DIACARE
Symposium 2023

# Người bệnh Đái tháo đường mong đợi gì từ bác sĩ

**PGS.TS.BS. Nguyễn Thy Khuê**
*Phó chủ tịch Hội Đái tháo đường & Nội tiết TPHCM*

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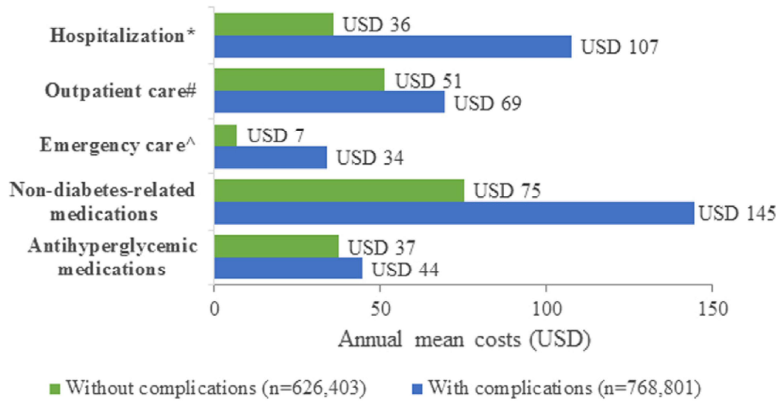
## Gánh nặng kinh tế bệnh Đái tháo đường ở Mỹ năm 2017

- ***Chẩn đoán*: *$327 tỷ chi trả cho chẩn đoán ĐTĐ năm 2017***.
  - $237 tỷ cho chi phí y tế trực tiếp (tăng 26% kể từ năm 2012) và $90 tỷ cho việc giảm năng suất lao động (người bệnh ĐTĐ nghỉ hơn 300 triệu ngày làm việc)
- ***Điều trị:*** Thuốc điều trị ĐTĐ= $31 tỷ trong đó $15 tỷ cho việc sử dụng insulin (Tăng 45% trong 5 năm – đã được điều chỉnh theo lạm phát)
- ***Chăm sóc***: Cứ $4 chi cho việc chăm sóc sức khỏe thì có $1 chi cho việc chăm sóc bệnh nhân ĐTĐ
- ***Tử vong*:** ĐTĐ dẫn đến 277.000 ca tử vong sớm.

American Diabetes Association. Diabetes Care. 2018 May;41(5):917-928.

2

## Direct medical costs of diabetes and its complications in Vietnam: A national health insurance database study

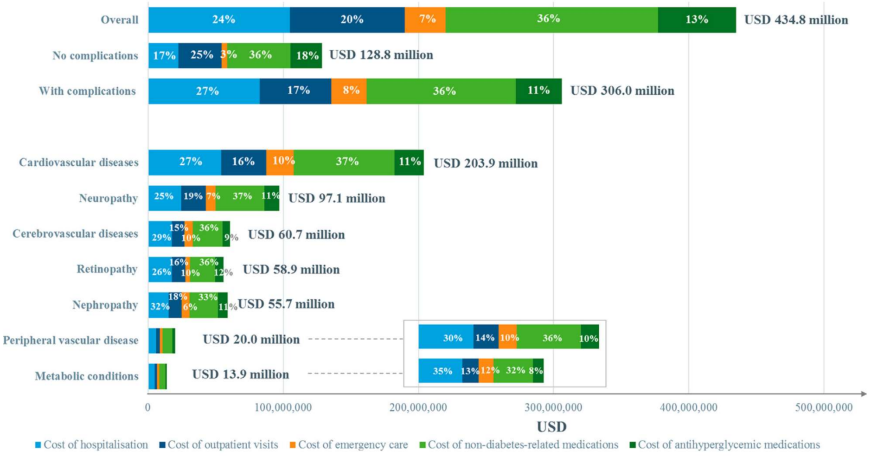



n=1,395,204

Huy Tuan Kiet Pham et al DRCP https://doi.org/10.1016/j.diabres.2020.108051

3

## Direct medical costs of diabetes and its complications in Vietnam: A national health insurance database study




Huy Tuan Kiet Pham et al DRCP https://doi.org/10.1016/j.diabres.2020.108051

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Chúng ta đã có những bằng chứng khoa học vững chắc cho thấy **điều trị Đái Tháo Đường tích cực có lợi ích lâu dài**

- ❖ Giảm biến chứng mạch máu nhỏ
- ❖ Giảm biến chứng mạch máu lớn
- ❖ Cải thiện chất lượng cuộc sống
- ❖ Kéo dài tuổi thọ

