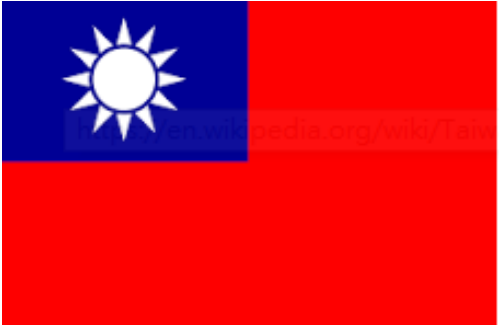

Effectiveness of integrated care model for type II diabetes mellitus

Wan-O Chu RPh

Department of Pharmacy, Keelung Hospital, Ministry of Health and Welfare

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g39004036@gmail.com

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衛生福利部 基隆醫院 Keelung Hospital

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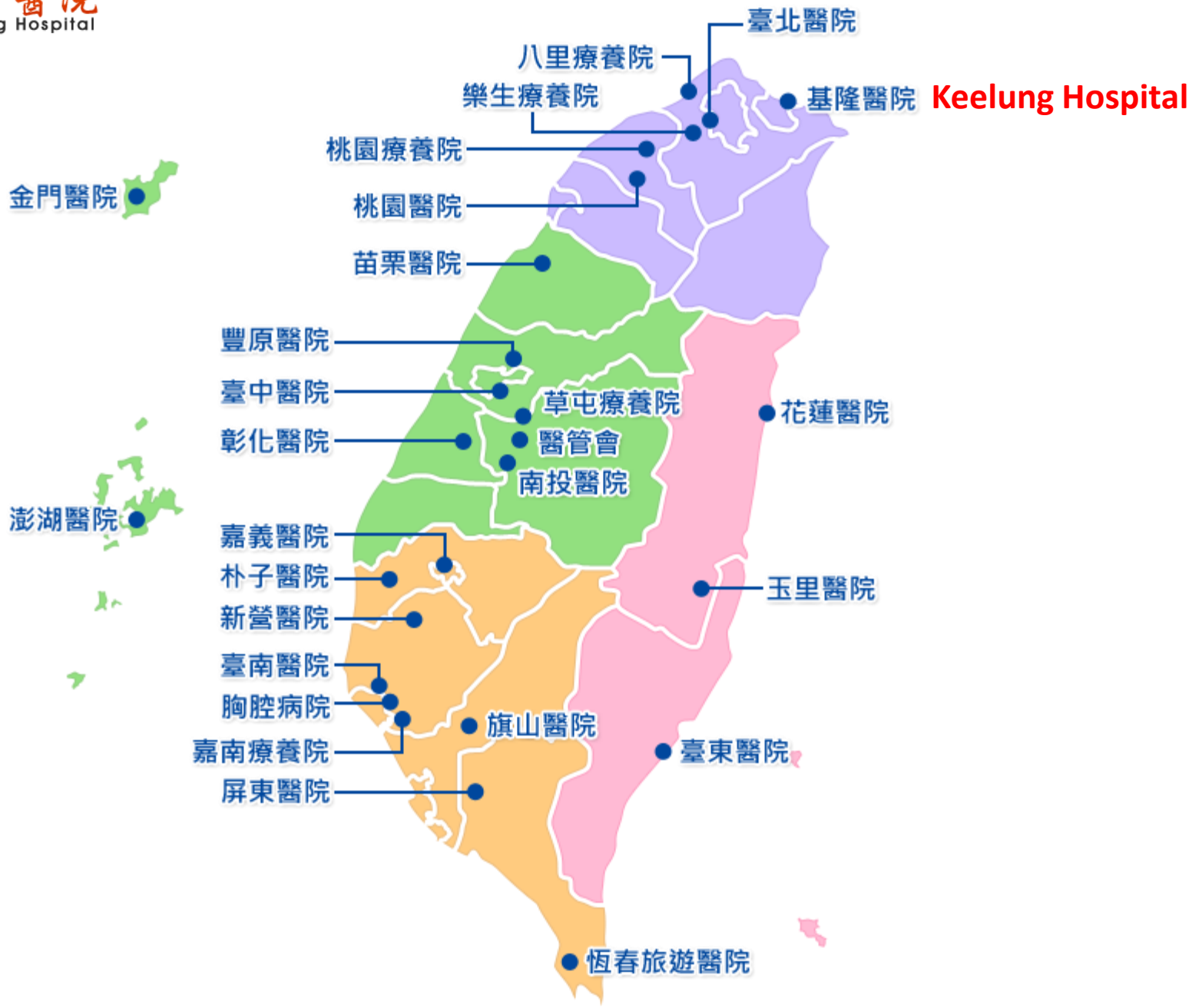

