Strengthening diabetes services at the primary care level in Iceland

Overview

In the early 2000s, diabetes care in Iceland was primarily delivered in hospitals, despite the potential for diabetes-related services to be largely managed by general practitioners. In more recent years, this design of services was challenged by the rising prevalence of type 2 diabetes, straining the capacity of specialized providers to meet the needs of diabetic patients. Responding to this context, a new model of care for diabetes services was proposed, led by providers drawing from firsthand international experiences, with the aim of addressing inefficiencies in the existing system. After consulting with colleagues and finding widespread enthusiasm for change, an initial conference was organized to bring providers together to discuss and strategize actions needed, leading to the proposal to develop new diabetes care guidelines to support services delivery in primary care settings. As a result of the initiative, gradually general practitioners voluntarily adopted responsibility for diabetes care. Nurses were brought into primary care teams to support diabetes care and expand services available, including the introduction of patient education and counselling services to enable improved self-management by patients. Changes over time have gained government support, leading to the development of care guidelines for managing diabetes in primary care. Success of the initiative is marked by the increasing number of general practitioners registered as providing diabetes services, contributing to improved access and availability of services for patients with diabetes.

Problem definition

The prevalence of type 2 diabetes in Iceland has grown steadily over time. However, with diabetes care concentrated at secondary and tertiary levels, increasing prevalence placed added pressure on health services to treat the growing number of patients, straining the capacity of specialist providers and contributing to increased waiting times for services (Box 1). Furthermore, the lack of diabetes-related care at the primary level made accessing services difficult for patients living in rural areas, who were required to travel to the closest urban centre to obtain care.

Box 1
What problems did the initiative seek to address?

- Increasing prevalence of type 2 diabetes.
- Concentration of diabetes care in higher-level care settings.
- Increasing waiting times for diabetes services.
- Geographic inequities in accessing diabetes services.

Health services delivery transformations

Timeline of transformations

Momentum to improve diabetes services in Iceland was cultivated by the health workforce, following exposure through trainings and professional opportunities abroad. In the early 2000s, a conference was organized convening a multi-profile group of providers to strategize the design and organization of alternative models of care and their applicability in the context of Iceland. Following these discussions, primary care providers began to gradually introduce and offer diabetes services to their patients. In the late 2000s, new clinical guidelines for delivering diabetes care in primary settings were published. These guidelines are currently in practice and are continuously expanded upon for the effective delivery of diabetes services.

Description of transformations

Selecting services. Diabetes-related services are included in the standard benefits package covered by mandatory health insurance. Diabetes services now offered in primary settings include lifestyle counselling, blood glucose testing and monitoring, drug therapies, and provision of insulin. The initiative has also placed greater emphasis on the availability of counselling and education services for patients on self-management and lifestyle changes.

Designing care. Care guidelines have been updated to formalize recommended practices for the delivery of diabetes care in primary settings. Checklists for primary care providers have been created as tools to guide practice for standardization of quality diabetes services.

Organizing providers. Responsibility for delivering diabetes care has gradually shifted to primary care providers. Nurses have been engaged in primary care teams, typically consisting of five to six general practitioners, to support diabetes services delivery and ensure the needs of patients are followed closely over time. Nurses also play a key role in patient education and supporting patient self-management.

Managing services. Management over diabetes services continues to be within the purview of the Ministry of Welfare. The Ministry is responsible for contracting private practitioners at the primary level to deliver diabetes care according to new guidelines.

Improving performance. A two-day training programme for primary care providers was developed to educate them on new care guidelines and equip them with the necessary skills to deliver comprehensive diabetes care. Trainings are carried out in practices and clinics with approximately 20 providers participating in each session. Approximately 80 general practitioners – roughly half of those practicing in Iceland – have received training.

Table 1
How was the delivery of health services transformed through the initiative?