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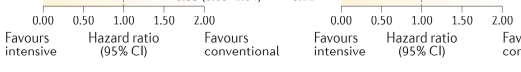
## Điều trị tích cực, toàn diện ngay từ đầu mang lại hiệu quả lớn hơn

| Trial | Years | n (at start) | All cause mortality | HR (95% CI) | P | Incident cardiovascular events | HR (95% CI) | P |
|---|---|---|---|---|---|---|---|---|
| **Multifactorial intervention trial** | | | | | | | | |
| Steno-2[1] | 21 | 160 | | 0.55 (0.36–0.83) | 0.005 | | 0.55 (0.39–0.77) | <0.001 |
| Steno-2[4] | 13.3 | 160 | | 0.54 (0.32–0.89) | 0.02 | | 0.41 (0.25–0.67) | <0.001 |
| **Glucose lowering intervention trials** | | | | | | | | |
| UKPDS (SU-insulin group)[3] | 10 | 3,867 | | 0.87 (0.79–0.96) | 0.007 | | 0.85 (0.74–0.97) | 0.01 |
| UKPDS (metform group)[3] | 10 | 753 | | 0.73 (0.59–0.89) | 0.002 | | 0.67 (0.51–0.89) | 0.005 |
| ACCORDION[5] | 9 | 8,601 | | 1.01 (0.92–1.10) | 0.91 | | 0.94 (0.88–1.00) | 0.05 |
| ADVANCE-ON[6] | 10 | 8,494 | | 1.00 (0.92–1.08) | 0.91 | | 1.00 (0.92–1.08) | 0.93 |
| VADT[7] | 11.8 | 1,791 | | 1.05 (0.89–1.25) | 0.54 | | 0.83 (0.70–0.99) | 0.04 |
| DCCT/EDIC[2] | 30 | 1,441 | | 0.67 (0.45–0.99) | 0.048 | | 0.70 (0.52–0.93) | 0.016 |
| **Blood pressure lowering intervention trials** | | | | | | | | |
| ACCORD BP[8] | 4.7 | 4,733 | | 1.07 (0.85–1.35) | 0.55 | | 0.95 (0.84–1.07) | 0.4 |
| ADVANCE ON[6] | 10 | 8,491 | | 0.91 (0.84–0.99) | 0.03 | | 0.92 (0.85–1.00) | 0.06 |
| **Lipid lowering intervention trial** | | | | | | | | |
| CARDS[9] | 3.9 | 2,838 | | 0.73 (0.52–1.01) | 0.059 | | 0.68 (0.55–0.85) | 0.001 |
| **Intensive lifestyle intervention trial** | | | | | | | | |
| LOOK AHEAD[10] | 9.5 | 5,145 | | 0.85 (0.69–1.04) | 0.11 | | 0.95 (0.83–1.09) | 0.51 |




doi:10.1038/nrendo.2016.172

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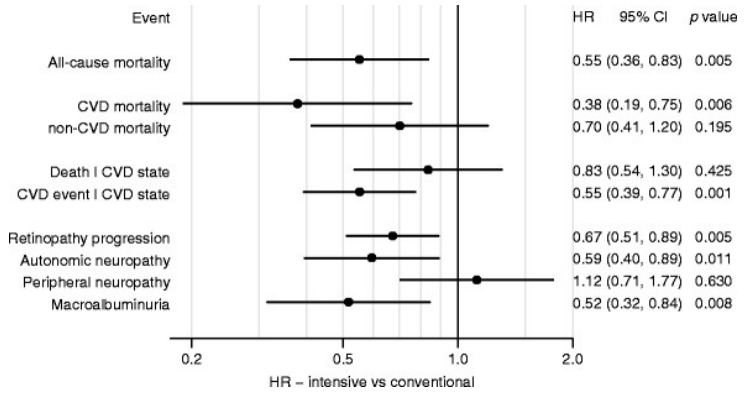
## Nghiên cứu Steno : Can thiệp đa yếu tố - kết cục sau 21 năm




