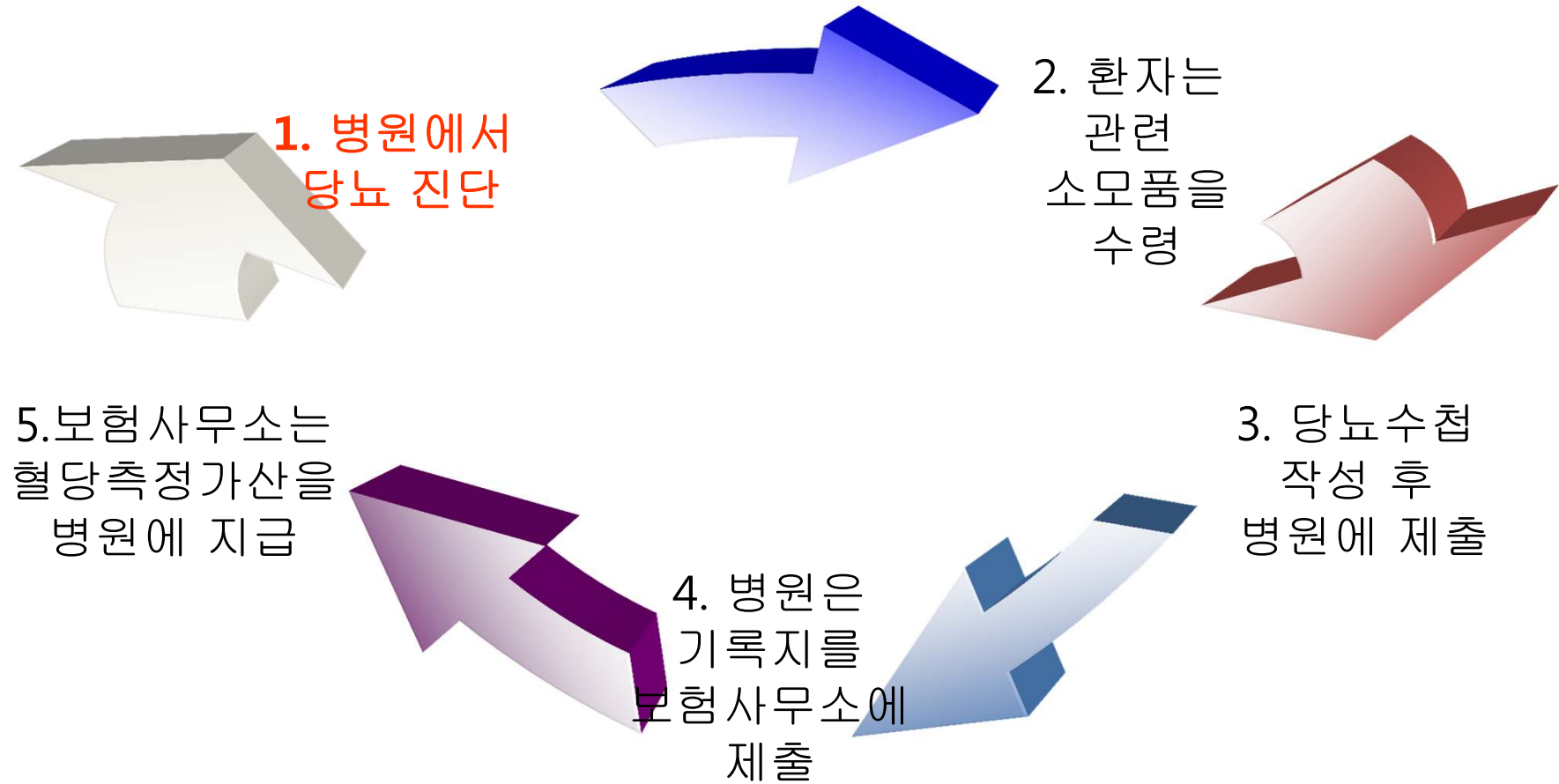
1月の血糖自己測定回数	20回以上	40回以上	60回以上	(80回以上)	(100回以上)	(120回以上)
点数	400点	580点	860点	(1,140点)	(1,320点)	(1,500点)

※80回・100回・120回以上; 1型糖尿病患者のみ

※3月に3回加算(インスリン製剤を2月分、3月分以上処方している患者、在宅小児低血糖症患者指導管理料又は在宅妊娠糖尿病患者指導管理料を算定している患者に限る。)

※ビクトーザ[®]皮下注 18mg の場合は、インスリン製剤に準じて算定する

일본 혈당측정 관련 보험 개념



일본, 인슐린 주사용품

【院内処方】

<ペンシステム>

펜시스템

주사지도관리료

在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
注入器	注入器加算(処方した場合)	300点
注射針	注入器用注射針加算(処方した場合)	200点/130点
薬剤	薬価基準	—

<キット製剤(プレフィルド製剤)>

在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
注射針	注入器用注射針加算(処方した場合)	200点/130点
薬剤	薬価基準	—

<バイアル(ディスポーザブルシリンジ)> **병(일회용 주사기)**

在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
注入器(ディスポーザブルシリンジ) (処方した場合)	注入器加算(注射針一体型の場合)	300点 주사침 일체형
	注入器用注射針加算(注射針一体型でない場合)	200点/130点
薬剤	薬価基準	—

C101 재택 자가주사 지도관리료

C010-2 재택 **소아** 저혈당 환자 지도관리료

C101-3 재택 **임신** 당뇨병 환자 지도관리료

일본, 인슐린 주사용품

【院外処方】

<ペンシステム> **펜시스템**

医療機関	在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
	注入器	注入器加算(処方した場合)	300点
保険薬局	注射針	特定保険医療材料	15,17,18円/本
	薬剤	薬価基準	—

<キット製剤(プレフィルド製剤)>

医療機関	在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
保険薬局	注射針	特定保険医療材料	15,17,18円/本
	薬剤	薬価基準	—

<バイアル(ディスポーザブルシリンジ)>

병(일회용 주사기)

医療機関	在宅療養指導管理料	在宅自己注射指導管理料	810点(290/190/100点)
保険薬局	注入器 (ディスポーザブルシリンジ)	特定保険医療材料	17円(インスリン) 인슐린 10円(成長ホルモン) 11円(その他)
	薬剤	薬価基準	—

- 가. 월 3회 이하의 경우 100점
- 나. 월 4회 이상의 경우 190점
- 다. 월 8회 이상의 경우 290점
- 라. 월 28회 이상의 경우 810점

대한당뇨병학회 정책건의

(정부는 이제 실천할 때임!)

- **체계화된 당뇨병 교육 급여화**
 - 진단시, 그 이후 필요시
 - 인슐린 사용자에게 대한 주사지도관리료
- **혈당측정용 스트립 지원 확대**
 - 현행: 1형당뇨병 환자에 국한
 - 확대방안: 인슐린 사용하는 2형당뇨병, 임신성당뇨병
- **당뇨병 환자 필수소모품 지원책 마련**
 - 인슐린 주사기 또는 펜니들, 인슐린펌프 소모품
 - 혈당측정기용 주사침/주사기
 - 기타 소모품; 알콜솜, 배터리 등