Considerations for the Implementation of Remote Monitoring Programs in Canada

Based on the findings of CADTH's Health Technology Assessment on remote monitoring programs for patients with chronic cardiac conditions, the CADTH Health Technology Expert Review Panel (or HTERP) recommended that the design and implementation of such programs include a broad range of stakeholder voices, with considerations across several key domains summarized here.

Patient and Caregiver Considerations

Remote Monitoring (RM) programs should be flexible and adaptable to patient circumstances.

Considerations:

- The need for functional and easy-to-use technologies that fit within patients' lifestyles (considerations may include battery life, reliable connectivity, equipment size, cost, ease of use, adaptability for travel, etc.)
- The availability of technical support
- The ability to address the needs of caregivers (caregivers may be a facilitator to the uptake and success of RM programs; however, the potential burden on caregivers could be a barrier)
- The views of key stakeholder groups regarding their preferences in the potential adoption of RM programs (particularly where evidence is lacking – e.g., those in rural and remote settings, Indigenous peoples, people of low socioeconomic status, etc.)

Provider Considerations

RM programs should be an integral part of the care pathway for chronic cardiac conditions, with processes and policies to support it.

Considerations:

- Integration of RM technologies into health care processes (including aligning them with clinical practice guidelines)
- Integration of RM technologies into electronic medical records (to minimize duplicate data entry, reduce errors, and ensure smooth transitions between care providers)
- A potential increase in workload for cardiologists, primary care providers, and nurses associated with RM programs (e.g., from activities such as increased administrative tasks, increased number of patient contacts, and the need for rapid decision-making and responding to alerts, all of which can interrupt workflow)
- Appropriate remuneration
- Policies for patients accessing specialist cardiac care outside their jurisdictions of residence

Data and Privacy

There should be transparency about information flow and patient data use and privacy should be at the forefront of service contract negotiations.

Considerations:

- Protecting consumers from third-party use of data (e.g., through the negotiation of service contracts between jurisdictions and technology providers)
- Consideration of how data is transmitted and stored, and associated privacy and security (particularly extra-jurisdictional data storage, with consideration for who has data sovereignty)

Digital Equity

RM programs should avoid creating or exacerbating inequalities in health care.

Considerations:

- Access to reliable internet connection and sufficient technology (note potential inequalities with bring-your-own-device models)
- Consideration of the potential for RM programs to exacerbate disparities in care because of other underlying social determinants of health (e.g., it is important not to neglect in-person options for high-needs populations)

Evaluation

RM programs should include an evaluation component to ensure program aims are met.

Considerations:

- Appropriate metrics (e.g., morbidity and mortality, patient quality of life, access to care for those for whom in-person care is more challenging to access, burdens and costs associated with RM programs, etc.)
- Clinical practice guidelines quality indicators could be used to benchmark care and could be part of what is collected in the evaluation
- Evaluation may also aid in determining costs in general, as well as cost-effectiveness moving forward

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