Diabetologia 59(11) DOI: 10.1007/s00125-016-4065-6

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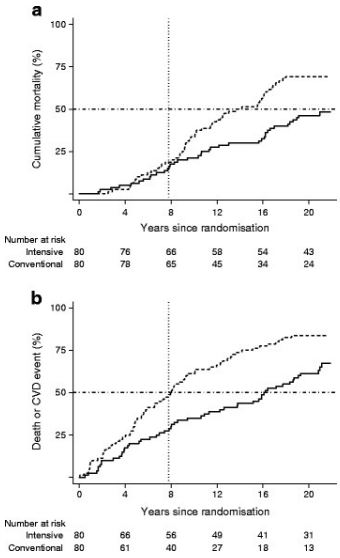
## Nghiên cứu Steno sau 21 năm theo dõi: điều trị đa yếu tố ĐTĐ típ 2 có albumin niệu vi lượng: Kéo dài thời gian sống ở nhóm điều trị tích cực so với nhóm chứng

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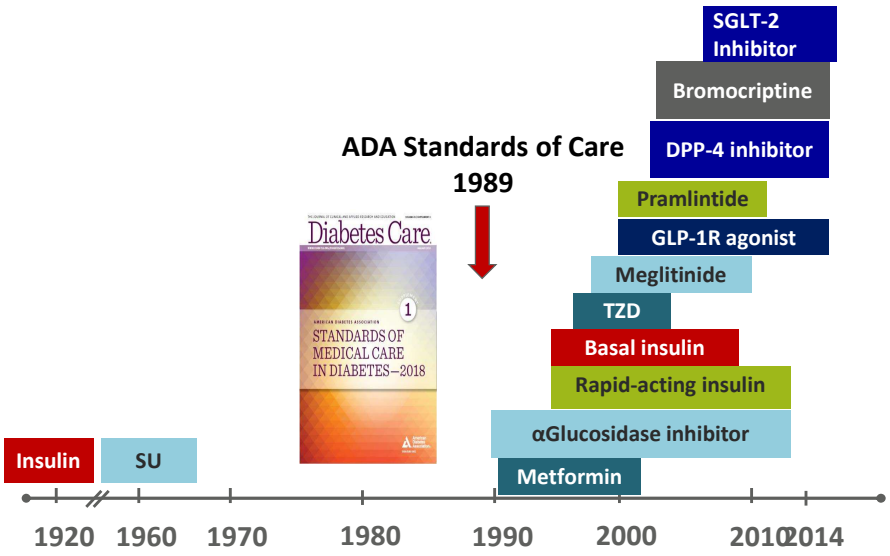
# Lịch sử các thuốc điều trị ĐTĐ típ 2

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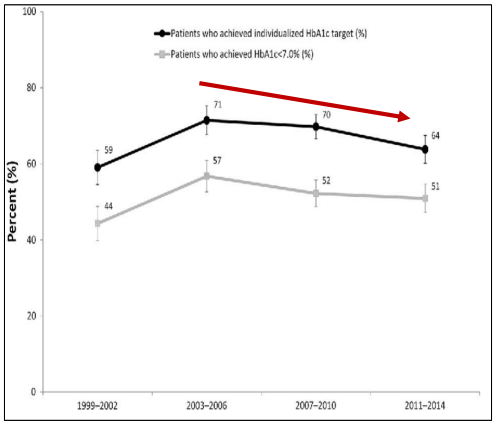
# Mặc dù số lượng thuốc và các phương thức điều trị ngày càng tăng …

Nhưng số lượng bệnh nhân đạt mục tiêu HbA 1c ngày càng giảm
từ 69.8% xuống **63.8%**
**(2014 đến 2017)**




Carls G . Huynh J . Tuttle *et al*. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Ther 2017;8:863–873

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# Chi phí điều trị gia tăng khi HbA1C gia tăng

**Mean per patient annual direct medical costs (in 2011 €)**

| | Patients with $HbA_{1c}$ | $HbA_{1c}$ <7% | 7% ≥ $HbA_{1c}$ <8% | 8% ≥ $HbA_{1c}$ <10% | $HbA_{1c}$ ≥10% | Patients without $HbA_{1c}$ |
|---|---|---|---|---|---|---|
| | n=100,391 | n=54,395 | n=24,994 | n=16,286 | n=4,716 | n=26,419 |
| Total costs | 3,038.76 (6,580.76) | 2,842 (6,233.06) | 3,102.32 (7,292.54) | 3,504.30 (6,548.69) | 3,352.77 (6,520.38) | 3,381.14 (12,049.61) |

N= 100,391 cross-sectional study, people with type 2 diabetes. Data from the database of Catalan Health Institute
Abbreviations: RR, relative risk; T2D, type 2 diabetes.
Mata-Case M et al. Diabetes care. 2020;43(4):751-758. A

