POLICY BRIEF
APEC DIABETES WORKSHOP MANADO
Manado, 2 July 2025

"An Integrated Interprofessional Response to Type 2 Diabetes in APEC Regions"

A. Title:

Diminishing the Burden of Type 2 Diabetes Mellitus in APEC Communities through Interprofessional Collaboration (IPC)

B. Executive Summary

Type 2 Diabetes Mellitus (T2DM) has emerged as a significant public health concern within APEC economies, affecting over 460 million individuals globally and increasingly exerting pressure on healthcare systems and economic resources. Effective management of type 2 diabetes mellitus (T2DM) necessitates a comprehensive, patient-centered approach. This policy brief highlights the strategic importance of Interprofessional Collaboration (IPC) in mitigating the burden of Type 2 Diabetes Mellitus (T2DM) at the community level. It presents evidence from international studies and community-based interventions, provides practical policy recommendations, and highlights the vital roles of education, technology, and culturally responsive care in attaining sustainable outcomes. IPC provides a comprehensive framework for integrating diverse healthcare professionals and community stakeholders to deliver coordinated, holistic, and effective care for individuals diagnosed with diabetes.

C. Problem Description

Type 2 diabetes mellitus (T2DM) continues to increase across APEC regions, fueled by aging populations, urban growth, and lifestyle shifts. The disease leads to substantial morbidity, death rates, and financial burdens, worsened by:

- Socioeconomic disparities (e.g., poverty, illiteracy)
- Fragmented healthcare systems
- Poor patient adherence to treatment
- Cultural and language barriers

Traditional, siloed approaches are inadequate. To effectively manage and prevent type 2 diabetes mellitus (T2DM), healthcare systems are required to adopt collaborative, community-centered, interprofessional models.

D. Research Overview

Epidemiology & Economic Burden:

- Approximately 462 million people are affected globally, with an expected increase to 537 million by 2030.
- Significant cost burdens: USD 336 billion in the U.S. projected by 2050.
- The 20-year economic burden in Peru is estimated at USD 15.4 billion.

Barriers in Community Management:

- Limited access to quality care and medications.
- Psychosocial stress, low health literacy, and lack of motivation.
- Cultural beliefs impede treatment adherence.

Effective Interventions Identified:

- Community-based education and support.
- Cultural tailoring of health programs.
- Use of mobile health and digital tools.

Role of Interprofessional Collaboration (IPC):

IPC integrates a diverse array of professionals—including physicians, nurses, pharmacists, dietitians, educators, mental health specialists, Care Health Workers (CHWs), exercise physiologists, and community leaders—into coordinated care teams. The advantages encompass:

- Improved glycemic control and A1C reduction.
- Enhanced self-management and patient satisfaction.
- Holistic support covering medical, psychological, and social needs.

E. Policy Recommendations

1. Enhance Education and Community Awareness
    - Develop structured, culturally-sensitive community diabetes education programs.
    - Launch multi-platform awareness campaigns.
    - Integrate IPC and diabetes education into health curricula to enhance patient care and outcomes.
2. Strengthen Healthcare Support Systems
    - Allocate resources to primary healthcare and training programs to enhance support systems.
    - Upskill CHWs in IPC and psychosocial support.
    - Foster academic-health sector partnerships for community internships.
3. Establish and Scale IPC Models
    - Formalize IPC teams in healthcare systems.

- Publish national IPC guidelines outlining team roles and communication protocols.
- Secure funding for IPC training and operations.