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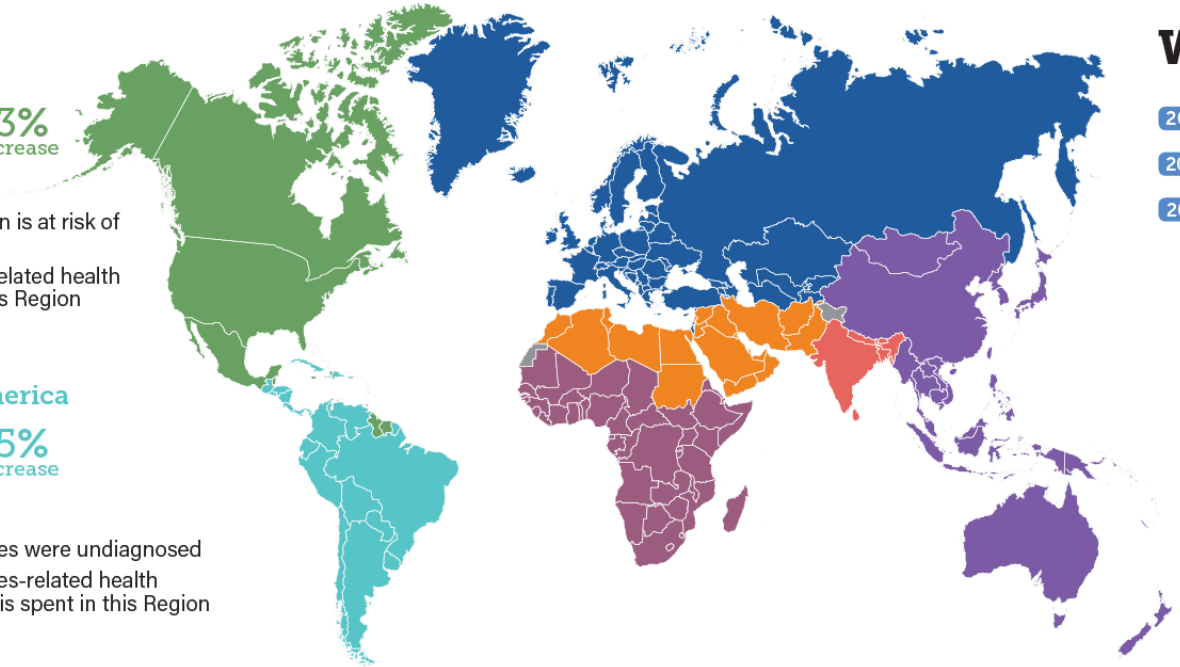
Effectiveness of integrated care model for type II diabetes mellitus

Health care management systems, structures and processes to optimize health gain for patients, staff and populations served

GLOBAL

Diabetes data report 2010 – 2045

Number of adults (20–79 years) with diabetes worldwide



North America & Caribbean

2045 63 million
2030 56 million
2019 48 million

33% increase

- 1 in 6 adults in this Region is at risk of type 2 diabetes
- 43% of global diabetes-related health expenditure occurs in this Region

South & Central America

2045 49 million
2030 40 million
2019 32 million

55% increase

- 2 in 5 people with diabetes were undiagnosed
- Only 9% of global diabetes-related health expenditure for diabetes is spent in this Region

WORLD

2045 700 million
2030 578 million
2019 463 million

51% increase

Europe

2045 68 million
2030 66 million
2019 59 million

15% increase

- 1 in 6 live births are affected by hyperglycaemia in pregnancy
- The Region has the highest number of children and adolescents (0–19 years) with type 1 diabetes – 297,000 in total

Africa

2045 47 million
2030 29 million
2019 19 million

143% increase

- 3 in 5 people with diabetes are undiagnosed
- 3 in 4 deaths due to diabetes were in people under the age of 60

Middle East & North Africa

2045 108 million
2030 76 million
2019 55 million

96% increase

- 1 in 8 people have diabetes
- 1 in 2 deaths due to diabetes were in people under the age of 60

South-East Asia

2045 153 million
2030 115 million
2019 88 million

74% increase

- 1 in 5 adults with diabetes lives in this Region
- 1 in 4 live births are affected by hyperglycaemia in pregnancy