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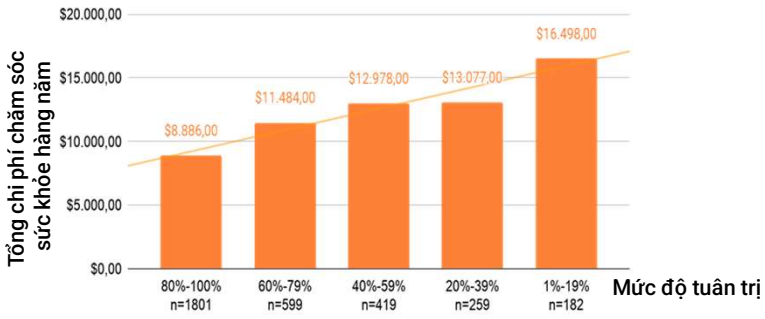
# Liên quan giữa tuân trị và chi phí điều trị

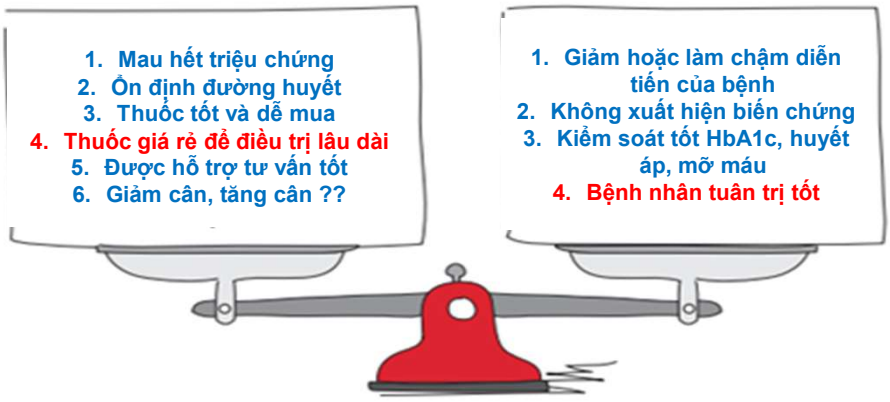



**Chi phí điều trị càng cao tuân trị càng kém và trì trệ điều trị càng tăng**

Sokol MC et al. Med Care. 2005;43:521-530

12

# Nhu cầu Bệnh nhân – Mục tiêu của bác sĩ




**Nhu cầu của bệnh nhân – mục tiêu của bác sĩ là tương tự nhau, chúng ta cùng làm việc với nhau để đạt được điều đó**

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## WHO prioritizes access to diabetes and cancer treatments in new Essential Medicines Lists
## High prices and low availability still a major barrier for patients' access to new and old medicines

World Health Organization
Model List of Essential Medicines

22nd List
(2021)

| | |
|---|---|
| *18.5.2 Oral hypoglycaemic agents* | |
| ☐ empagliflozin<br>Therapeutic alternatives:<br>- canagliflozin<br>- dapagliflozin | **Tablet:** 10 mg; 25 mg. |
| ☐ gliclazide*<br>Therapeutic alternatives:<br>- 4th level ATC chemical subgroup (A10BB Sulfonylureas) | **Solid oral dosage form:** (controlled-release tablets) 30 mg; 60 mg; 80 mg.<br>*glibenclamide not suitable above 60 years. |
| metformin | **Tablet:** 500 mg (hydrochloride). |
| *Complementary List* | |
| *metformin [c]* | *Tablet: 500 mg (hydrochloride).* |