4. Leverage Digital Health and Technology
   - Implement mHealth and telemedicine for remote diabetes care.
   - Provide tech training for providers and patients.
   - Promote data-sharing systems for team coordination.
5. Promote Holistic, Patient-Centered Care
   - Integrate mental health support into routine diabetes care.
   - Offer psychosocial counseling and motivational interviewing.
   - Use patient-reported outcomes to guide personalized care.
6. Public-Private Partnership
   - Leverage the strengths of each sector to improve awareness, prevention, early detection, and management of diabetes.
   - Establish public-private partnerships to strengthen the expertise and resources of different sectors.
7. Advanced Fiscal and Environmental Policies
   - Introduce or expand taxes on sugar-sweetened beverages (SSBs) and unhealthy foods.
   - Provide subsidies for fruits and vegetables.
   - Promote healthy food access and active living infrastructure.
8. Empower Community-Led Interventions
   - Train and engage CHWs in risk screening and lifestyle interventions.
   - Facilitate participatory community policy advocacy.
   - Develop tailored interventions for underserved and ethnic minority populations.
9. Ensure Evaluation and Continuous Improvement
   - Develop standardized monitoring frameworks for IPC and diabetes outcomes.
   - Fund research on the effectiveness of IPC across APEC settings.
   - Adapt policies based on feedback and evolving local needs.

F. Supporting Data and Models

1. IPC in Action:
   - The Interprofessional Management and Education in Diabetes Care (INMED) Care Pathway: Integrated professional education and case management.
   - Thailand’s Local Health Security Funds: Enabled community-driven diabetes programs.
   - Indonesia implements a structured community-based model through Posbindu and Posyandu, which are managed by community health

volunteers and supported by primary healthcare providers. This model focuses on early detection, routine monitoring, health education, and referral.

- China employs a structured, community-centered diabetes care model through government-funded primary health centers, incorporating regular follow-ups, health education, and digital monitoring, supported by interprofessional training and AI-based tools to enhance accessibility and effectiveness nationwide.
- In Brunei Darussalam, a structured primary healthcare model for diabetes management integrates government-funded services through 'One Stop Health Centres', where multidisciplinary providers including doctors, dietitians, diabetes nurse educators, pharmacists, and phlebotomists offer coordinated care, supported by the nationwide e-health system BruHIMS and the BruHealth mobile app that enables patient engagement, monitoring, and personalized lifestyle interventions.
- In Russia, a centralized and highly specialized diabetes care model is led by the Endocrinology Research Center, which integrates seven national institutes and eight reference centers. This model delivers comprehensive and multidisciplinary care, from early diagnosis to high-tech interventions, while providing structured patient education, personalized treatment, and professional training aligned with international guidelines.
- Thailand implements a remission-focused diabetes and hypertension care model at Bantakhun Hospital through a multidisciplinary Smart NCD Clinic, combining personalized behavioral interventions, frequent follow-ups, and digital monitoring tools, enabling measurable remission outcomes and improved disease control.
- Vietnam applies a decentralized diabetes care model by integrating Commune Health Stations into the national diabetes program, enabling basic screening, stable case management, and stepwise treatment protocols at the local level, supported by referral pathways, capacity-building programs, and village health workers to enhance early detection, self-management, and system-wide continuity of care.

2. Technological Integration:
   - Digital voice assistants have been shown to increase adherence to physical activity.
   - Mobile health platforms reduced healthcare access barriers in remote areas.
3. Fiscal Policy Impact:
   - A 20% V&F subsidy in Canada is projected to save CAD 442 million and prevent 551 cases of type 2 diabetes mellitus (T2DM).
   - SSB taxes reduced sugar intake and healthcare costs across several countries.

4. Equity Considerations:
    - Subsidy-tax combos reduce regressive effects.
    - Cultural tailoring improves outcomes for minority and disadvantaged groups.

G. Conclusion

Addressing Type 2 Diabetes Mellitus (T2DM) in APEC economies necessitates a comprehensive response rooted in interprofessional collaboration. Interprofessional collaboration (IPC) improves the quality, equity, and sustainability of diabetes care. By emphasizing education, technological advancements, policy innovation, and community partnerships, APEC economies can substantially diminish the burden of T2DM and enhance population health outcomes. Strategic investment in IPC constitutes both a public health necessity and a cost-effective, socially responsible strategy for managing chronic diseases.

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