Optimizing financial incentives to drive preventative care and treatment for cardiovascular disease (CVD)

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Introduction & objectives

CVD is the leading cause of mortality and morbidity globally. In the last decade, the burden of CVD has increased both in terms of deaths and disability, and it is estimated that mortality from CVD will continue to rise in the coming years, killing more than 20 million people per year by 2030.[1] For this reason, there is a need to improve policy action to address CVD, ranging from policies prioritising health promotion and early diagnosis to incentives for research and development in areas of unmet need and financial incentives integrated into patient care and disease management.

Financial incentives can play a key role in driving preventative care interventions and ensuring an effective level of treatment is provided to patients. However, despite promising potential, implementation and evaluation of incentives are preliminary and fragmentary. Evidence across countries shows that there are various incentive structures and channels to promote preventative care and treatment. Incentives can target patients, providers, or take a mixed approach to address risk factors for CVD through changes to lifestyle, provision of care, and administration of medication.

- **Objective 1:** Review the design and implementation of incentives for CVD prevention across a set of countries
- **Objective 2:** Assess the impact on CVD prevention and determine a set of best practices for financial incentives

Methodology

Step 1 A systematic literature review identified financial incentives for CVD secondary prevention implemented across five countries representing different healthcare systems and regions: Australia, Brazil, Canada, China, and Japan

Step 2 Incentives were individually reviewed across research questions related to the design and implementation, evaluation and monitoring, and impact of stakeholders

Step 3 A cross-country set of evaluation criteria was applied to each incentive to identify possible best practices in each country

Countries in scope (number of incentives identified)

Australia	Brazil	Canada	China	Japan
5	6	6	6	6

Results

Across all countries:

- Diabetes is the most frequently targeted risk factor
- The focus of most incentives is to improve primary care chronic disease management to prevent CVD
- Incentive success can be influenced by country-specific factors and healthcare system characteristics
- Utilisation of preventative healthcare services are the most frequently measured outcome across countries

From the analysis, a set of policy recommendations and best practices emerged:

Policy recommendation 1
Ensure all relevant risk factors for CVD are covered by financial incentives

Best practice 1.1	**All relevant risk factors for CVD are covered by financial incentives**
Rationale	*Diabetes mellitus, dyslipidaemia, hypertension, and obesity are all established predictors of and risk factors for CVD*

Incentive example for best practice 1.1

British Colombia chronic disease management program

Objective: Improve access and continuity of primary care for patients with chronic diseases and encourage walk-in clinics to offer more longitudinal and less episodic care[2]

Learning: An incentive introduced to target a single CVD risk factor (diabetes, 2003) can subsequently be expanded to include other indications. This was done to include heart failure (2006), hypertension (2006), and chronic obstructive pulmonary disease (2009)[2]

Best practice 1.2	**Educational programs are implemented to ensure targeted recipients are aware of CVD prevention incentives**
Rationale	*Incentives can be limited in their effectiveness if the intended recipient (typically physicians or patients) is not aware of their existence*

Incentive example for best practice 1.2

Australia heart health check toolkit

Objective: To screen for at-risk patients requiring treatment, ultimately lowering the morbidity and mortality of CVD by employing a digital set of resources, or "toolkit"[8]

Learning: The launch of the new risk calculator and guidelines in 2023 was endorsed by the Royal Australian College of General Practitioners, leading to the highest recorded uptake of the toolkit. Promotion of the tool to GPs and integration within a separate incentive targeting CVD prevention (Quality Improvement Incentive in the Practice Incentives Program) may have also driven awareness and uptake[9,10]

Policy recommendation 2
Prioritise regular tracking and measurement of health and quality of care indicators and outcomes

Best practice 2.1	**Key performance indicators (KPIs) are implemented and regularly monitored**
Rationale	*Regular KPI tracking provides insight into incentive impact and uptake, so policymakers can modify design and implementation*

Incentive example for best practice 2.1

Previne Brasil

Objective: To increase the population's access to primary care services and improve the quality of care[4]

Learning: Regular evaluation of KPIs improves compliance with, and uptake of, incentives, driving healthcare providers to improve work processes and enhance patient health outcomes. The incentive regularly tracks and measures KPIs related to the utilization of preventative healthcare services. As a result, the service quality for the population improved[5]

Best practice 2.2	**Data collection infrastructure is implemented to track KPIs and measure health and quality of care outcomes**
Rationale	*Rewarding appropriate dimensions ensures that the program achieves the desired goals; and this is dictated by data available for collection*

Incentive example for best practice 2.2

Shandong Province simultaneous management of three risk factors and six co-morbidities

Objective: To align with the national priority, building on China's Contracted Family Doctor Service (CFDS) family doctor networks, to address chronic diseases by providing enhanced primary care to patients[11]

Learning: The program is incorporated within a centralized health record and information system that allows patients to access their records remotely. Patients can contact HCP teams for support when necessary, and their diagnosis and treatment records and service plans are all integrated within the information system[11]

Policy recommendation 3
Address broader healthcare system limitations and leverage financial incentives as a tool to improve efficiency of care delivery

Best practice 3.1	**Sufficient budget is allocated to the incentive and the criteria for incentive receipt is adjusted to account for regional differences**
Rationale	*For equitable implementation, some regions may require additional funding to address health disparities and resource constraints*

Incentive example for best practice 3.1

Health Japan 21

Objective: To improve population health by promoting a healthy lifestyle and preventing chronic diseases[6]

Learning: Local governments (prefectures) had the autonomy to tailor incentives to address specific population healthcare needs. Each Prefectural Health Promotion Plan could include both national and locally unique targets/indicators to fit regional healthcare goals. Local governments also devised their own strategies to implement health initiatives and meet targets[6,7]

Best practice 3.2	**Staff within hospitals and clinics are trained to support incentive rollout, including an investment in dedicated administrative staff**
Rationale	*Most incentives have an administrative requirement for the financial payment to be received, posing a barrier to uptake*

Incentive example for best practice 3.2

China's Contracted Family Doctor Service (CFDS)[2]

Objective: To support the management and continuity of care for patients with chronic diseases by incentivizing family health teams to provide long-term care[12]

Learning: The program established dedicated roles for administrative teams to support HCPs with care coordination and incentive uptake. Further, establishing dedicated administrative staff can also improve care coordination and support KPI tracking activities, ensuring objective and regular evaluation of the incentive (Best practice 2.1)[13]

Conclusions

- There are a set of best practices that offer global lessons to guide successful design, implementation, and optimization of financial incentives for CVD prevention
- Elements impacting the success of each incentive are commonly influenced by factors specific to each country's healthcare system
- Therefore, country specific healthcare contexts also need to be accounted for, and this can be steered by following global best practices

Sources

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