**Gliclazide được liệt kê từ 2013**

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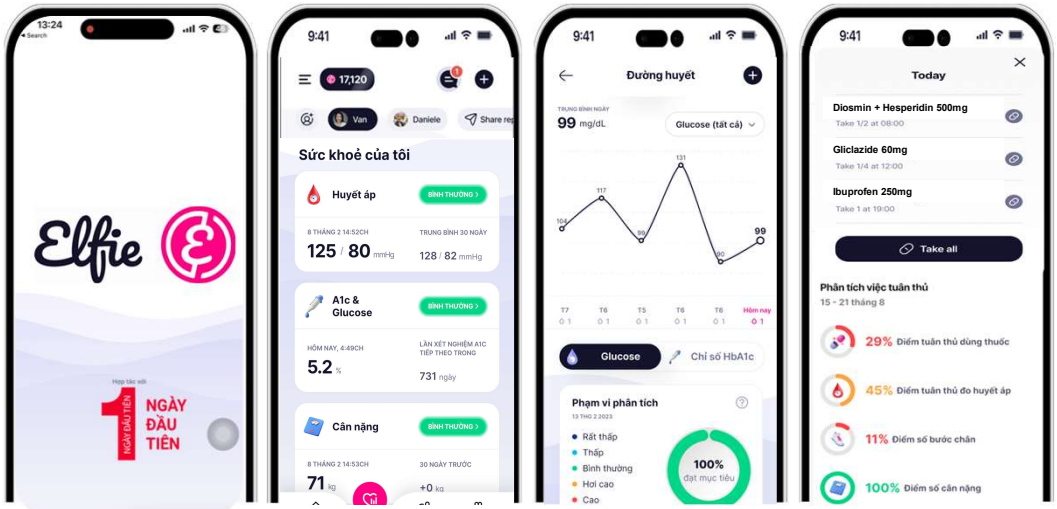
## Tư vấn bệnh nhân bên cạnh Áp dụng công nghệ hỗ trợ theo dõi BN

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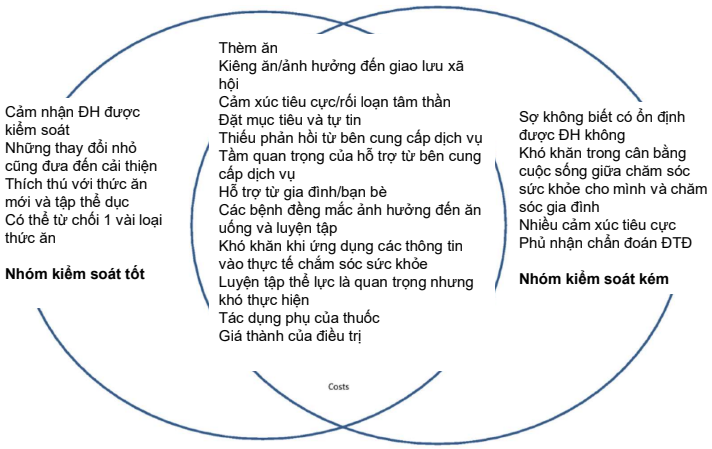
## Factors Influencing Diabetes Self-Management Among Medically Underserved Patients With Type II Diabetes




Global Qualitative Nursing Research
Volume 4: 1–13; DOI: 10.1177/2333393617713097
Jimmy Reyes at el

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## Patients' and healthcare providers' perspectives of diabetes management in Cambodia: a qualitative study


BMJ open (http://dx.doi.org/10.1136/bmjopen-2019- 032578)

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## Patients' and healthcare providers' perspectives of diabetes management in Cambodia: a qualitative study

| | Patients' perspective | Health-providers' perspective |
|---|---|---|
| Patient level | *Self-management*<br>'In my body, I find that I cannot control my eating; for example, the doctor told me that I can eat the banana and other food but when eaten, my blood sugar rises at the level higher than it was when coming to see him. So, controlling your diet is the hardest to manage.' (Male, rural, PB06)<br><br>*Distance and transportation*<br>'Traveling by car took the whole morning and whole afternoon almost a whole day; then when arriving there, waiting to receive the service there was also the whole day. I went there, I waited for the doctor since morning until around 2–3 pm that I received the treatment.' (Male, rural, PB07) | *Self-management*<br>'…. Patient has difficulty using insulin on their own, … the difficulty is that their diet is not appropriate, and their usage of insulin is not appropriate'. (HP04, nurse, urban area)<br>'The challenge with the patient is that they don't manage themselves appropriately, they leave their health to a difficult stage, the most difficult stage, so it is also difficult for the doctor too.' (HP04, nurse, urban area) |

BMJ open (http://dx.doi.org/10.1136/bmjopen-2019- 032578)