Western Pacific

2045 212 million
2030 197 million
2019 163 million

31% increase

- 1 in 3 adults with diabetes lives in this Region
- 1 in 3 deaths due to diabetes occur in this Region

https://diabetesatlas.org/data/en/world/

Taiwan

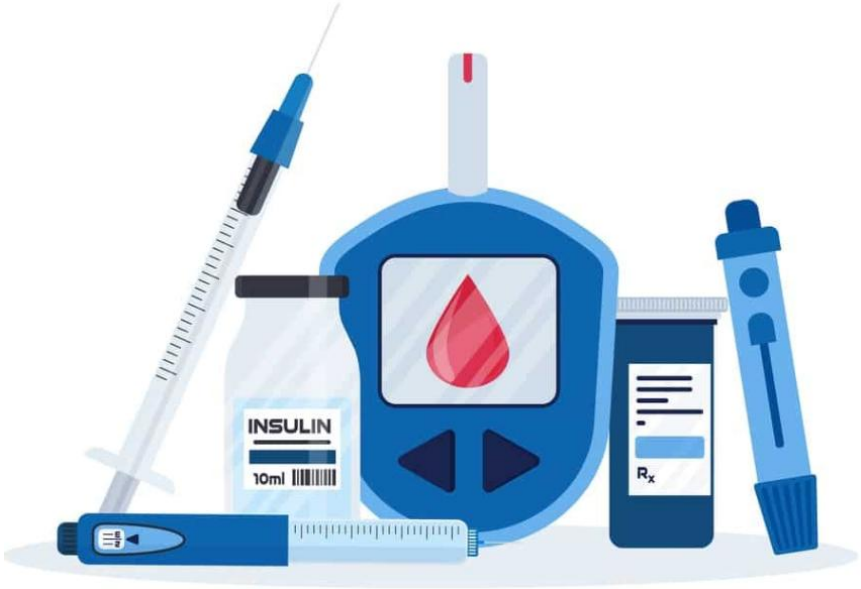
Diabetes report 2010 – 2045

IDF DIABETES ATLAS
9th edition 2019

At a glance	2010	2019	2030	2045
Diabetes estimates (20-79 y)				
People with diabetes, in 1,000s	815.9	1,228.8	1,438.1	1,372.9
Age-adjusted comparative prevalence of diabetes, %	7.5	6.4	7.3	7.8
People with undiagnosed diabetes, in 1,000s	-	525.9	-	-
Proportion of people with undiagnosed diabetes, %	-	42.8	-	-
Demographics				
Total adult population (20-79 y), in 1,000s	14,221.6	18,523.4	18,690.4	16,850.5
Population of children (0-14 y), in 1,000s	3,958.0	3,096.9	-	-
Population of children and adolescents (0-19 y), in 1,000s	-	4,388.6	-	-
Complications of diabetes				
Microvascular	**Nephropathy:** 5.4% **Neuropathy:** 1.9%		**Retinopathy:** 2.3%	
Macrovascular	**Coronary artery disease:** 7.4% **Peripheral artery disease:** 1.6%		**Cerebrovascular disease:** 1.9% **Heart failure:** 2.3%	

Objective

An effective and persistent integrated care model for type II diabetes mellitus can improve patient health and save medical costs.



HIS in Taipei City Hospital
the first Diabetes Care Service in 2017

Glycated hemoglobin (HbA1c)

total cholesterol (TC)

triglyceride (TG)

low density lipoprotein cholesterol (LDL-C)