Before	After
Selecting services	
A standard package of services is available to patients with diabetes where services include drug and insulin therapies as well as lifestyle counselling.	Standard package of services has been expanded with a focus on lifestyle counselling and support services for patients with diabetes.
Designing care	
Guidelines for diabetes care skew services delivery to higher levels of care, concentrating services in the secondary or tertiary settings.	New guidelines for the delivery of diabetes care in primary settings are published; tools developed to aid general practitioners delivering diabetes care.
Organizing providers	
Specialist providers in secondary and tertiary settings responsible for diabetes care delivery; primary care providers do not typically manage the needs of diabetic patients.	General practitioners now the primary providers for delivery of diabetes care; nurses have been incorporated into primary care teams to support diabetes services delivery.
Managing services	
Ministry of Welfare oversees management of diabetes services.	Ministry of Welfare continues to oversee management of diabetes services.
Improving performance	
Not applicable in this case.	Ad hoc training programmes on updated diabetes care guidelines offered to primary care providers.

Health system enabling factors

The Ministry of Welfare has supported of the development of primary care-led diabetes services, providing funding for activities where necessary. New clinical guidelines for diabetes related care have been officially adopted and incorporated into the formal medical education system, ensuring future generations of general practitioners have the knowledge and skills to care for patients with diabetes. Coordination of services has further benefited from the introduction of electronic health records that facilitate information sharing and communication between providers.

Outcomes

While no formal assessment on the impact of changes in the design of diabetes services has been conducted, primary care teams report both improved efficiency of services and access to diabetes care, with a greater number of general practitioners now registered to treat diabetes. Moreover, as a result of the delivery of diabetes services shifting to primary care settings, patients are now able to access care closer to home. The support of nurses in primary care teams has also reportedly allowed additional time for discussions with patients on lifestyle and self-management. The health workforce also describes a changing professional culture; “there is more dialogue about services” among providers who informally consult with one another other and share advice to optimally support patients.

Change management

Key actors

Transformations in diabetes services were led by a provider following a period of working abroad which highlighted constraints in the Icelandic system's delivery of diabetes care. Discussing key issues with colleagues highlighted widespread enthusiasm for change across provider groups and providers self-organized to voluntarily drive change (Box 2). Support from the Ministry of Welfare later enabled the development of official care guidelines, helping to solidify new practices and establish delivery of diabetes services in primary settings as the new norm.

Box 2

Who were the key actors and what were their defining roles?

- **Initiator of transformation.** Introduced concept of delivering diabetes services in primary settings; convened conference on providing diabetes care at the primary level; developed official clinical guidelines for diabetes care; facilitated trainings on new guidelines for health providers.
- **Ministry of Welfare.** Responsible for oversight of the health system; provided funding for activities and supported transition of diabetes care into primary settings.
- **Primary care providers.** Adopted new responsibilities to enable delivery of diabetes-related care in primary settings.

Initiating change

The idea for change was first triggered by international experiences. "There are really different approaches between countries. It really sparks creativity for new ideas." As many Icelandic providers receive training abroad, the professional culture can be described to support the exchange of different ideas and adoption of new approaches. Within this context, the initiator of this work organized a small-scale conference to bring providers from across care settings together to discuss issues and strategize solutions to enable the delivery of diabetes-related care in primary settings: "From this the initiative just slowly evolved".

Implementation

Through word of mouth, an increasing number of primary care providers voluntarily chose to take on new responsibilities relating to diabetes care. Later, the initiative's leader was called on to develop official guidelines to support the delivery of diabetes services in primary settings, standardizing the proposed model of primary care-led diabetes services at the national level. Training on the new guidelines was offered to providers in small group settings, allowing for a more personalized education experience. "We went through with providers the changes needed in their practice for the whole of diabetes from diagnosis to treatment. We worked with them to see and appreciate the whole spectrum of care." Given Iceland's relatively low population size, a personalized, small-scale training system was suited to this context.

Moving forward

Primary care providers currently deliver diabetes care according to care guidelines now in place. Ad hoc trainings continue to support professional development in diabetes services delivery and sustainability of knowledge has been secured through incorporating training into formal medical education.

Highlights

- Strengthening the role of primary care in diabetes treatment and management reorientated the model of care towards a more comprehensive package of services focused on lifestyle and behaviour changes.
- Knowledge gained through experiences working abroad, fostered local innovation.
- Informal discussions among providers had sufficient power to motivate and direct change.
- Incorporating trainings into the formal education system helped establish a new standard of care and ensured sustainability of knowledge.