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| | Patients' perspective | Health - Providers' perspective |
|---|---|---|
| Health-provider level | *Medication supply*<br>'When I run out of medication, I go there for nothing and I just have medication left for 1 or 2 days more and not seeing them or no stock wait sometimes until next week, so my daily treatment is interrupted. So, my request is to supply drugs regularly, it will be good because if we don't take medication regularly, we feel unwell.' (Female, urban, PP02) | *Medication supply*<br>'For example, a patient lives far, sometimes the hospital supplied them two weeks. They run out of medication, they don't have the fee to come and pick up the medication, so err, at the district hospital or the health centre near their home should have this medication for them to access.' (HM10, nurse, rural)<br>*Limited knowledge and skills*<br>'I am a doctor, but I am not specialized in this field. I only look after minor illnesses, in case of severe diabetes, I am afraid to treat.' (HP11, medical doctor, rural)<br>*Limited Laboratory service*<br>'Blood monitoring such as examining A1c haemoglobin is not available because we don't have a laboratory.' (HS18, nurse, semiurban)<br>*Shortage of staff*<br>'The challenges in providing service, the most important one is that our resources are limited. There are not many people working, so the quality of counselling, the quality of the provision is limited. (HS13, medical doctor, semiurban) |
| Health-system level | | *Lack of diabetes services*<br>They [the patients] come to seek us, and we refer them, this means that we have failed, this means that we have failed. … they will seek the Khmer medication'. (HB28, medical doctor, rural) |

BMJ open (http://dx.doi.org/10.1136/bmjopen-2019- 032578)

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## Patient Views on Quality of Life and Hospital Care: Results From a Qualitative Study Among Vietnamese Patients With Diabetes

*Mai Trong Tri, Nguyen Thy Khue, Vo Tuan Khoa and Aya Goto*

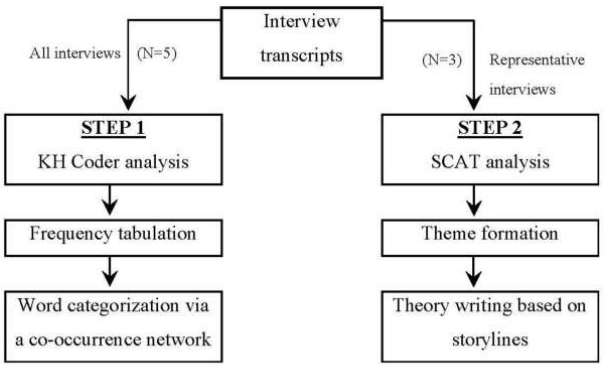


**FIGURE 1 |** Analysis flow. KH Coder, Text-mining software; SCAT, Steps for Coding and Theorization.

*Front. Commun. 7:894435. doi: 10.3389/fcomm.2022.894435*

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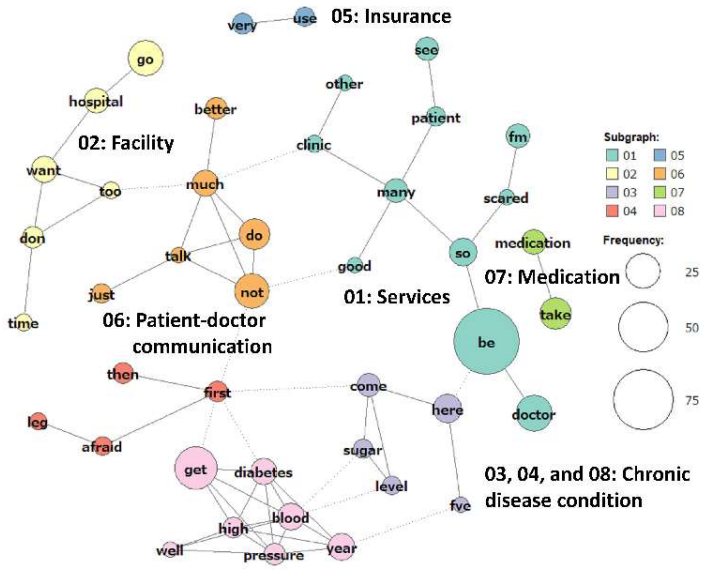


**FIGURE 2 |** Co-occurrence network of frequently used words. A total of 280 sentences were entered into the KH Coder analysis and 55 words used five times or more were analyzed in the co-occurrence network.

*Front. Commun. 7:894435. doi: 10.3389/fcomm.2022.894435*

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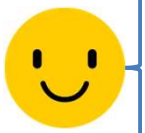
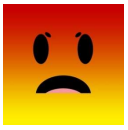
## Patient Views on Quality of Life and Hospital Care: Results From a Qualitative Study Among Vietnamese Patients With Diabetes

***Mai Trong Tri, Nguyen Thy Khue, Vo Tuan Khoa and Aya Goto***

### Summary of patients' views of medical services



- Better hospital infrastructure compared with the past.
- Higher quality of care at the tertiary compared with the primary hospital.
- Patient-friendly doctors
- Personalized care.
- Positive treatment outcomes.



- Long waiting times.
- Limited consultation time.
- Lack of empowerment/encouragement.
- Complex insurance system.
- Unsatisfactory insurance coverage of services.