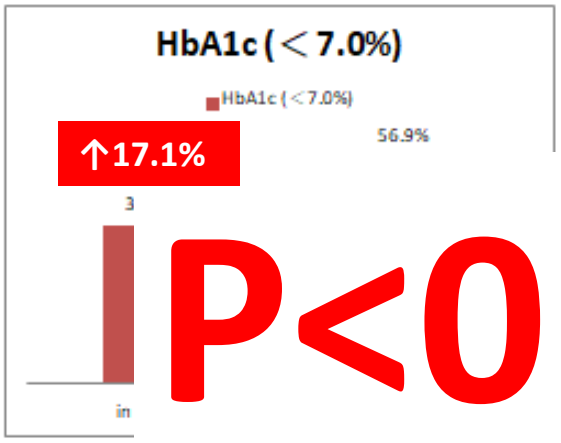
from Jan. 1 2017 to Dec. 31 2019

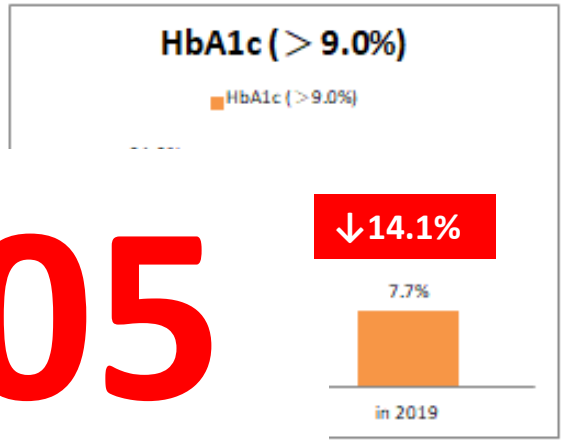
paired sample t-test

significance (α) was set at p-value < 0.05 by the IBM SPSS

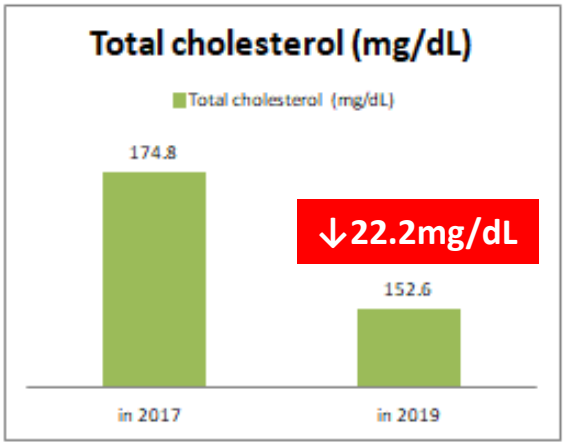
Results

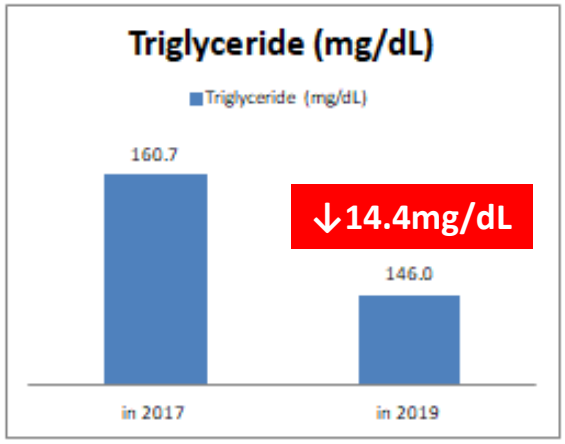
487 patients
60.9 (SD 14.1) years old

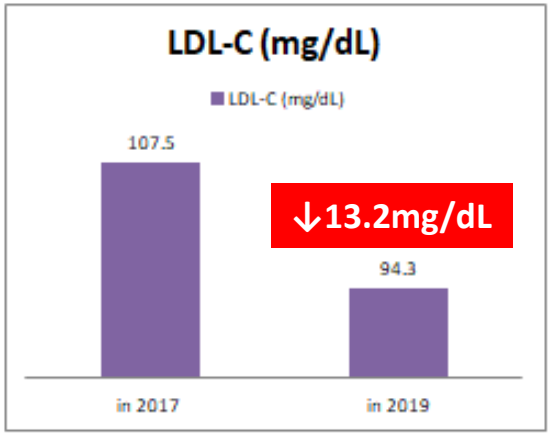




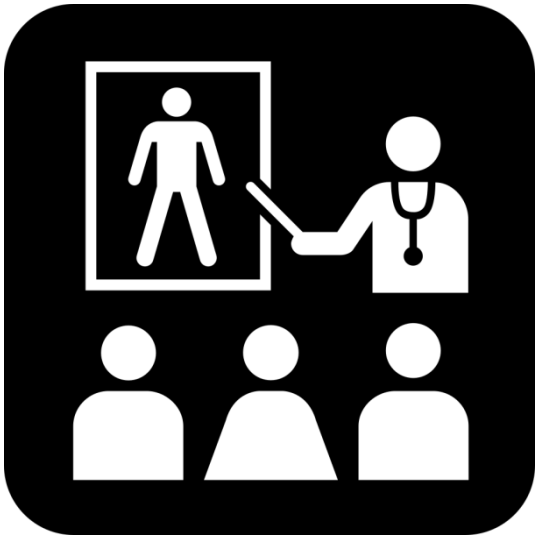
P<0.05

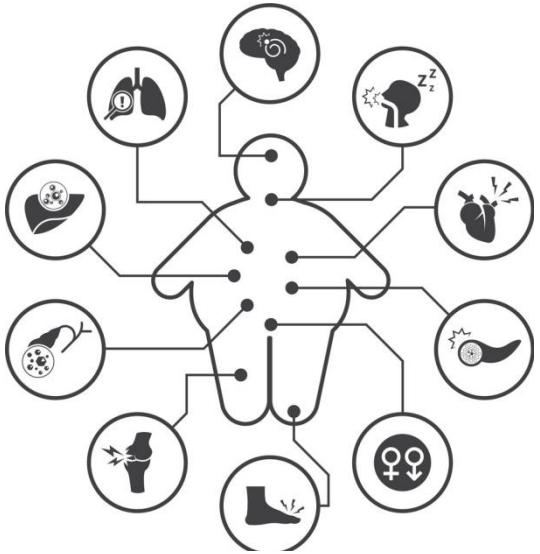






Conclusion





Thank you for your attetion!

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