*Front. Commun. 7:894435. doi: 10.3389/fcomm.2022.894435*

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# Vietnamese diabetic patients and their physicians: what ethnography can teach us

**Cause of Diabetes**

"I've noticed that a lot of Vietnamese people get diabetes in the United States, but almost no one got it in Viet Nam. It could be because people are worried all the time—about their children not listening to them, about money. Also, people sweat less here, and the heat can't get out of their bodies, and that can bring on diabetes, too"

Dorothy S Mull, Nghia Nguyen, J Dennis Mull
West J Med. 2001 Nov; 175(5): 307– 11. doi: 10.1136/ewjm.175.5.307

**Attitudes about treatment**

- **Use of eastern (herbal) medicine** "Eastern medicine is much safer than doctors' medicine because it cools your body and brings it back into balance. Doctors' medicine has a lot of strong hot chemicals—you can get really bad side effects if the dose is too high for you"
- **Use of home remedies** "Since I was diagnosed with diabetes 2 months ago, I've been using different things from the market to bring my sugar down—bitter gourd, guava leaf tea, and banana tree sap. If those don't work, then I'll think about taking doctors' medicine"
- **Attitudes toward insulin** "If you have to take insulin, for sure you're going to die soon. Also, they say that some people go blind because of it"
- **Attitudes toward diet** "I know I shouldn't eat too much sugar, but it's hard because we like our coffee very sweet. I did change to that thin Indian rice because I heard it has less starch. It seems like people eat much more here than they did in Viet Nam"
- **Use of neighborhood doctors trained in Viet Nam** "We go to them because they understand our language and we don't have to wait as long as in a clinic, but we can't really ask them any questions. Some of them seem to be just rushing through"

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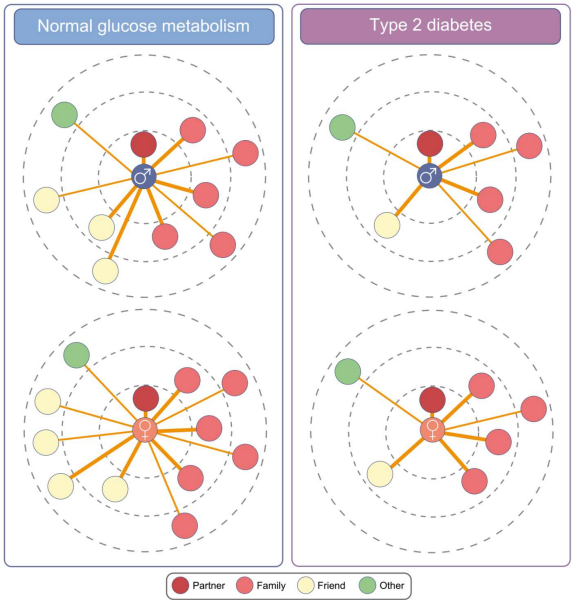
# Social networks and type 2 diabetes: a narrative review

**Structural social network characteristics in diabetes**




Miranda T. Schram et al;
Diabetologia (2021) 64:1905–1916
https://doi.org/10.1007/s00125-021-05496-2

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## Unmet needs for social support and diabetes-related distress among people living with type 2 diabetes in Thai Binh, Vietnam: a cross-sectional study

**Table 2** Associations between unmet needs for social support and diabetes-related distress

| Unmet needs for social support | Crude odds ratio (CI95%) | Model 1 Odds ratio (CI95%) | Model 2 Odds ratio (CI95%) | Model 3 Odds ratio (CI95%) |
|---|---|---|---|---|
| **Health care visits/transportation (*n* = 402)** | | | | |
| No (ref) (*n* = 305) | 1 | 1 | 1 | 1 |
| Yes (*n* = 97) | **1.57 (1.11–2.22)** | 1.22 (0.84–1.76) | 1.14 (0.78–1.65) | 1.10 (0.75–1.61) |
| **Remembering medication** | | | | |
| No (ref) (*n* = 344) | 1 | 1 | 1 | 1 |
| Yes (*n* = 58) | 1.53 (0.99–2.35) | 1.27 (0.82–2.00) | 1.14 (0.73–1.80) | 1.14 (0.72–1.80) |
| **Purchasing and preparing food (n = 402)** | | | | |
| No (ref) (*n* = 352) | 1 | 1 | 1 | 1 |
| Yes (*n* = 50) | **2.35 (1.40–2.93)** | 1.62 (0.95–2.77) | 1.53 (0.89–2.65) | 1.48 (0.85–2.57) |
| **Remembering to doing exercise (*n* = 401)** | | | | |
| No (ref) (*n* = 331) | 1 | 1 | 1 | 1 |
| Yes (*n* = 70) | **1.60 (1.07–2.38)** | 1.36 (0.90–2.06) | 1.21 (0.79–1.84) | 1.17 (0.77–1.80) |
| **Emotional support (n = 402)** | | | | |
| No (ref) (*n* = 371) | 1 | 1 | 1 | 1 |
| Yes (*n* = 31) | **3.65 (1.72–7.77)** | **2.59 (1.19–5.63)** | **2.38 (1.09–5.24)** | **2.36 (1.07–5.23)** |
| **Financial support (n = 402)** | | | | |
| No (ref) (*n* = 306) | 1 | 1 | 1 | 1 |
| Yes (*n* = 96) | **2.07 (1.43–2.99)** | **1.63 (1.10–2.40)** | **1.49 (1.00–2.22)** | 1.45 (0.97–2.16) |

Model 1: Adjusted for age, gender, household economic status
Model 2: Adjusted for age, gender, household economic status, physical health
Model 3: Adjusted for age, gender, household economic status, physical health, household size, duration of diabetes

N=806 , ≥ 40 tuổi

Diep.K.T et al, BMC Public Health volume 21, Article number: 1532 (2021)

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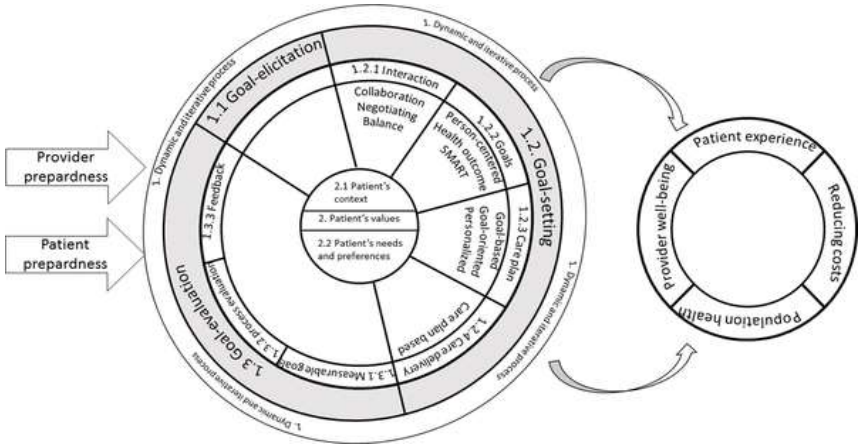
**Fig 2. Schematic representation of the antecedents, attributes and consequences.**




Boeykens D, Boeckxstaens P, De Sutter A, Lahousse L, Pype P, et al. (2022) Goal-oriented care for patients with chronic conditions or multimorbidity in primary care: A scoping review and concept analysis. PLOS ONE 17(2): e0262843. https://doi.org/10.1371/journal.pone.0262843
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0262843

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# Tạm thay lời kết

- Bệnh nhân ĐTĐ và bác sĩ điều trị điều hướng đến một kết cục điều trị tốt lâu dài
- Bệnh nhân và bác sĩ cần hợp tác tích cực trong điều trị
- Ảnh hưởng không nhỏ của gia đình, xã hội, mạng xã hội
- Hệ thống y tế cần bảo đảm cung cấp đầy đủ, liên tục các nguồn thuốc thiết yếu với giá cả hợp lý cho người bệnh
- Mục tiêu: bệnh nhân đạt mục tiêu điều trị, tăng cường sức khỏe toàn dân, bảo vệ sức khỏe của nhân viên y tế, giảm chi phí y tế

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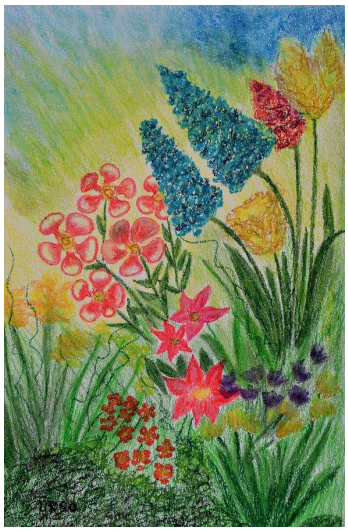

**Chân thành cám ơn quí đồng nghiệp**

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